Tulare Meadow

Conservation Easement

Baseline Documentation Report

Prepared by

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Prepared for

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Summary

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Table 1: Summary of key information about the Easement Area

Item	Description
Easement Name	Tulare Meadow Property
Property Owner	City of San José
Owner's Contact Person	Kim Walesh Deputy City Manager | Director of Economic Development Address: 200 E. Santa Clara St. San José, CA 95113 Email: Kim.Walesh@sanjoseca.gov Phone: (408) 535-8181
Location	The property is located in northern Coyote Valley in the southern part of the City of San José, just south of Tulare Hill and the Metcalf Energy Center, west of Coyote Creek and US Highway 101, and east and south of Fisher Creek and Laguna Seca. It is bounded on the northeast by Blanchard Road, the northwest by the Fisher Creek levee, the south by Bailey Avenue, the east by Monterey Road, and the west by Santa Teresa Boulevard.
Parcels	The Easement Area is 325.798 acres as surveyed by Kier and Wright (326.7 acres as measured in GIS) and consists of 10 parcels totaling 352.7554 acres as surveyed by Kier and Wright (351.8 acres as measured in GIS); all but two of the parcels are entirely within the Easement Area (Table 2). The two Fisher Flats parcels in the northeastern corner of the property are zoned Agriculture, while the remaining eight parcels are zoned for Agriculture with Planned Development-Industrial.
Baseline Documentation Report	This report was prepared by Jodi McGraw, Ph.D., Ecologist and Principal with Jodi McGraw Consulting (JMc), Linda Kwong, Real Property Specialist with Santa Clara Valley Open Space Authority, and Peter Cowan, Director of Conservation Science with Peninsula Open Space Trust. Site visits were conducted by Dr. McGraw and JMc Assistant Ecologist Katarina Palermo, on June 14, 2019 and Linda Kwong on October 4, 2019 and October 8, 2019.

1 Introduction

This Baseline Documentation Report (BDR) was prepared to document the physical features, conditions, land use, and improvements within the Tulare Meadow Property Conservation Easement Area (Easement Area) of the Conservation Easement granted by the City of San José to the Santa Clara Valley Open Space Authority, dated _____ and recorded as Document Number _____ in the Official Records of Santa Clara County (Appendix A). It was developed based on a synthesis of existing information about the Easement Area and the broader region, including reports and geographic information system (GIS) data, as well as a site visit to examine the features and conditions on the ground. The text, tables, and maps identify and briefly describe the conditions and features of the Easement Area, including land uses, land cover, and improvements, with an emphasis on those that are relevant to the terms of the conservation easement. The report maps illustrate certain features adjacent to the Easement Area to provide context; however, such features are not included in the narrative descriptions and tables except where noted.

1.1 Regional Landscape

The Easement Area is located in the southern portion of the City of San José--a 180 square mile incorporated area centered on the Santa Clara Valley in the southern portion of the San Francisco Bay Area. The Easement Area is located in the northern portion of Coyote Valley--a relatively flat, low-lying area between the Santa Cruz Mountains to the west, and Coyote Ridge, a portion of the Diablo Range Mountains, to the east (Figure 1).

Compared to the remainder of the City of San José, Coyote Valley is relatively sparsely developed, and consists primarily of agricultural land including remnant orchards, row crop land, and hayfields, as well as parks and open space lining Coyote Creek, which flows north through the valley to the San Francisco Bay. Coyote Valley is dotted with residential, industrial, and commercial development, including the IBM Campus west of the Easement Area on Bailey Avenue, and the Metcalf Energy Center, a natural gas power plant, to the north of Blanchard Road.

Prominent natural features in the general region in which the Easement Area occurs include the following, which are referenced in this report for geographic context (Figure 1):

- **Fisher Creek,** a stream tributary to Coyote Creek, which flows to the west and north of the Easement Area;
- **Tulare Hill**, a 620-foot-tall hill that is largely protected by the Land Trust of Santa Clara Valley and Santa Clara County Parks and Recreation Department, is located north of Fisher Creek just north of the Easement Area;
- **Laguna Seca**, a seasonal lake with perennial freshwater wetlands, located just north of Fisher Creek and west of Tulare Hill;
- **Coyote Ridge,** which is the portion of the Diablo Range Mountains just east of Coyote Valley; and
- **Santa Teresa Hills**, a prominent ridgeline that extends northwest from the Easement Area to Santa Teresa County Park.

1.2 Easement Boundaries and Parcels

The Easement Area is 325.798 acres as surveyed by Kier and Wright (326.8 acres as measured in GIS[1]) and includes the entire area within eight assessor's parcels as well the southern portions of two additional parcels (Table 1, Figure 2); the northern 1.62-acre area as surveyed, (1.7 acres as measured in GIS) along Fisher Creek in parcel 708-25-002, and the northern 25.37-acre area as surveyed (23.3 acres as measured in GIS) area straddling Fisher Creek in parcel 708-28-002, were excluded from the Easement Area. The parcels are owned by the City of San José.

Table 2: Parcels within the Easement Area (acreages are as measured in GIS))

Assessor's Parcel Number	Zoning	Developed?	Acres in Easement	Total Parcel Acres
708-25-002	Planned Development-Industrial	Yes (Blanchard House)	14.5	16.2
708-25-004	Agriculture	No	15.1	15.1
708-25-005	Agriculture	No	14.8	14.8
708-26-001	Planned Development-Industrial	No	41.8	41.8
708-26-002	Planned Development-Industrial	Yes (Emado Compound)	45.0	45.0
708-27-001	Planned Development-Industrial	Yes (Emado Compound)	26.8	26.8
708-27-002	Planned Development-Industrial	No	3.3	3.3
708-27-007	Planned Development-Industrial	No	79.9	79.9
708-27-014	Planned Development-Industrial	No	24.4	24.4
708-28-002	Planned Development-Industrial	No	61.2	84.5
	Total		**326.8**	**351.8**

To the north, the Easement Area is generally bounded by the southern Fisher Creek Levee (northwest) and Blanchard Road (northeast), excluding one parcel known as the "Weyhe Property" (APN 708-25-001), which may be incorporated into the easement in the future, at which time this BDR will be updated to also reflect the conditions of the Weyhe Property. To the east, the Easement Area abuts narrow parcels owned by Southern Pacific Transportation Company, which support rail lines; residential parcels lie between the rail lines and Monterey Road in the northern third of the eastern boundary, while the Easement Area is separated from Monterey Highway on the east solely by the railroad parcels. To the south, the Easement Area adjoins the City right-of-way that includes Bailey Avenue, while the western boundary of the Easement Area is adjacent to Santa Teresa Boulevard and the City right-of-way.

1.3 Physical Description of the Easement Area

The Easement Area features flat land in the bottom of Coyote Valley, which slopes gently northwest. Elevation ranges between approximately 246 feet above mean sea level (AMSL) in the northwest, just

[1] All acreages in this report are derived from the geographic information system (GIS) unless otherwise noted. Acreages from GIS may differ from those measured through surveying, such that the acreages reported here may differ from presented in title reports or other reports based on surveys.

south of the Fisher Creek levee, to just 263 feet AMSL in the southeastern corner of the property (USGS 2005).

As mapped by the US Department of Agriculture Soil Conservation Service, the Easement Area is underlain by four soil types, which are generally mapped in contiguous strips running north-south through the property (Figure 3, USDA 2010). Table 3 lists the acreages and the percent of the total Easement Area underlain by the five soil types, which have been grouped according to their suitability for irrigated agriculture as discussed in Section 1.4.2.3.

Table 3: Soils within the Easement Area (USDA 2010)

Soil Land Capability Class (Irrigated) and Soil Type as classified in SSURGO	Drainage Class	Hydrologic Group[2]	Acres (GIS-derived)	% of Total
Class 1: Soils with few limitations that restrict their use				
Campbell silty clay loam	Somewhat poorly drained	C	111.5	34%
Yolo silty clay loam, 0 to 2 percent slopes	Well drained	B	54.6	17%
		Subtotal Class 1	**166.1**	**51%**
Class 2: Soils with moderate limitations that reduce the choice of plants or that require moderate conservation practices				
Clear Lake clay, drained, 0 to 2 percent slopes	Poorly drained	D	44.8	14%
Sunnyvale silty clay, drained	Poorly drained	C	0.1	0%
		Subtotal Class 2	**44.9**	**14%**
Class 3: Soils with severe limitations that reduce the choice of plants or that require special conservation practices, or both				
Sunnyvale silty clay	Poorly drained	C	115.8	35%
		Subtotal Class 3	**115.8**	**35%**
		Total	**326.8**	**100%**

[2] *Group B* - Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C - Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D - Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission. (USDA 2010)

There are no surface water features, such as springs, ponds, or streams within the Easement Area. The Easement Area lies within the 18,500-acre sub-watershed of Coyote Creek in Santa Clara County. Fisher Creek, a stream tributary to Coyote Creek, flows just north of the Easement Area along its northwest boundary, while Coyote Creek flows approximately 500 feet east of the northeastern border of the Easement Area. Approximately 39 acres of the Easement Area lie within Fisher Creek's 100-year floodplain as mapped by the Federal Emergency Management Agency (FEMA 2019). The Easement Area overlies the Santa Clara Plain Aquifer, which is known to be susceptible to contamination from urban runoff. The Easement Area features several groundwater wells (Section 2.4)

1.4 Summary of Significant Conservation Values

The Easement Area features primary conservation values for wildlife habitat and connectivity and water resources, as well as secondary conservation values for scenic resources, agricultural resources, cultural resources, and low-intensity/passive recreation and environmental education. The following sections contain the descriptions of the conservation values contained within the conservation easement document.

1.4.1 Primary Conservation Values

1.4.1.1 Wildlife Habitat and Connectivity

Coyote Valley is a regionally important area of habitat connectivity, being positioned between vast expanses of open space that lie to the east and west of the valley. Located within Coyote Valley, the Easement Area consists entirely of regionally rare undeveloped valley floor habitat that can support important grasslands, valley oak savanna, oak woodlands, riparian forest, and wetlands. Historically, movement of mammals, amphibians, and reptiles across the Santa Clara Valley was relatively unobstructed. This connectivity changed as the valley developed, Monterey Highway was constructed, the Coyote Canal was built, agriculture became a dominant land use, and the U.S. 101 Freeway was constructed. Currently, wildlife movement between the Santa Cruz Mountains and the Diablo Range can occur in relatively few locations due to the barriers to dispersal and the distance between these two ranges (SCVOSA and Conservation Biology Institute 2017, p. 9).

Positioned at the valley narrows, the Easement Area helps connect over one million acres of habitat in the Santa Cruz Mountains and the Diablo Range. The loss of landscape connectivity on the Easement Area to development would further isolate wildlife populations in the Santa Cruz Mountains and the Diablo Range resulting in the loss of genetic diversity and reducing the ability of wild plant and animal populations to adapt to climate change, which would result in the decline or loss of species populations. Preserving the Easement Area is essential for establishing a landscape linkage that connects species and habitat between the Santa Cruz and Diablo Mountain ranges. The Conservation Property is located entirely within the Coyote Valley Landscape Linkage (Santa Clara Valley Open Space Authority and Conservation Biology Institute 2017, p.31-45). Additionally, 38 acres have been identified by the Conservation Lands Network (BAOSC 2011) as "essential to the Conservation Goals."

Preserving the Easement Area is also essential to maintaining biodiversity and the health of wildlife (plant and animal populations) in the region. Wildlife species on the Easement Area include, but are not limited to, mountain lion (*Puma concolor)*, bobcat (*Lynx rufus)*, coyote (*Canis latrans)*, black-tailed deer (*Odocoileus hemionus*), raptors, and migratory birds. The Easement Area is located in the Pacific Flyway,

a significant migratory bird pathway stretching from Alaska to Southern South America, which supports a large number of migratory and resident bird species. Over 240 species of birds have been observed in the Coyote Valley region (SCVOSA and Conservation Biology Institute 2017, p. 20). The Easement Area provides connectivity and habitat (or potential habitat) for rare, threatened and endangered species including, but not limited to, tricolored blackbirds (*Agelaius tricolor*), burrowing owls (*Athene cunicularia*), Swainson's hawk (*Buteo swainsoni*), western pond turtle (*Actinemys marmorata*), California red-legged frog (*Rana draytonii*), California tiger salamander (*Ambystoma californiense*), badger (*Taxidea taxus*), golden eagle (*Aquila chrysaetos*), and bay checkerspot butterfly (*Euphydryas editha bayensis*). The Easement Area is located within the Lower Coyote Creek Watershed, and its protection and management as open space will maintain water quality, provide climate resilience, protect groundwater-dependent ecosystems, and support favorable habitat conditions in the waterways to benefit wildlife, including, but not limited to, local populations of steelhead trout.

Existing movements of wildlife in North Coyote Valley have been addressed in detail by Phillips *et al*. (2012 p.40-57), Diamond and Snyder (2016, p.12-31) and the SCVOSA and Conservation Biology Institute (2017 p17-20). A study of movements of bobcats in the Coyote Valley area, using GPS-enabled collars (Serieys and Wilmers 2019, p.7-21), has provided insights into on how bobcats use the landscape and the habitats with which they are most frequently associated. Mapping from this study revealed several important observations regarding bobcat use of the Easement Area:

- Bobcat use of the Easement Area was focused in areas providing cover along the edge of Santa Teresa Boulevard, the base of Tulare Hill, and the northwestern portions that are adjacent to the Fisher Creek corridor;
- Considerable movement occurs along Fisher Creek, which lies northwest of the Easement Area, including both the mainstem and the bypass channel;
- Bobcats are closely associated with vegetative cover, explaining the preferential use along Fisher Creek, which is adjacent to the northwest of the Easement Area.
- There are movements concentrated along Santa Teresa Boulevard and the base of Tulare Hill to the north of the Easement Areas, in areas providing cover.

Roadkill data for various species illustrate animal movements (Pathways for Wildlife 2016 p.18-19, SCVOSA and Conservation Biology Institute 2017 p.19, Santa Clara County Wildlife Corridor Technical Working Group, Coyote Valley Subcommittee 2019 p.14-15, Pathways for Wildlife 2018 p.5-12). Most roadkill has been observed where animals are dispersing along creeks and other areas featuring cover, such as at the Fisher Creek crossings of Bailey Avenue and Santa Teresa Boulevard which are located to the west and southwest of the Easement Area, respectively. However, roadkill at other locations indicate animal movements also occur more widely. As summarized in Santa Clara County Wildlife Corridor Technical Working Group, Coyote Valley Subcommittee (2019, Appendix B), roadkill data indicate the presence of raccoon (*Procyon lotor*), black-tailed jackrabbit (*Lepus californicus*), and American badger along Bailey Avenue south of the Easement Area as well as numerous roadkill, including that of American badger, bobcat, coyote, black-tailed deer, western pond turtle and California ground squirrel (*Otospermophilus beecheyi*), along Monterey Road east of the Easement Area.

Wildlife habitat within the Easement Area consists of primarily hayfields, coyote brush, ruderal vegetation, and non-native landscaping and ornamental vegetation. A total of 20 bird species were recorded in low numbers in the Easement Area during June 2019 surveys by H.T Harvey & Associates (H.T. Harvey, 2019). The hayfields provided habitat for few wildlife species including Common raven

(*Corvus corax*), Brewer's blackbird (*Euphagus cyanocephalus*), and red-winged blackbird (*Agelaius phoeniceus)*, which were observed foraging in the recently cut hayfields. The majority of bird use is associated with Fisher Creek, which is northwest of the Easement Area, and around the Emado Compound in the east-central part of the site, where mostly non-native trees and shrubs, as well as buildings, provide nesting and foraging habitat for a small number of regionally common, urban-adapted species (H.T. Harvey, 2019, p.18).

Very few Botta's pocket gopher (*Thomomys bottae*) and California ground squirrel burrows were present within the hayfield, with the latter present primarily in the southwestern corner of the hayfield, and nearby on the Fisher Flats site to the northeast. Between October 2017 and March 2018, motion detecting cameras on the Fisher Flats parcels recorded numerous images of coyote, opossum (*Didelphis virginiana*), raccoon, and feral house cats (*Felis felis*), as well as single images of mountain lion (*Puma concolor*), bobcat, and striped skunk.

Approximately 5.7 acres of dense coyote brush on a mound of fill in the southeastern corner of the Easement Area ("the Bailey Overpass Soil Disturbance Area") provides some habitat structure, and a few bird species, such as the California towhee (*Melozone crissalis*), California scrub-jay (*Aphelocoma californica*), and bushtit (*Psaltriparus minimus*), as well as a large flock of post-breeding European starlings (*Sturnus vulgaris*), were observed in this vegetation during June 2019 (H.T Harvey & Associates 2019). Numerous black-tailed jackrabbits were foraging in the hayfields around the edges of this coyote brush stand and using the coyote brush as cover. Similar coyote brush scrub is present along portions of the western edge of the hayfield, along Santa Teresa Boulevard (H.T. Harvey 2019, p.18-19, Figure 4).

The narrow strip of landscaped vegetation along the sidewalks north of Bailey Avenue and east of Santa Teresa Boulevard supports relatively limited wildlife use; however, numerous nests of the San Francisco dusky-footed woodrat were observed in this vegetation (H.T. Harvey 2019, p.19).

1.4.1.2 Water Resources

Located in the Lower Coyote Creek Watershed, the Easement Area encompasses a flood-prone area and groundwater basin upstream from the City of San José and the San Francisco Bay. This flood-prone area is a part of the larger Fisher Creek floodplain and historic Laguna Seca Wetland complex that spread and capture floodwater; by doing so, these features reduce flooding in downstream areas along Coyote Creek and support riparian areas and wetlands in Coyote Valley. According to FEMA, 39 acres of the Easement Area lie within the 100-year floodplain of Fisher Creek (FEMA 2019). The Easement Area overlies a portion of the Santa Clara Plain Groundwater Basin, where soil conditions allow for infiltration and percolation of rainfall and runoff into the groundwater table, which can support shallow groundwater conditions and baseflows into Fisher Creek. Additionally, maintaining this area as open space prevents groundwater contamination from urban runoff, to which this area is known to be susceptible. Protecting the Easement Area from development maintains its natural flood-control function, protects groundwater and surface water quality, supports groundwater sustainability, and provides climate resilience by buffering more frequent or severe weather events and protecting the groundwater supply.

1.4.2 Secondary Conservation Values

1.4.2.1 Scenic Resources

Located in the pastoral Coyote Valley, the Easement Area is part of a larger complex of undeveloped open space and agricultural lands that provide an exceptional scenic buffer between the cities of San José and Morgan Hill. The Easement Area is adjacent to several protected scenic properties, including Tulare Hill to the north, Coyote Ridge Open Space Preserve to the east, and Coyote Valley Open Space Preserve to the southwest; the Easement Area is highly visible from designated scenic routes such as US Highway 101, Santa Teresa Boulevard, Monterey Road, and Metcalf Road. The Easement Area itself is picturesque and provides expansive views across its open landscape to the nearby foothills of the Santa Cruz Mountains and the Diablo Range. Tulare Hill features steep, rock-outcrop-covered slopes that provide a dramatic backdrop. The Easement Area also provides unobstructed views to notable landmarks including Loma Prieta (the highest peak in the Santa Cruz Mountains), Mount Umunhum to the northwest, and El Toro Peak to the south.

1.4.2.2 Low Intensity/Passive Recreation and Environmental Education Values

The Easement Area provides the opportunity to create an unparalleled natural urban greenbelt that will provide access to open space and trails, improving quality of life and benefiting public health. The Easement Area is located just to the west of the Coyote Creek Parkway and Coyote Ridge Open Space Preserve and between two urban centers, as it is ten miles south of downtown San José and eight miles north of downtown Morgan Hill. Its protection helps close a gap in the system of local parks and open space preserves and will facilitate local and regional trail connections. The Easement Area provides opportunities to connect with the de Anza Historic Trail to the Coyote Creek Parkway and other trails, including the Bay Area Ridge Trail. The Easement Area provides opportunities for Environmental Education to interpret Coyote Valley's myriad conservation values and the importance of protection of this landscape through activities such as docent-led tours, interpretive signs, and educational events.

1.4.2.3 Agricultural Resources

The Easement Area is an important agricultural resource. Livestock operations were present on the Easement Area in the 1800s. The Easement Area has supported ongoing agricultural operations since the early 1900s, and once supported orchards that were widespread throughout the Santa Clara Valley at a time when it was known as the "Valley of Heart's Delight." Much of the Easement Area is currently cultivated as dry-farmed hay (Figure 4). The exceptions are 29.9 acres within the two Fisher Flats parcels (708-25-004 and -005), which feature a mix of ruderal vegetation and coyote brush; approximately 5.7 acres of dense coyote brush in the Bailey Overpass Soil Disturbance Area; two residential areas totaling approximately 2 acres; and approximately 0.6 acres of paved or developed areas along the southeastern boundary of the Easement Area, including the San José Municipal Water System pump stations (Figure 4).

More than half of the Easement Area (166 acres, 51%) features Class 1 soils, which are soils that feature few limitations that restrict their use for irrigated agriculture (USDA 2010, Table 3, Figure 3). An additional 44.9 acres (14%) feature Class 2 soils, which have moderate limitations that reduce the choice of plants or that require moderate conservation practices during irrigated agriculture; the remaining 115.7 acres (35%) feature Class 3 soils, which have severe limitations that reduce the choice of plants or that require special conservation practices, or both (USDA 2010, Table 3, Figure 3).

The Easement Area has over 178.5 acres (GIS-derived) of land classified as Prime Farmland and 130.2 acres (GIS-derived) of land classified as Farmland of Local Importance as designated by the State Department of Conservation's Farmland Mapping and Monitoring Program in 2016.

1.4.2.4 Cultural Resources

Coyote Valley was inhabited by the Ohlone people and is considered an important cultural landscape by the Muwekma and Amah Mutsun tribal bands. According to Basin Research Associates, Laguna Seca was probably an important resource for food. Additionally, the adjoining lands to the west of Santa Teresa Boulevard, north of Bailey Avenue as well as to the north of the Easement Area, contain Native American burial sites (Basin Research Associates 2008). A Native American village was possibly located within or adjacent to the Easement Area, as noted by Spanish explorers as they traveled through the Santa Clara Valley (Basin Research Associates 2007). Prior to Spanish settlement, the San Juan Batista de Anza Expedition traveled through Coyote Valley in 1775-76. Coyote Valley is included within the Juan Bautista de Anza National Historic Trail corridor, and the portion of Santa Teresa Boulevard immediately adjacent to the Easement Area has been designated as a certified segment of this National Historic Trail.

2 Baseline Conditions

2.1 Current Land Use

Land uses in the Easement Area at the time this report was prepared (June through October 2019) include the following:

1. **Agriculture:** Most of the property leased by a tenant to produce dry-farmed hay (cut and stored grass and other herbaceous plants) used as animal fodder (food for livestock). Prior to the June 14, 2019 site visit, the herbaceous plant growth had been recently cut, baled, and stacked on site throughout much of the property except the 29.9 acres within the two Fisher Flats parcels (708-25-004 and -005), the dense coyote brush in the Bailey Overpass Disturbance Area totaling 5.6 acres, the two residential areas totaling about 2.4 acres, and relatively small areas supporting ruderal and ornamental vegetation around the perimeter of the property.
2. **Residential:** The Emado Compound featured 2 unoccupied residential structures located on APN 708-27-001 and structures that supported the former agricultural operation on the property, as described in Section 2.5.1. The residences featured fenced enclosures used for animal keeping. The Blanchard Residence on the northern border of the Easement Area (on APN 708-25-002) was in disrepair and unoccupied at the time of the site visit. A residence and two outbuildings formerly located on the Fisher Flats parcels along Blanchard Road were demolished in late 2018. The residential well and abandoned and filled septic tank remain from the residence on Fisher Flats.
3. **Municipal Water System Production:** Three water wells, pump stations, distribution system piping and appurtenances that are part of the San José Municipal Water System are operational along the southeastern border of the Easement Area (Figure 7). The Municipal Water System serves customers outside of the Easement Area within its service area, providing water for potable uses. In the Metcalf Energy Center, recycled water from the City of San José's water treatment facility is used for cooling during energy production; however, the Metcalf Energy Center may use potable water from the pump stations for cooling upon written notice to the Compliance Project Manager in the event the recycled water system is interrupted. The Municipal Water System also serves Gavilan College, City of San José, and an AT&T substation to the southwest. The City is in conversations with Great Oaks Water Company to provide up to an annual daily average of 0.15 million gallons per day (104 gallons per minute) from the Municipal Water System Wells to the Great Oaks Water Company for Great Oaks Water Company to supply to the IBM campus located in Coyote Valley on APN 708-32-006 through a future agreement.

2.2 Prior Land Uses

Prior to the site visit, the Easement Area was subject to soil import and export in five areas ranging between 5.6 and 27.4 acres and totaling 54.5 acres within the Easement Area (Table 4, Figure 4).

Table 4: Areas of prior soil disturbance within the Easement Area (Figure 4)

Name	Activity	Acres (GIS-derived)
Northwest Soil Disturbance Area	Raised soil import and staging area	6.1
West Soil Disturbance Area	Raised soil import area	13.0
Calpine Soil Disturbance Area	Raised soil import area	2.4
Southwest Soil Disturbance Area	Soil excavation and staging area	27.4
Bailey Overpass Soil Disturbance Area	Soil excavation and fill import	5.6
Metcalf Energy Center Soil Disturbance Area	Grading, soil excavation, and staging area	17.3
	Total	**67.9**

These areas, which were mapped based on analysis of historical aerial imagery using Google Earth Pro (OSA 2019), were subject to soil export and/or import (i.e., excavation and/or fill) as part of completed development projects, including construction of the Bailey Avenue Overpass over Monterey Road, construction of the Metcalf Energy Station to the north, as well as anticipated future development on site. Additionally, soil and equipment were staged in some of these areas. Soil excavation and fill likely contributed to the increased cover of invasive plants, including yellow star thistle (*Centaurea solstitialis*) and slender flowered thistle (*Carduus tenuiflorus*) found in these areas relative to elsewhere in the Easement Area. Similarly, the dense stand of coyote brush (*Baccharis pilularis*) in the Bailey Overpass Soil Disturbance Area is likely attributable to the soil excavation and fill there.

Environmental Site Assessments (ESAs) were conducted by EKI Environment & Water, Inc. on the Easement Area (EKI 2017, 2019). The ESAs for Fisher Flats found dieldrin near the well located off of Blanchard Road on the northern portion of Fisher Flats that were at concentrations above the Regional Water Quality Control Board's Environmental Screening Levels (ESLs) for residential/unrestricted land use, but below the ESLs for commercial/industrial use (EKI 2017). EKI determined that the dieldrin concentrations were at the very low end of the risk range and remedial actions are not warranted (EKI 2017).

The ESAs for the remainder of the Easement Area detected selected metals, pesticides, diesel-range TPH, and benzo(a)pyrene in soil in portions of the Easement Area are above residential screening levels; however, all of the concentrations, except for arsenic, were below commercial screening levels (EKI 2019). Arsenic exceeded the regional background level and possibly the local background level in surface soil at two locations: south of the residential area in the Emado Compound where there was a former chemical storage barn and around the well located on the southeastern corner of APN 708-28-002 (EKI 2019). In addition, lead was present in soil at concentrations above residential levels and below commercial levels at two locations: south of the residential area in the Emado Compound where there was a former chemical storage barn, and around the well located south of the Blanchard Residence on APN 708-25-002. The lead concentrations could meet the definition of a hazardous waste if the soil is excavated at these locations. No significant impacts to groundwater were identified in the groundwater sampling (EKI 2019).

2.3 Land Cover

The Easement Area features six main land cover types (Table 5, Figure 4). Hayfields dominate the Easement Area, covering 275 acres (84%). These areas are dominated by herbaceous plant species,

including primarily exotic annual grasses and forbs such as oats (*Avena* spp.) and bromes (*Bromus* spp.), but also invasive plants such as yellow star thistle; native plants occur at low diversity and abundance. The hayfields were mapped based on the 2017 high-resolution aerial imagery which was used to delineate areas where herbaceous plant cover had been harvested (i.e., cut or mowed).

Ruderal areas cover an additional 36.2 acres (11%) and are also dominated primarily by herbaceous exotic plants including those found in the hayfields, as well as mustards (*Brassica* spp.) and perennial species such as poison hemlock (*Conium maculatum*). The majority of this land cover type is in the Fisher Flats parcels (708-25-004 and -005), with remaining areas found along roads, around buildings, in ditches, or other areas where perhaps access limited hay harvest.

Table 5: Land cover within the Easement Area

Land Cover	Description	Acres (GIS-derived)	Percent of Total
Coyote Brush Scrub	Areas dominated by coyote brush (*Baccharis pilularis*)	8.3	2.5%
Riparian	Areas near the Fisher Creek levee where greater soil moisture supports willows (*Salix* spp.) and Fremont cottonwood (*Populus fremontii*)	0.5	0.2%
Hayfield	Areas dominated by herbaceous plants that evidenced hay harvest in aerial imagery and site observation (i.e., recent cutting)	275.2	84.2%
Ruderal	Areas dominated by herbaceous plants including primarily invasive plant species, which are not harvested.	36.2	11.0%
Ornamental	Areas supporting ornamental trees including gums (*Eucalyptus* spp.), plum (*Prunus* sp.), palms (*Phoenix* spp.) and pines (*Pinus* spp.)	4.1	1.3%
Developed	Areas featuring buildings and/or pavement	2.4	0.7%
	Total	**326.3**	**100.0%**

Coyote brush scrub occurs in 8.3 acres (2.5%), most of which is concentrated in the Bailey Overpass Soil Disturbance Area, with additional areas emerging in the eastern Fisher Flats parcel (708-25-005). This community is dominated by coyote brush (*Baccharis pilularis*), a native shrub that colonizes disturbed areas following cessation of disturbance; gaps between shrubs are dominated primarily by herbaceous exotic plants in canopy gaps.

A small patch of riparian vegetation (0.5 acres, 0.2%) occurs along the northwestern border of the Easement Area adjacent to the Fisher Creek levee. It features plant species adapted to moister soil including willows (*Salix* spp.) and Fremont cottonwood (*Populus fremontii*).

Patches of ornamental shrubs and trees occur in a total of 4.1 acres (1.3%) of the Easement Area, including in the association with the housing areas, and adjacent to the City sidewalks along Bailey Avenue and Santa Teresa Boulevard. These areas include planted including gums (*Eucalyptus* spp.), plum (*Prunus* sp.), palms (*Phoenix* spp.) and pines (*Pinus* spp.).

The remaining 2.4 acres (0.7%) of the Easement Area are developed, and feature buildings, pavement, or soil that has been highly compacted and graveled. Most of this area is in the Emado Compound, which is a developed area at the end of Emado Avenue that features a 1.8-acre paved yard, with residential and agricultural structures (Section 2.5.1). The remaining developed areas are all smaller (<6,500 ft^2) and include: the Blanchard House (Section 2.5.1), and three paved or graveled lots: two in the northeast corner of the Easement Area along Blanchard Road, and one in southeastern corner of the Easement Area near the Bailey Overpass. This does not include road surfaces, which were not mapped within the land cover layer (Section 2.5.2).

2.4 Water and Drainages

There are no surface water features, such as springs, ponds, or streams, within the Easement Area (Section 1.3). According to FEMA, 39 acres of the Easement Area lie within the 100-year floodplain of Fisher Creek (FEMA 2019). The Easement Area overlies a portion of the Santa Clara Plain Groundwater Basin, where soil conditions allow for infiltration and percolation of rainfall and runoff into the groundwater table, which can support shallow groundwater conditions and baseflows into Fisher Creek. The Easement Area features groundwater resources that are utilized for both agricultural and Municipal Water System supply (Section 2.5.4).

2.5 Improvements

The Easement Area features various improvements, including buildings, roads, fences, wells, and utilities, associated with is residential, agricultural, and municipal uses, including prior planned residential development. This section describes the various improvements to the Easement Area, which were mapped in Figure 5 and Figure 5a-d based on a combination of existing spatial data and site visits to document conditions and features in June 2019.

2.5.1 Buildings

The Easement Area features 17 buildings:

1. **Houses:** There are two unoccupied single-family homes in the Emado Compound (APN 708-27-001) (Photos 70, 71, 73-75) and one at the Blanchard Residence (APN 708-25-002) (Photos 46, 48, 49), which are intended to be demolished;
2. **Agricultural Buildings:** APN 708-27-001 of the Emado Compound features a wooden barn (Photos 60, 62, 67, 69), two open sided pole barns with tin roofs (Photos 58, 63, 65), and two cinderblock structures (Photos 61, 64, 66). APN 708-26-002 of the Emado Compound contains a small shed, one raised concrete structure, and one cinderblock structure (Photo 55, 57). All of these structures were likely used as part of the prior agricultural operations on site;
3. **Pump Houses:** There are three ~1,200 ft^2 pump houses associated with the City of San José Municipal Water System Wells along the southeastern border of the Easement Area (Photo 22 and 27, 78-83); and
4. **Generator Houses:** In each of the three fenced compounds featuring the City's pump houses, there is a ~ 230 ft^2 generator house adjacent to the pump house (Photo 22 and 27, 78-83).

2.5.2 Roads

The Easement Area features 2.4 miles of private roads, which were classified into two categories based on their condition during the June 2019 site visit (Table 6). The two primary roads both are gravel. Calpine Road, which was built to provide secondary (i.e., emergency) access for the Metcalf Energy Center, connects a gated entry on Santa Teresa Boulevard (Photo 39, 96) to a gated entrance on Blanchard Road (Photo 88), which is located just north of the Easement Area and therefore not included in Table 6. Emado Avenue provides access to the Emado Compound from Monterey Road.

Table 6: Private Roads within the Easement Area (Figure 5)

Road	Approx. Surface Width (feet)	Length (Miles)
Primary Roads (Graveled)		**0.77**
Calpine Road	10 - 12	0.66
Emado Ave	20 - 22	0.11
Secondary Roads (Dirt Roads)		**1.62**
Emado Field Access Road	16 - 18	0.41
Northeast Perimeter Road[1]	16 - 18	0.64
Southeast Perimeter Road	16 - 18	0.57
	Total	**2.39**

[1] Portions of this road are outside of the Easement Area

The three secondary roads are unpaved and not elevated, but feature some gravel (i.e., roadbed). Northeast Perimeter Road and Southeast Perimeter Road provide access to the Emado Compound along the eastern perimeter of the property. Southeast Perimeter Road, which also provides access to the City of San José Municipal Water Wells, terminates in the south at a gated entrance on Bailey Avenue.

Emado Field Access Road is a dirt road that traverses the center of the property and connects the Emado Compound to a gated entrance to the property on Santa Teresa Boulevard.

Additional routes used seasonally for the agricultural operations were visible in 2017 aerial imagery but not noticeable on the ground during the June 2019 site visit and were therefore not mapped or included in this report.

Approximately 1,544 feet of City sidewalk lie within the southern boundary of the Easement Area along Bailey Avenue (Photos 84, 85, 89, 92) and approximately 3,980 feet of City sidewalk lie within the western boundary of the Easement Area along Santa Teresa Boulevard (Photos 86, 87, 93, 95, 97). The sidewalks are situated within a public service easement of 10 feet in width.

2.5.3 Fences

The Easement Area features a total of 3,592 linear feet of walls, fences, and other barriers including k-rails (Jersey barriers; Table 7). These features are primarily located on the perimeter of the Easement Area adjacent to roads and previously planned access from Santa Teresa Boulevard and Bailey Avenue. However, they do not fully enclose the Easement Area. They also include fenced enclosures used to

encircle wells including the Municipal Water System pump stations and transformers on the property. There is also a 1,324' foot long segment of 8' tall chain link along the

Table 7: Walls, fences, and other barriers in the Easement Area

Type	Description	Feet
Chain Link	A linear fence made of wire mesh, also known as a hurricane fence. These fences are 6' tall except on northeastern boundary, where the fence is 8' tall. (Photo 14, 15, 39)	1,897
Fenced Enclosure	A chain link fence enclosing a small area, such as a well (Photo 6, 22, 78-83)	739
Wall	A solid wall made of brick or cinder blocks (Photo 28, 29, 91, 94)	261
Wood Fence	A short (~3') fence made from wooden slats (Photo 28, 91)	175
	Subtotal Walls and Fences	**3,073**
K-Rail (Jersey Barrier)	A short (~2') concrete barrier placed along roads (Photo 13, 88)	519
	Total of All Barriers	**3,592**

northeastern property line. The perimeter fences feature five gates regulating access to the Easement Area (Figure 5, Photos 88, 90, 95, 96); additional gates are associated with the fenced enclosures (e.g., around the pump stations).

2.5.4 Wells

The Easement Area has 12 wells, which were mapped and characterized according to their status (active or destroyed) by the Santa Clara Valley Water District (SCVWD 2012). The locations of some wells were adjusted based on ground truthing the data during the site visit (Figure 5).

Of the 12 wells, three are destroyed (i.e., decommissioned). Of the nine active wells, three are municipal wells operated by City of San José Municipal Water (Photo 22 and 27, 78-83). Located along the Southeastern Perimeter Road, these wells are located in pump houses (Section 2.5.1) in fenced enclosures that also feature transformers and emergency generators. In the course of standard operating procedures, the City of San José releases water from the pump stations onto the surrounding fields.

The other six active wells are private residential and agricultural wells. The Fisher Flats agricultural well occurs in a dilapidated fenced enclosure with a water tank (~250 gallon) and pressure tank (~100 gallon) (Photo 45). The Blanchard House well features a 100-gallon pressure tank (Photo 50). There is one residential well on Fisher Flats (Photo 44), one residential well at the Emado Compound (Photo 72), one agricultural well at the Emado Compound (Photo 58), and one agricultural well on the southeast corner of APN 708-28-002 that are categorzied as active by SCVWD but appear inactive (Photo 77).

2.5.5 Utility Lines

The Easement Area features the following utility lines (Figure 5, Figure 7, Figure 8), listed below according to the source of the data used to identify and map underground facilities, most of which were not readily observable during the site assessment:

- Overhead power lines supplying electricity and telecommunications utilities to the Blanchard and Emado residences, and also Fisher Flats wells and the City of San José Municipal Water System wells;
- Underground water lines along the eastern border, providing reclaimed water (HMH Engineers 2016);
- Stormwater lines including gravity mains, laterals, and open drains located on the perimeter of the property, where they straddle the property and the City right-of-way, and nine stormwater manholes (City of San José 2019); and
- A private sanitary pressurized main that runs along Calpine Road from Santa Teresa Boulevard to the Metcalf Energy Center and three sanitary system manholes (City of San José 2019).
- San José Municipal Water System maintains pressurized water systems from the Municipal wells north to Metcalf Energy Center, south along the eastern boundary of the Easement Area, and west to Bailey Avenue.

2.5.6 Other Anthropogenic Features

The Easement Area features other anthropogenic features associated with the utilities (Figure 5) including:

- A 380-foot long drainage ditch (~6’ wide) on the eastern portion of the property;
- Signposts with signs to deter trespass (5);
- Water infrastructure, including a water valve (1), an air valve (1), and a blow off valve with adjacent bollards (1);
- Two square (4” x 4”) upright monitoring wells (2.5’ tall); and
- Three piles of debris near the south levee of Fisher Creek. The two piles on the northeastern end of the levee consists of one that is 10’ in diameter and features old tires (Photo 54) and one that is approximately 30’ wide with woody debris, rusted barrels and old concrete footings (Photo 52, 53), while the southwestern pile features rocks and debris (Figure 5d).

2.6 Encumbrances and Water Rights

There are no surface or riparian water rights within the Easement Area; the only water rights pertain to groundwater. The groundwater basin is managed by the Santa Clara Valley Water District. The Santa Clara Subbasin, in which this Easement Area is located, is subject to the Sustainable Groundwater Management Act of 2014 (SGMA) and has been identified as a ‘high priority basin’ by the California Department of Water Resources (CDWR 2019). The City of San José Municipal Water System operates a water utility system, including three pump stations, distribution piping, and appurtenances along the eastern, southern, and western boundaries of the Easement Area (Figure 7) and an access road along the western side of the pump stations as described in the unrecorded legal description entitled

"Temporary Access Easement" dated January 11, 2005 (Appendix C) and along the northern side of Bailey Avenue as described in the unrecorded legal description entitled "Public Service Easement" dated August 8, 2000 (Appendix D), and shown in Figure 5 as the "Southeast Perimeter Road".

The three pump stations and associated infrastructure are located within an easement granted to the City of San José on July 17, 1986 in Book J769, Page 634 in the Official Records of Santa Clara County (Appendix E). Additional water mains were installed in the locations described in i) the easement granted to Metcalf Energy Center on June 11, 2002 as Document Number 16308398 in the Official Records of Santa Clara County (Appendix F), ii) the easement granted to the City of San José on December 5, 2002 as Document Number 16661030 in the Official Records of Santa Clara County (Appendix G), iii) the unrecorded legal description entitled "Public Service Easement" dated January 11, 2005 (Appendix H) and shown in Figure 7.

The Municipal Water System primarily serves the Metcalf Energy Center, Gavilan College, and the AT&T substation. However, the Municipal Water System will provide service to users within its service area who request to be connected. The current service area consists of the valley floor roughly bounded by Palm Avenue to the south, the foothills of the Santa Cruz Mountains to the west, and Highway 101 to the east. To the north, the current service area is bounded by Bailey Avenue to the west of Santa Teresa Boulevard and Tulare Hill and Metcalf Road to the east of Santa Teresa Boulevard (Figure 7). The City is in conversations with Great Oaks Water Company to provide up to an annual daily average of 0.15 million gallons per day (104 gallons per minute) from the Municipal Water System Wells to the Great Oaks Water Company for Great Oaks Water Company to supply to the IBM campus located in Coyote Valley on APN 708-32-006 (Figure 7) through a future agreement.

The three existing pump stations were designed and constructed to have a capacity of 1,850 gallons per minute each. Over a 10-year period, the highest volume pumped by the pump stations was 175 million gallons. Over one year, the pump stations averaged 0.45 million gallons per day, which is an average of approximately 300 gallons per minute in output. During Fiscal Year 2018-2019, approximately 112 million gallons total were pumped from the three Municipal Water System Wells and Municipal Water System customers within the existing Coyote Valley Service Area consumed a total of 100 million gallons. The difference of 12 million gallons was attributed to a broken water main along Bailey Avenue, routine flushing for maintenance of the wells, and a difference in timing for data reporting with the municipal water wells reporting on a monthly basis and consumer water use reporting every two months. Recycled water is used for cooling and other non-potable uses at the Metcalf Energy Center. However, with written notification to the Compliance Project Manager, potable water may be used for cooling for up to 45 days in any year if the recycled water supply is interrupted.

For maintenance purposes, the City of San José releases water from the pump stations onto the surrounding fields. Additionally, the City of San José has a 3,600,000-gallon water tank served by the Municipal Water System located on the IBM property located on Bailey Avenue west of the Easement Area.

The Easement Area is currently leased to AgCo Hay for dry-farmed hay production with a term commencing _____ to _____ (Appendix I).

The City of San José, Peninsula Open Space Trust, and Santa Clara Valley Open Space Authority entered into a Master Agreement, dated _____, attached as Appendix J. Purchase of the property that comprises the Easement Area was funded through Measure T, a general obligation bond measure

passed in 2018 from which the City Council allocated $50 million towards land acquisition in Coyote Valley for flood protection and water quality.

Additional encumbrances are shown in the preliminary title report (Appendix K). The City is reserving all easements and encumbrances benefitting the City at the time of the grant of the Easement.

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Preparers' Qualifications

This baseline documentation report was prepared by Jodi McGraw, Principal and Ecologist with Jodi McGraw Consulting, Linda Kwong, Real Property Specialist with Santa Clara Valley Open Space Authority, and Peter Cowan, Director of Conservation Science with Peninsula Open Space Trust. Katarina Palermo, JMc Assistant Ecologist with Jodi McGraw Consulting, assisted with data acquisition and database management.

Jodi McGraw, PhD; Principal and Ecologist, Jodi McGraw Consulting
Dr. Jodi McGraw is a Conservation Ecologist who has assisted conservation organizations and private landowners since 2001 with a variety of projects to protect and manage natural lands. Trained as a plant ecologist, Dr. McGraw has prepared numerous easement documentation reports for conservation easements as well as several land management plans documenting the conditions of conservation lands in California's Central Coast Ecoregion.

Linda Kwong, Master of Environmental Science and Management; Real Property Specialist, Santa Clara Valley Open Space Authority
Linda Kwong provides support for land acquisitions, conservation easements, and other real property matters for the Santa Clara Valley Open Space Authority. She has six years of experience working with conservation easements and has conducted four years of conservation easement monitoring for the Authority.

Peter Cowan, PhD; Director of Conservation Science, Peninsula Open Space Trust
Dr. Peter Cowan is the Director of Conservation Science at POST. Peter has a PhD from UC Berkeley, his dissertation focused on how wildfire has shaped evolution of California chaparral life history. He has a Master of Science from Stanford University and Bachelor of Arts from Kalamazoo College. Peter previously worked as an aide to the California State Senate with an environmental quality portfolio including climate change and the state cap-and-trade program.

Acknowledgement of Conditions

I, _____, duly authorized representative of the City of San José, have reviewed this report, the attached photographs, maps, and other exhibits attached hereto and incorporated herein, and understand it. I attest that the information contained in this Report accurately describes and depicts the physical features, relevant site conditions, and current land uses of the area protected by the conservation easement as of the Easement Date of the Grant of Conservation Easement.

Property Owner:

_____ _____
Date

_____
[Print Name and Title]
City of San José

We, Jodi McGraw, Linda Kwong, and Peter Cowan, attest that the information contained in this report accurately describes and depicts the physical features, relevant site conditions, and current land uses of the area protected by the conservation easement, as were observed on June 14, 2019, October 4, 2019 and October 8, 2019, and affirm the accuracy of the information contained herein.

Prepared by:

_____ _____
Jodi McGraw, Ecologist and Principal Date
Jodi McGraw Consulting

_____ _____
Linda Kwong, Real Property Specialist Date
Santa Clara Valley Open Space Authority

_____ _____
Peter Cowan, Director of Conservation Science Date
Peninsula Open Space Trust

As the General Manager of the Santa Clara Valley Open Space Authority, I declare that the Santa Clara Valley Open Space Authority adopts the information contained in this report to describe and depict the physical features, relevant site conditions, and current land uses on the property as of the Easement Date of the Grant of Conservation Easement.

Conservation Easement Holder:

_____ _____

Andrea Mackenzie, General Manager Date
Santa Clara Valley Open Space Authority

Maps

This section provides the following maps of the Easement Area:

- Figure 1: Region
- Figure 2: Easement Area Boundaries and Parcel
- Figure 3: Soils
- Figure 4: Land Cover and Soil Disturbance Areas
- Figure 5: Improvements within the Easement area overall, and
    - Figure 5a: Improvements within the Northeastern Portion of the Easement Area
    - Figure 5b: Improvements within the Southeastern Portion of the Easement Area
    - Figure 5c: Improvements within the Southwestern Portion of the Easement Area
    - Figure 5d: Improvements within the Northwestern Portion of the Easement Area
- Figure 6: Photostations overall, and
    - Figure 6a: Photostations within the Emado Compound Area
    - Figure 6b: Photostations within the Southwestern Portion of the Easement Area
    - Figure 6c: Photostations within the Northwestern Portion of the Easement Area
    - Figure 6d: Photostations within the Northeastern Portion of the Easement Area
- Figure 7: Municipal Water System Service Area
- Figure 8: Utilities Map from HMH Engineering (2016)

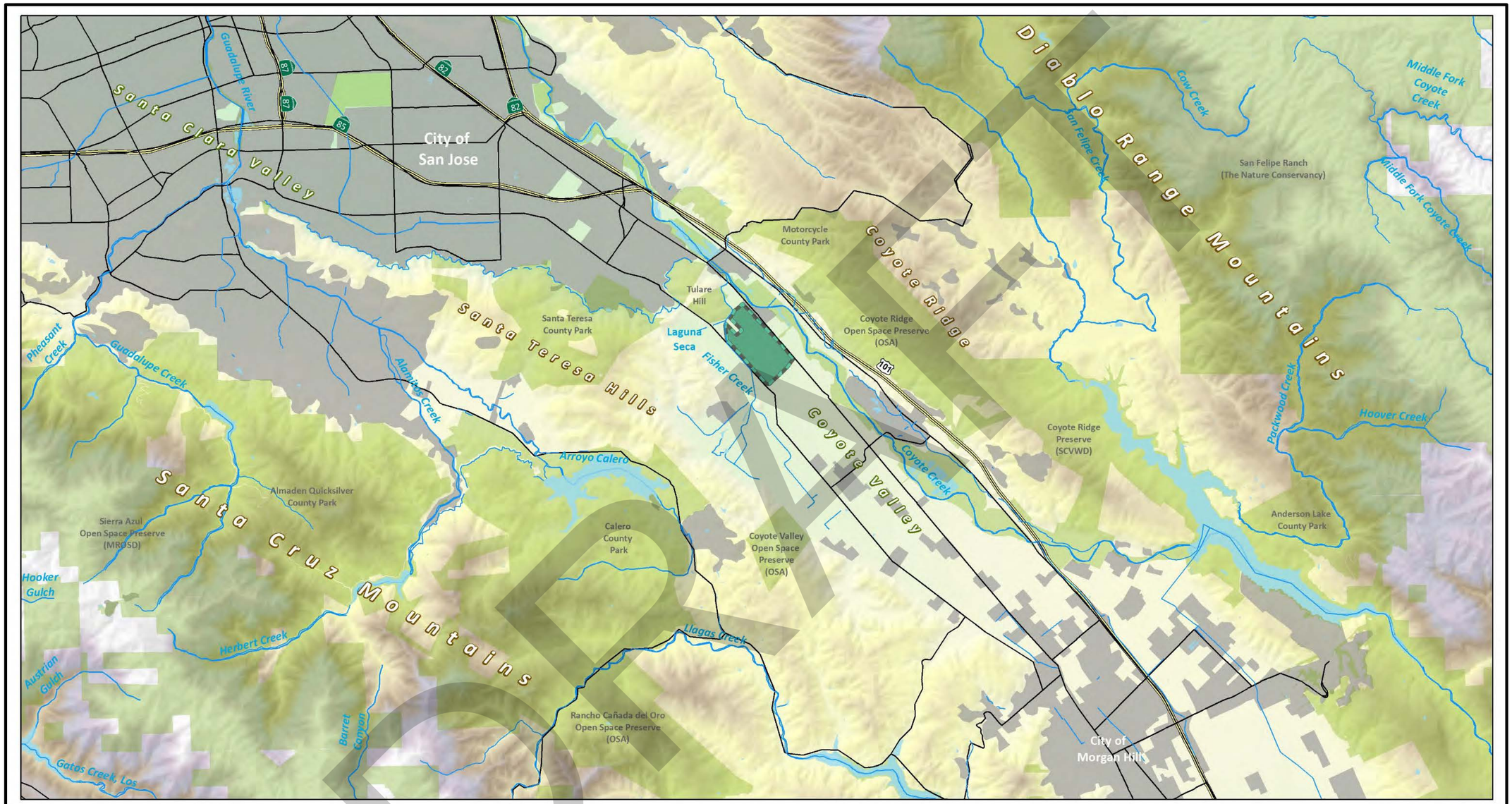

Figure 1: North Coyote Valley Properties Easement Area Region

Figure 2: North Coyote Valley Properties Easement Area and Parcels

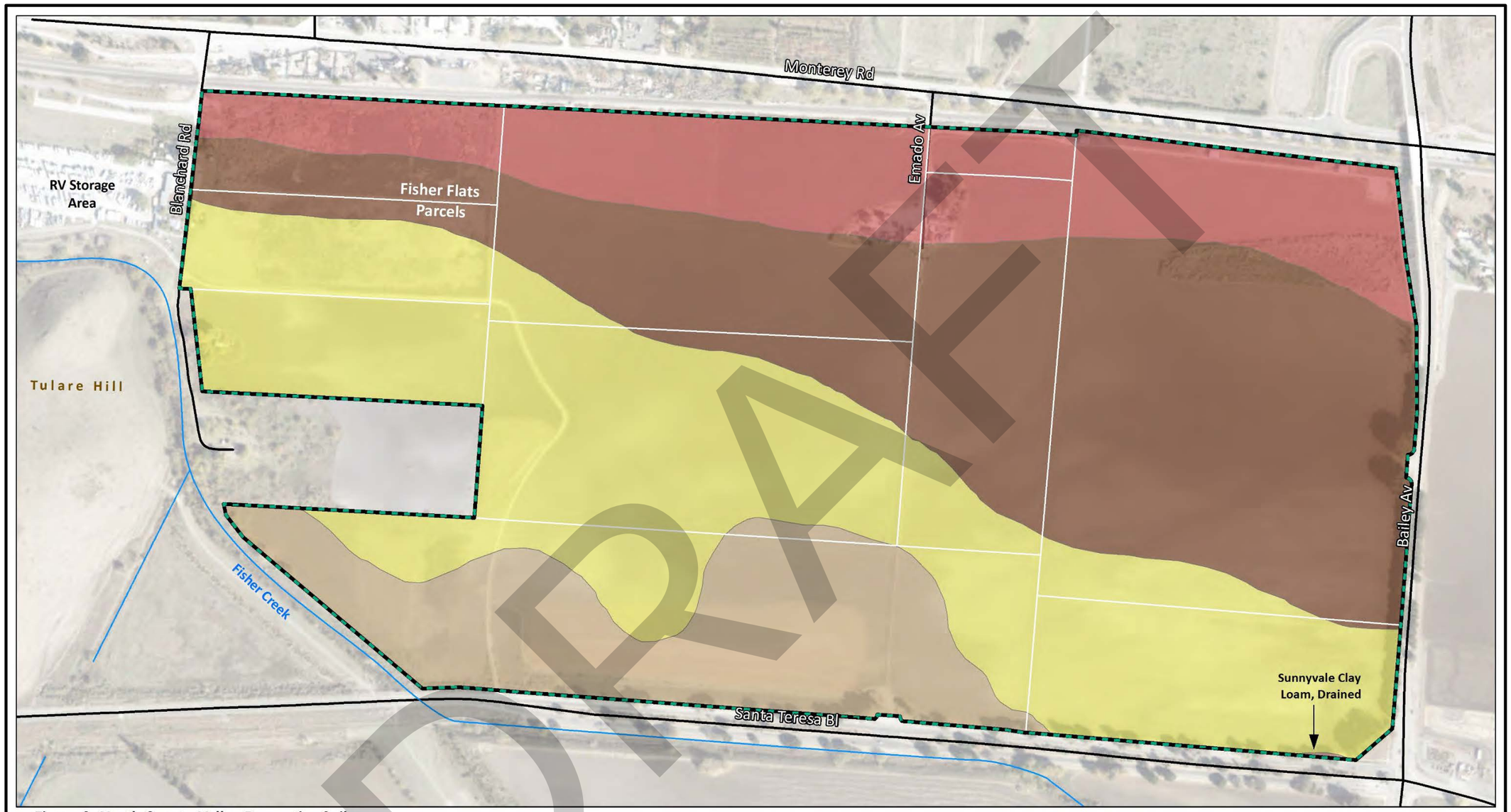

Figure 3: North Coyote Valley Properties Soils

Figure 4: North Coyote Valley Properties Land Cover and Soil Disturbance Areas

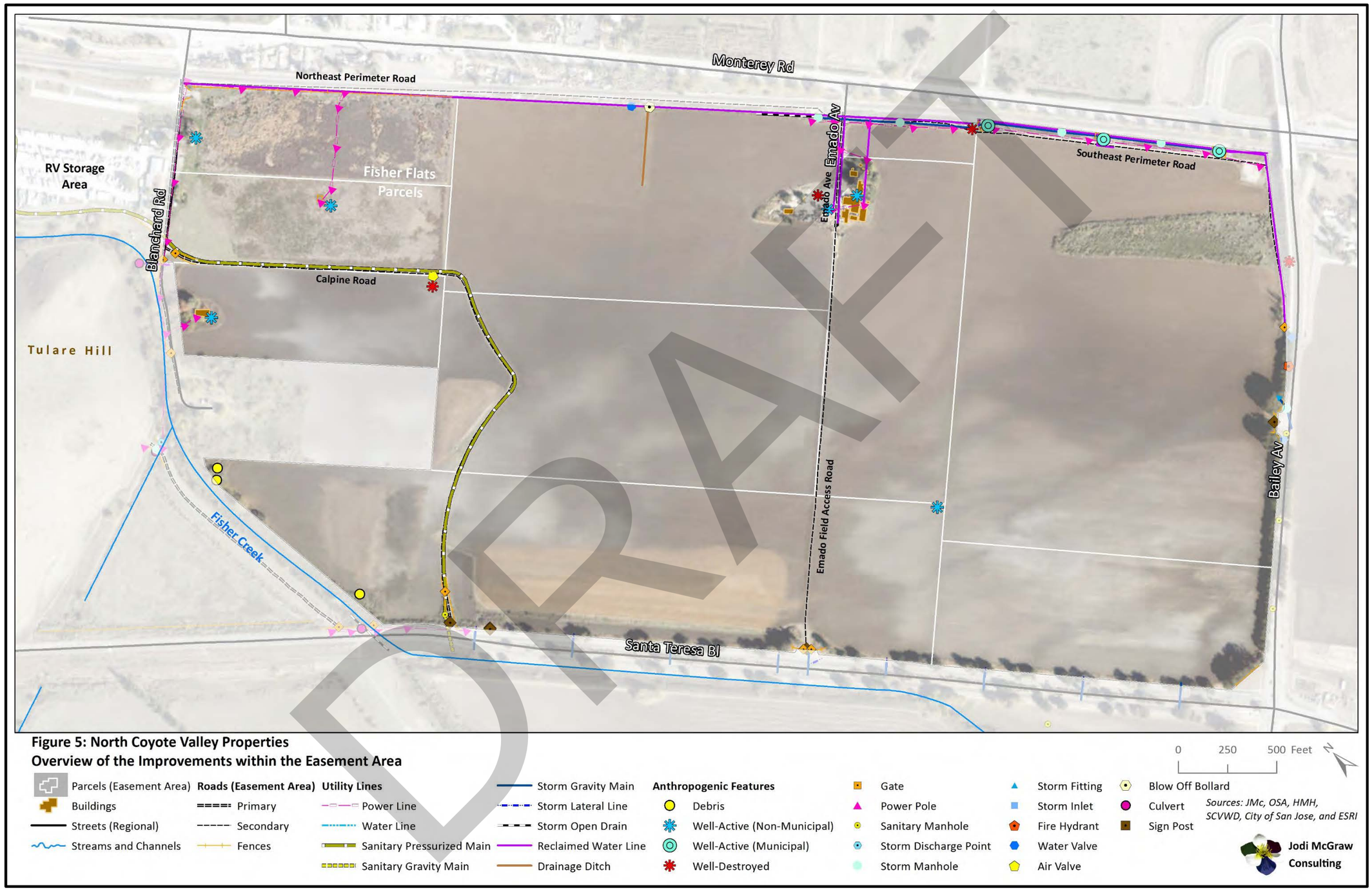

Figure 5: North Coyote Valley Properties
Overview of the Improvements within the Easement Area

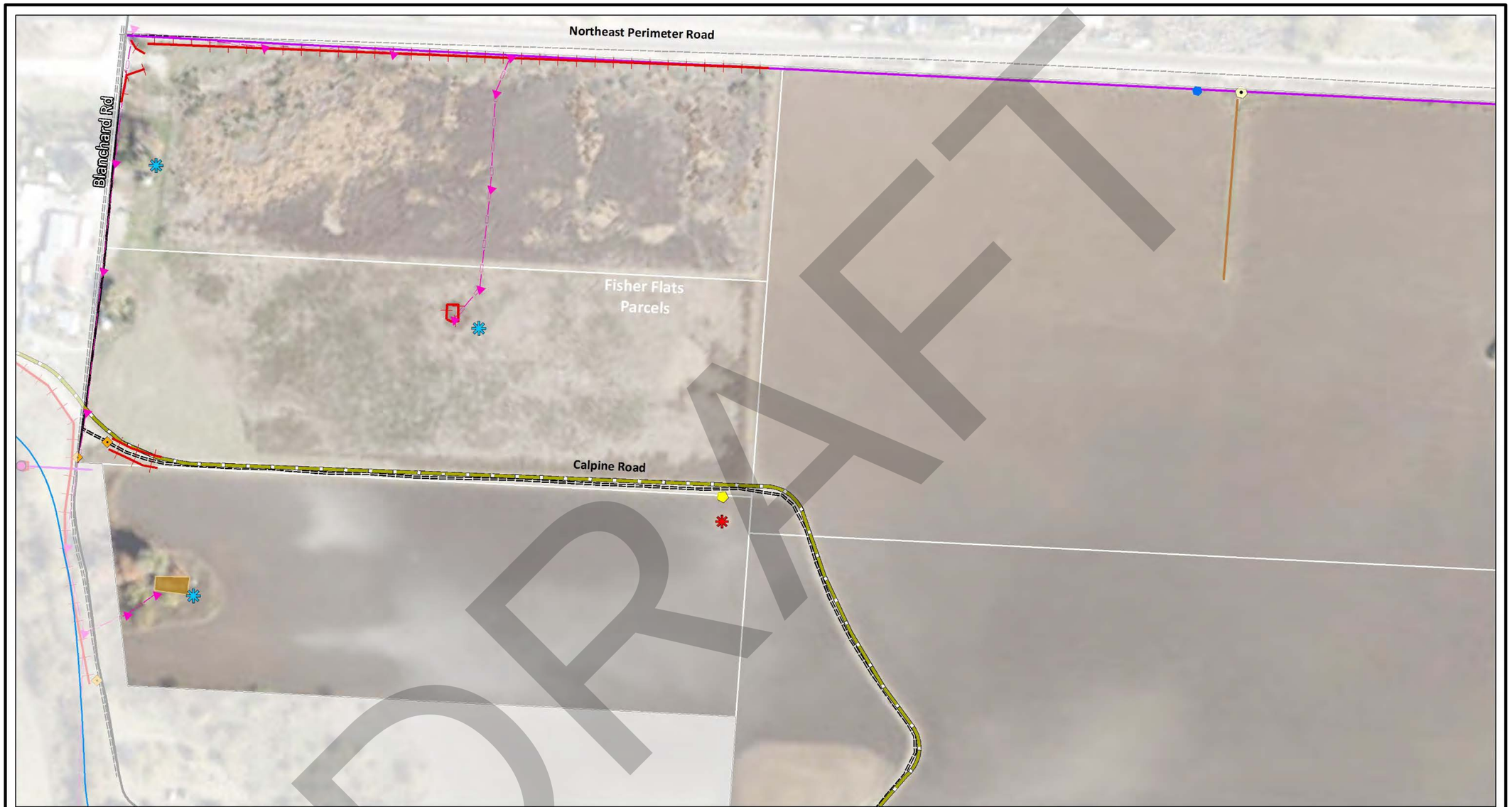

Figure 5a: North Coyote Valley Properties
Improvements in the Northeast Portion of the Easement Area

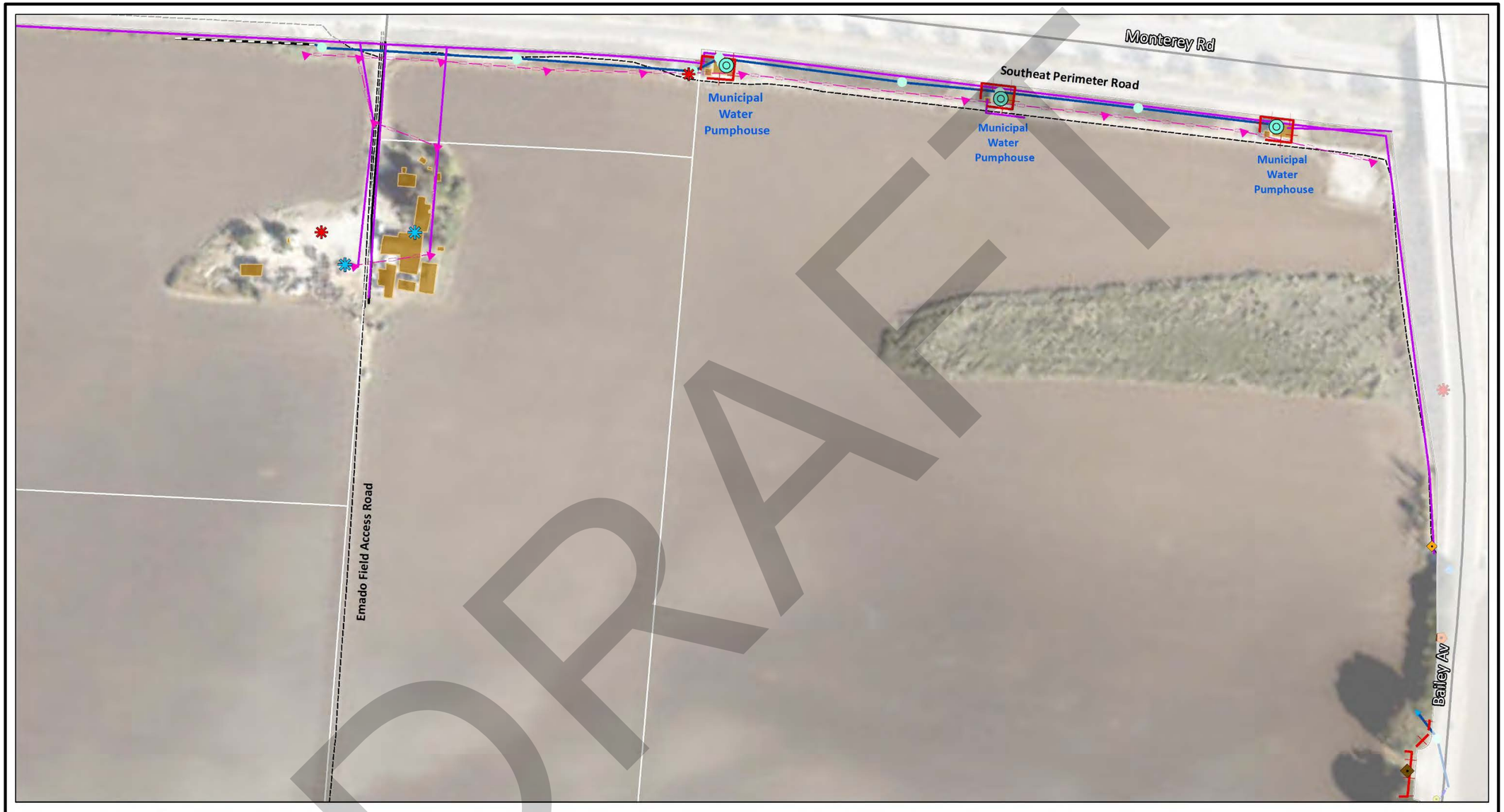

Figure 5b: North Coyote Valley Properties
Improvements in the Southwest Portion of the Easement Area

Parcels (Easement Area)
Buildings
Streets (Regional)

Roads (Easement Area)
Primary
Secondary
Fences

Utility Lines
Power Line
Storm Gravity Main
Storm Lateral Line
Storm Open Drain
Reclaimed Water Line

Anthropogenic Features
Well-Active (Non-Municipal)
Well-Active (Municipal)
Well-Destroyed
Gate
Power Pole
Sanitary Manhole
Storm Manhole
Storm Fitting
Storm Inlet
Fire Hydrant
Sign Post

0 100 200 Feet

Sources: JMc, OSA, HMH, SCVWD, City of San Jose, and ESRI

Jodi McGraw Consulting

Figure 5c: North Coyote Valley Properties
Improvements in the Southwest Portion of the Easement Area

Figure 6: North Coyote Valley Properties Photostations

Figure 6a: North Coyote Valley Properties Photostations

Figure 6b: North Coyote Valley Properties Photostations

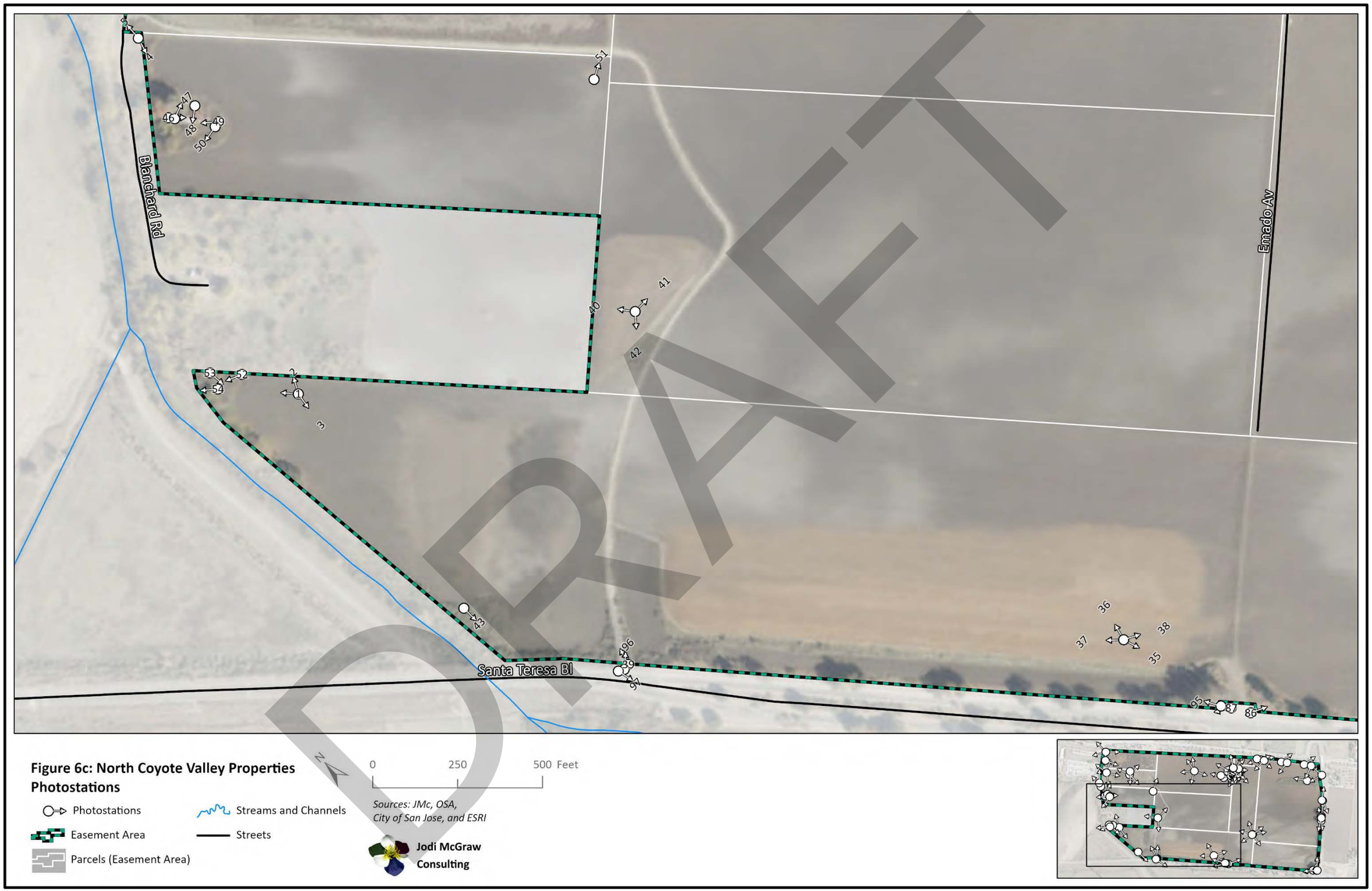

Figure 6c: North Coyote Valley Properties Photostations

Figure 6d: North Coyote Valley Properties Photostations

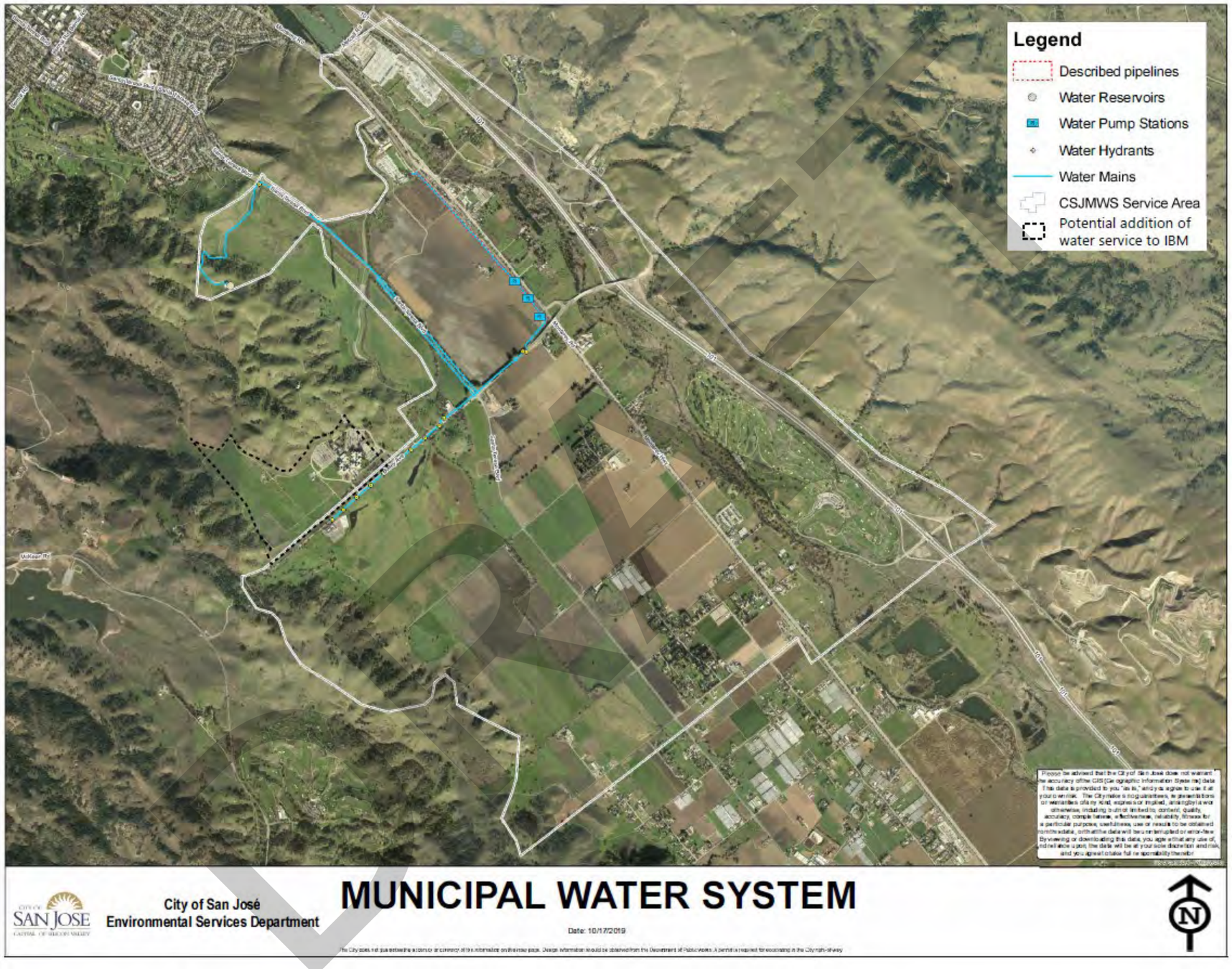

Figure 7. Coyote Valley Municipal Water System and Service Area

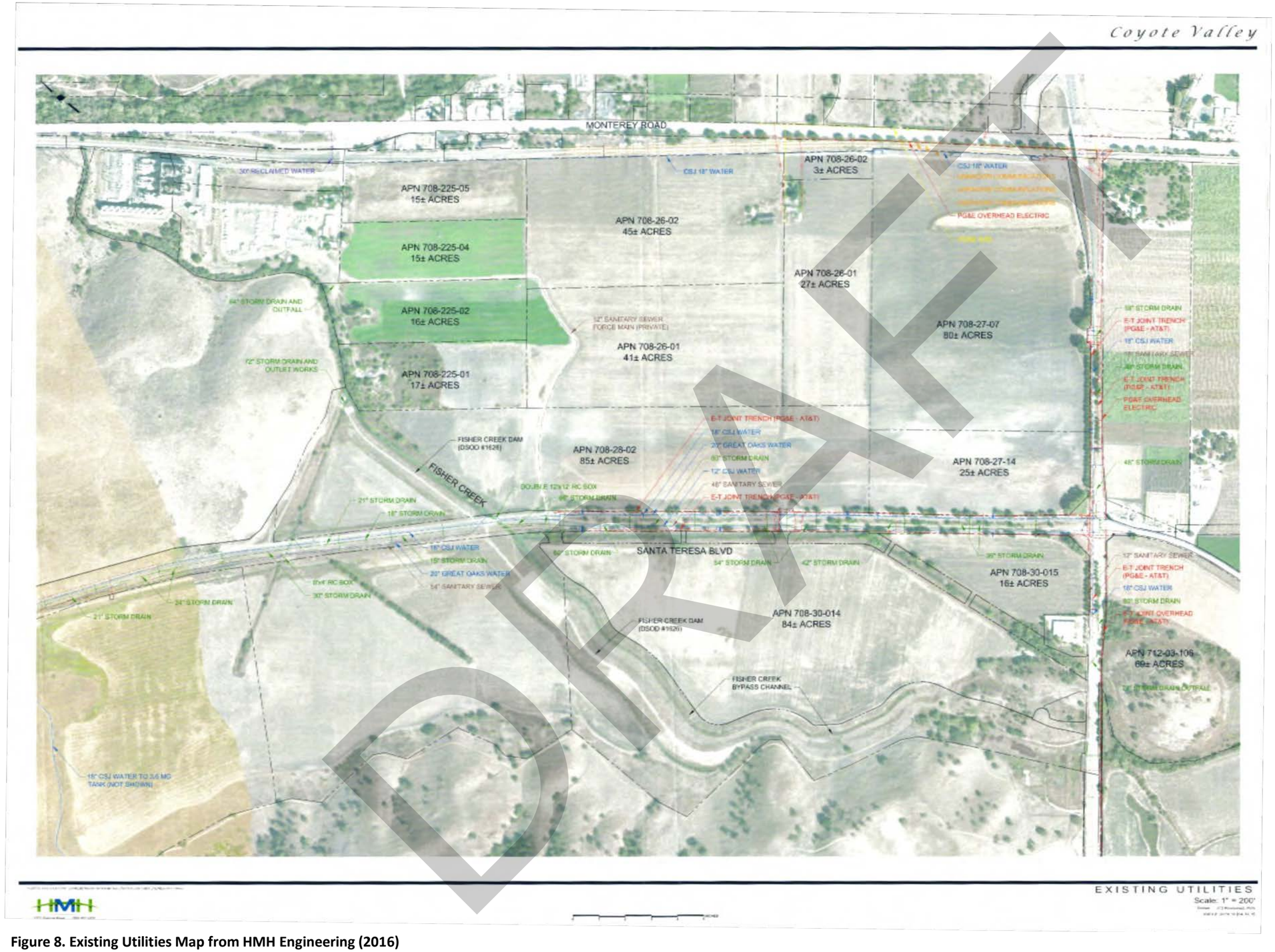

Figure 8. Existing Utilities Map from HMH Engineering (2016)

Photodocumentation

This section provides photographs of representative features and conditions of the Easement Area. For each, it provides the following:

- **Location:** A unique identifier for the location from where the photograph was taken;
- **Photograph:** A unique sequential identifier (i.e., number) for the 97 photographs, which are identified on the photostation map (Figure 6, Figure 6a-d);
- **Description:** A brief description of the subject and key landscape features in the photograph;
- **Date:** the date the photograph was taken;
- **Angle:** the direction (azimuth) the photographer was facing when taking the photograph; and
- **Northing and Easting:** the latitude and longitude, respectively, of the photostation location in feet in the NAD 1983 State Plane California Zone III projection system.

Table 8 provides an overview of the subjects and locations of the photographs.

Table 8: Descriptions of photographs taken to document the Easement Area

Photograph	Subject	Angle (°)	Parcel
1	Fisher Creek Riparian and Hayfield	319	708-28-002
2	Boundary with Weyhe Property	29	708-28-002
3	Hayfield in Parcel 7085-28-002	189	708-28-002
4	Blanchard Residential Area	197	708-25-002
5	Blanchard Road Extension and Gate	5	708-25-002
6	Fisher Flats Water Infrastructure	89	708-25-004
7	Fisher Flats Parcel 708-25-004 North	341	708-25-004
8	Fisher Flats Parcel 708-25-004 West	181	708-25-004
9	Northern Boundary on Parcel 708-25-004	353	708-25-004
10	Fisher Flats Ruderal and Coyote Brush Vegetation	61	708-25-004
11	Fisher Flats Ruderal Vegetation	149	708-25-004
12	Fisher Flats Ruderal Vegetation West	215	708-25-004
13	Gravel Lot in Northeast of Parcel 708-25-005	299	708-25-005
14	Northeast Parcel 708-25-005 Fence and Trees	1	708-25-005
15	Fence Along Northeastern Boundary	135	708-25-005
16	Gravel Lot and Ornamental Trees in Northeast	231	708-25-005
17	Ditch within Hayfield in Parcel 708-26-002	37	708-26-002
18	Hayfield and Bales in Eastern Parcel 708-26-002	155	708-26-002
19	Hayfield in South: Looking West	239	708-26-002
20	Hayfield in South: Looking North	309	708-26-002
21	Pallet Yard Along Eastern Border	11	708-26-002
22	City of San José Municipal Water Pump Station	123	708-27-002
23	Emado Compound and Hayfield to South	299	708-27-002
24	Southeastern Hayfield and Bailey Overpass Scrub	173	708-27-002
25	Coyote Brush in Bailey Overpass Disturbance Area	325	708-27-007
26	Coyote Brush Scrub in Bailey Overpass Area	285	ROW Near 708-27-007
27	Gravel Parking and Pump Stations in Southeast	357	ROW Near 708-27-007
28	Bailey Avenue Planned Entrance	33	708-27-007
29	Ornamental Trees at Bailey and Santa Teresa	73	708-27-014
30	Hayfield in Southwest: North	27	708-28-002
31	Hayfield in Southwest: East	125	708-28-002
32	Hayfield in Southwest: South	191	708-28-002
33	Hayfield in Southwest: West	279	708-28-002
34	Hayfield in Southwest: Northwest	329	708-28-002
35	Eucalyptus Along Santa Teresa Blvd	163	708-28-002
36	Invasive Thistles on West Disturbance Area	15	708-28-002
37	Invasive Plants on West Disturbance Area	313	708-28-002
38	Invasive Plants and Hay Bails	117	708-28-002
39	Calpine Road Entrance from Santa Teresa Blvd	17	708-28-002

Table 8: Descriptions of photographs taken to document the Easement Area

Photograph	Subject	Angle (°)	Parcel
40	South Boundary of Weyhe Property	323	708-26-001
41	Hayfield on Calpine Soil Disturbance Area	89	708-26-001
42	Calpine Road and Calpine Soil Disturbance Area	221	708-26-001
43	Debris Pile in Northwest	180	708-28-002
44	Residential well and tank in Fisher Flats	156	708-25-005
45	Well near the center of wester Fisher Flats parcel	225	708-25-004
46	Blanchard single-family house (front)	134	708-25-002
47	Debris east of Blanchard single-family house	69	708-25-002
48	Blanchard single-family house (east)	233	708-25-002
49	Blanchard single-family house (back of house)	310	708-25-002
50	Well behind Blanchard single-family house	260	708-25-002
51	Blanchard Residential parcel abandoned well	63	708-25-002
52	Debris pile south of Fisher Creek Levee	293	708-28-002
53	Debris pile south of Fisher Creek Levee	176	708-28-002
54	Tires and concrete under tree	310	708-28-002
55	Northern portion of the Emado Compound	333	708-26-002
56	Emado Compound North: debris pile	332	708-26-002
57	Emado Compound North: cinder block building	148	708-26-002
58	Southern portion of the Emado Compound	143	708-26-002
59	Eastern portion of the Emado Compound	345	708-26-002
60	Southern portion of the Emado Compound	77	708-27-001
61	Emado Compound south: block building and turntable	114	708-27-001
62	Emado Compound South: barn	33	708-27-001
63	Emado Compound South: tin roofed pole barn	255	708-27-001
64	Emado Compound South: eastern cinder block building	333	708-27-001
65	Emado Compound South: second tin roofed pole barn	65	708-27-001
66	Emado Compound South: cinder block building	0	708-27-001
67	Emado Compound South: barn	260	708-27-001
68	Emado Compound South: debris south of barn	177	708-27-001
69	Emado Compound South: barn	169	708-27-001
70	Emado Compound South: western single-family house	140	708-27-001
71	Emado Compound South: eastern single-family house	83	708-27-001
72	Emado Compound South: residential well	232	708-27-001
73	Emado Compound South: western single-family residence	244	708-27-001
74	Emado Compound South: eastern single-family residence	319	708-27-001
75	Emado Compound South: eastern single-family residence	99	708-26-002
76	Emado Avenue entrance and driveway	33	708-26-002
77	Well and well equipment: parcel 708-28-002, southeast	100	708-28-002
78	North side of municipal pump house #21-1C	124	708-27-002

Table 8: Descriptions of photographs taken to document the Easement Area

Photograph	Subject	Angle (°)	Parcel
79	South side of municipal pump house #21-1C	269	708-27-007
80	North side of municipal pump house #22-1B	97	708-27-007
81	South side of municipal pump house #22-1B	262	708-27-007
82	North side of municipal pump house #23-1A	100	708-27-007
83	South side of municipal pump house #23-1A	250	708-27-007
84	Sidewalk along north side of Bailey Avenue (east)	52	708-27-007
85	Sidewalks along north side of Bailey Avenue (west)	218	708-27-007
86	Sidewalk along Santa Teresa Boulevard (south)	115	708-28-002
87	Sidewalk along Santa Teresa Boulevard (north)	301	708-28-002
88	Entrance to Calpine Road off Blanchard Road	46	708-25-004
89	Eastern end of Bailey sidewalk	202	708-27-007
90	Gate on north side of Bailey Avenue	54	708-27-007
91	Planned entrance to property off of Bailey Avenue	238	708-27-007
92	Sidewalk along north side of Bailey Avenue	47	708-27-014
93	Sidewalk along east side of Santa Teresa Boulevard	309	708-27-014
94	Wall at Santa Teresa Boulevard and Bailey Avenue	311	708-27-014
95	Gates at southern turnout along Santa Teresa Boulevard	331	708-28-002
96	Entrance to Calpine Road on Santa Teresa Boulevard	50	708-28-002
97	Sidewalk along eastern side of Santa Teresa Boulevard	169	708-28-002

Location: 1

Photograph: 1

Mature willow riparian woodland lining Fisher Creek (center), with recently harvested hayfield (bottom) and Tulare Hill (top).

Northing (ft): 1902575.86 **Easting (ft):** 6198786.94 **Angle:** 319° **Date:** 6/14/2019

Location: 1

Photograph: 2

Western and southern boundary of the unfenced adjacent parcel (708-25-001), which features a walnut orchard, showing recently harvested hayfield (bottom).

Northing (ft): 1902575.86 **Easting (ft):** 6198786.94 **Angle:** 29° **Date:** 6/14/2019

Location: 1

Photograph: 3

Recently harvested hayfield on the western portion of the property (parcel 708-28-002), showing Santa Cruz Mountains foothills (top).

Northing (ft): 1902575.86 **Easting (ft):** 6198786.94 **Angle:** 189° **Date:** 6/14/2019

Location: 2

Photograph: 4

Blanchard Residential Area with dilapidated single-family home and mature Fremont cottonwood (center) and pines lining the driveway, and the recently mowed hayfield (left and bottom).

Northing (ft): 1903649.35 **Easting (ft):** 6199193.97 **Angle:** 197° **Date:** 6/14/2019

Location: 2

Photograph: 5

Blanchard Road Extension, showing the gate across the road (center), mature willow riparian vegetation along the south bank of Fisher Creek (upper left), and the Metcalf Energy Center and residential and development north of the property (top).

Northing (ft): 1903649.35 **Easting (ft):** 6199193.97 **Angle:** 5° **Date:** 6/14/2019

Location: 3

Photograph: 6

Well and associated water infrastructure including water tank and electricity drop near the center of the Fisher Flats parcel 708-25-004, showing ruderal vegetation around the well.

Northing (ft): 1903344.24 **Easting (ft):** 6199928.90 **Angle:** 89° **Date:** 6/14/2019

Location: 3

Photograph: 7

Northern portion of the western Fisher Flats Parcel 708-25-004 with ruderal vegetation (bottom) showing ornamental palm trees planted in the property along Blanchard Road and Metcalf Energy Center (top) beyond the property.

Northing (ft): 1903344.24 **Easting (ft):** 6199928.90 **Angle:** 341° **Date:** 6/14/2019

Location: 3

Photograph: 8

Western portion of the western Fisher Flats Parcel 708-25-004 with ruderal vegetation including dense mustards (*Brassica spp.)* [center top], with the eastern foothills of the Santa Cruz Mountains in the distance (top).

Northing (ft): 1903344.24 **Easting (ft):** 6199928.90 **Angle:** 181° **Date:** 6/14/2019

Location: 4

Photograph: 9

Northern boundary of parcel 708-25-004, showing industrial and residential development on Blanchard Road beyond the property (top), and ruderal vegetation in the Fisher Creek property (bottom).

Northing (ft): 1903799.22 **Easting (ft):** 6199547.97 **Angle:** 353° **Date:** 6/14/2019

Location: 4

Photograph: 10

Northern Fisher Flats property showing ruderal vegetation (bottom) and emergent coyote brush scrub (center), planted palm trees on the northern portion of parcel 708-25-005 (upper left), and Coyote Ridge in the distance (top).

Northing (ft): 1903799.22 **Easting (ft):** 6199547.97 **Angle:** 61° **Date:** 6/14/2019

Location: 4

Photograph: 11

Fisher Flats property showing ruderal vegetation.

Northing (ft): 1903799.22 **Easting (ft):** 6199547.97 **Angle:** 149° **Date:** 6/14/2019

Location: 4

Photograph: 12

Fisher Flats property showing ruderal vegetation (bottom) and Blanchard Residential Area and Tulare Hill coming down to Fisher Flats (upper right), with the eastern Santa Cruz Mountains foothills in the distance (upper left).

Northing (ft): 1903799.22 **Easting (ft):** 6199547.97 **Angle:** 215° **Date:** 6/14/2019

Location: 5

Photograph: 13

Gravel lot in the northeastern portion of the property (parcel 708-25-005), showing K-rails blocking access from Blanchard Road (center) and Metcalf Energy Center (upper right) and Tulare Hill (upper left) in the distance.

Northing (ft): 1904187.13 **Easting (ft):** 6199912.19 **Angle:** 299° **Date:** 6/14/2019

Location: 5

Photograph: 14

Northeastern corner of the property showing ornamental trees, 8-foot tall chain link fence separating the property from the rail road alignment to the east, and the railroad crossing structure across Blanchard road (top), which is off the property.

Northing (ft): 1904187.13 **Easting (ft):** 6199912.19 **Angle:** 1° **Date:** 6/14/2019

Location: 5

Photograph: 15

Northeastern corner of the property showing the 8-foot tall chain link fence separating the property from the rail road alignment to the east (left), and the emergent coyote brush scrub (upper right).

Northing (ft): 1904187.13 **Easting (ft):** 6199912.19 **Angle:** 135° **Date:** 6/14/2019

Location: 5

Photograph: 16

Gravel lot in the northeastern portion of the property (parcel 708-25-005), showing planted palm trees (center top) and other ornamental trees (right top) planted in the property along Blanchard Road, and emergent coyote brush (left).

Northing (ft): 1904187.13 **Easting (ft):** 6199912.19 **Angle:** 231° **Date:** 6/14/2019

Location: 6

Photograph: 17

Ditch (~4' feet deep) in the center of the eastern hayfield in parcel 708-26-002, showing taller invasive plants including prickly lettuce since the ditch was not mowed as part of the recent hay harvest.

Northing (ft): 1902234.47 **Easting (ft):** 6201174.00 **Angle:** 37° **Date:** 6/14/2019

Location: 6

Photograph: 18

Hayfield in the eastern portion of the property (parcel 708-26-002) showing the stacks of hay bales (right) and Emado Compound (center top)

Northing (ft): 1902234.47 **Easting (ft):** 6201174.00 **Angle:** 155° **Date:** 6/14/2019

Location: 6

Photograph: 19

Hayfield in the southern portion of the property (bottom) showing the row of ornamental trees planted along Santa Teresa Boulevard (middle) and the eastern foothills of the Santa Cruz Mountains (top).

Northing (ft): 1902234.47 **Easting (ft):** 6201174.00 **Angle:** 239° **Date:** 6/14/2019

Location: 6

Photograph: 20

Hayfield in the eastern portion of the property (bottom) showing Tulare Hill (upper left) and Metcalf Energy Center (upper right).

Northing (ft): 1902234.47 **Easting (ft):** 6201174.00 **Angle:** 309° **Date:** 6/14/2019

Location: 6

Photograph: 21

Hayfield in the eastern portion of the property (bottom) showing pallet yard and adjacent residential and industrial development along Monterey Highway (center) and the northern portion of Coyote Ridge, part of the Diablo Range Mountains (top).

Northing (ft): 1902234.47 **Easting (ft):** 6201174.00 **Angle:** 11° **Date:** 6/14/2019

Location: 6

Photograph: 22

City of San José Municipal Water Pump Station and associated power lines (left), showing Southeastern Perimeter Road, a gravel road (right).

Northing (ft): 1901232.39 **Easting (ft):** 6202583.58 **Angle:** 123° **Date:** 6/14/2019

Location: 7

Photograph: 23

Hayfield south of the Emado Compound (center top), showing stacks of hay bales along Central Property Road (left center).

Northing (ft): 1901232.39 **Easting (ft):** 6202583.58 **Angle:** 299° **Date:** 6/14/2019

Location: 7

Photograph: 24

Hayfield in the southeastern portion of the property showing the coyote brush scrub established within the area where soil was excavated to create the Bailey Road Overpass, and later filled (top center)

Northing (ft): 1901232.39 **Easting (ft):** 6202583.58 **Angle:** 173° **Date:** 6/14/2019

Location: 8

Photograph: 25

Moderately dense stand of coyote brush growing in the Bailey Overpass Soil Disturbance Area in the southeastern portion of the property.

Northing (ft): 1900010.82 **Easting (ft):** 6203046.40 **Angle:** 325° **Date:** 6/14/2019

Location: 9

Photograph: 26

Bailey Overpass Soil Disturbance Area supporting dense coyote brush (*Baccharis pilularis*) and invasive plants such as slender flowered thistle as well as grasses such as slender wild oats between shrubs.

Northing (ft): 1899844.74 **Easting (ft):** 6203414.03 **Angle:** 285° **Date:** 6/14/2019

Location: 9

Photograph: 27

Southeastern portion of the property showing the gravel parking/staging area (center), City of San José Municipal Water Pump Stations along Southeastern Perimeter Road (center and top), and the southeastern hay field (left).

Northing (ft): 1899844.74 **Easting (ft):** 6203414.03 **Angle:** 357° **Date:** 6/14/2019

Location: 10

Photograph: 28

Planned entrance to property off of Bailey Avenue, showing dilapidated fence and concrete block wall and mature gum trees (*Eucalyptus sp.*).

Northing (ft): 1899028.75 **Easting (ft):** 6202574.75 **Angle:** 33° **Date:** 6/14/2019

Location: 11

Photograph: 29

Wall and ornamental trees and shrubs including gum (*Eucalyptus spp*.) and *Oleander* sp.

Northing (ft): 1898278.46 **Easting (ft):** 6201529.21 **Angle:** 73° **Date:** 6/14/2019

Location: 12

Photograph: 30

Hayfield in center of property from Well 13 in the southeastern corner of parcel 708-28-002, showing stacks of hay bales along Central Property Road and Emado Compound (center top), with Coyote Ridge in the distance (top)

Northing (ft): 1900026.10 **Easting (ft):** 6201085.04 **Angle:** 27° **Date:** 6/14/2019

Location: 12

Photograph: 31

Hayfield in southeastern portion of property from Well 13 in the southeastern corner of parcel 708-28-002, showing ornamental gum trees at planned property entrance from Bailey Road, (center right) and the southern portion of Coyote Ridge (upper left).

Northing (ft): 1900026.10 **Easting (ft):** 6201085.04 **Angle:** 125° **Date:** 6/14/2019

Location: 12

Photograph: 32

Hayfield in southwestern portion of property, showing well equipment (bottom), ornamental trees planted along Bailey Road (left center) and Santa Teresa Road (right center) and the eastern foothills of the Santa Cruz Mountains (top).

Northing (ft): 1900026.10 **Easting (ft):** 6201085.04 **Angle:** 191° **Date:** 6/14/2019

Location: 12

Photograph: 33

Hayfield in the western portion of property, showing a stack of hay bails along Emado Field Access Road (left center), ornamental trees planted along Santa Teresa Road (center top), the Santa Cruz Mountains (top left), and Tulare Hill (upper right).

Northing (ft): 1900026.10 **Easting (ft):** 6201085.04 **Angle:** 279° **Date:** 6/14/2019

Location: 12

Photograph: 34

Hayfield in the center of property from Well 13 in the southeastern corner of parcel 708-28-002, showing the eastern edge of the Santa Cruz Mountains (upper left), Tulare Hill (upper center), and the Diablo Range Mountains (upper right).

Northing (ft): 1900026.10 **Easting (ft):** 6201085.04 **Angle:** 329° **Date:** 6/14/2019

Location: 13

Photograph: 35

Hayfield on western edge of property (parcel 708-28-002), showing hay bale along Central Property Road (center), and non-native gum trees (*Eucalyptus* sp.) planted at an entrance from Santa Teresa Boulevard (right).

Northing (ft): 1900345.90 **Easting (ft):** 6199994.12 **Angle:** 163° **Date:** 6/14/2019

Location: 13

Photograph: 36

Hayfield on western edge of property (parcel 708-28-002), showing field bind weed (white flowers) and invasive starthistle with Metcalf Energy Center (upper left) and the northern portion of Coyote Ridge, part of the Diablo Range Mountains (top).

Northing (ft): 1900345.90 **Easting (ft):** 6199994.12 **Angle:** 15° **Date:** 6/14/2019

Location: 13

Photograph: 37

Hayfield on western edge of property (parcel 708-28-002), showing field bind weed (white flowers) and invasive starthistle (Centaurea spp.) (green), with Tulare Hill in the distance (top) and ornamental trees lining Santa Teresa Boulevard (left).

Northing (ft): 1900345.90 **Easting (ft):** 6199994.12 **Angle:** 313° **Date:** 6/14/2019

Location: 13

Photograph: 38

Hayfield on western edge of property (parcel 708-280-02), showing field bind weed (white flowers) and invasive starthistle, and the southern portion of Coyote Ridge, part of the Diablo Range Mountains (top).

Northing (ft): 1900345.90 **Easting (ft):** 6199994.12 **Angle:** 117° **Date:** 6/14/2019

Location: 14

Photograph: 39

Entrance to Calpine Road from Santa Teresa Boulevard on the western edge of parcel 708-28-002, showing initial stretch of asphalt to gate, and 6' tall chain link fence with 1' of reflexed barbed wire on top.

Northing (ft): 1901325.91 **Easting (ft):** 6198911.41 **Angle:** 17° **Date:** 6/14/2019

Location: 15

Photograph: 40

Southern, unfenced boundary with the adjacent parcel (708-25-001) [center' from the top of an ~ 5'-tall mound of fill material deposited on parcel 708-26-001 (bottom), showing Tulare Hill (upper left) and Metcalf Energy Center (upper right).

Northing (ft): 1902046.02 **Easting (ft):** 6199659.73 **Angle:** 323° **Date:** 6/14/2019

Location: 15

Photograph: 41

Hayfield on central and eastern portion of the property (center), from atop the 5' tall mound of fill deposited in parcel 708-26-001 (bottom), showing Coyote Ridge in the distance (top).

Northing (ft): 1902046.02 **Easting (ft):** 6199659.73 **Angle:** 89° **Date:** 6/14/2019

Location: 15

Photograph: 42

Calpine Road, a gravel road traversing the northern portion of the property (center), from atop the 5' tall mound of fill deposited in parcel 708-26-001 (bottom), showing the Santa Cruz Mountains in the distance (top).

Northing (ft): 1902046.02 **Easting (ft):** 6199659.73 **Angle:** 221° **Date:** 6/14/2019

Location: 16

Photograph: 43

Debris pile in northwest portion of parcel 708-28-002.

Northing (ft): 1901785.31 **Easting (ft):** 6198685.78 **Angle: 180°** **Date:** 6/26/2019

Location: 44

Photograph: 44

Residential well and tank located on eastern parcel of Fisher Flats (708-25-005)

Northing (ft): 1904041.48 **Easting (ft):** 6199749.97 **Angle:** 156° **Date:** 10/4/19

Location: 45

Photograph: 45

Western view of well, one large green tank and one small blue tank near the center of the Fisher Flats western parcel 708-25-004.

Northing (ft): 1903394.75 **Easting (ft):** 6200001.02 **Angle:** 225° **Date:** 10/4/19

Location: 46

Photograph: 46

Front of single-family home in Blanchard Residential Area; to be demolished.

Northing (ft): 1903421.15 **Easting (ft):** 6199090.98 **Angle:** 134° **Date:** 10/4/19

Location: 47

Photograph: 47

Debris pile to east single-family home in Blanchard Residential Area

Northing (ft): 1903405.95 **Easting (ft):** 6199102.21 **Angle:** 69° **Date:** 10/4/19

Location: 48

Photograph: 48

Eastern side of single-family home in Blanchard Residential Area; to be demolished. Abandoned pick up truck filled with debris behind home.

Northing (ft): 1903390.81 **Easting (ft):** 6199171.11 **Angle:** 233° **Date:** 10/4/19

Location: 49

Photograph: 49

Back of single-family home in Blanchard Residential Area; to be demolished. Pick up truck full of debris.

Northing (ft): 1903308.70 **Easting (ft):** 6199187.08 **Angle:** 310° **Date:** 10/4/19

Location: 50

Photograph: 50

Well in overgrown vegetation behind single-family home in Blanchard Residential Area with rusted tank laying on its side, possibly inactive.

Northing (ft): 1903304.97 **Easting (ft):** 6199169.72 **Angle:** 260° **Date:** 10/4/19

Location: 51

Photograph: 51

Abandoned well on southwest corner of parcel with Blanchard Residential area (708-25-002)

Northing (ft): 1902614.55 **Easting (ft):** 6200057.10 **Angle:** 63° **Date:** 10/4/19

Location: 52

Photograph: 52

Debris pile with rusted barrels, old concrete footings, and slash at northeast portion of 708-28-002, south of the Fisher Creek levee (same pile as in Photograph 53)

Northing (ft): 1902733.83 **Easting (ft):** 6198710.33 **Angle:** 293° **Date:** 10/4/19

Location: 53

Photograph: 53

Debris pile with rusted barrels, old concrete footings, and slash at northeast portion of 708-28-002, south of the Fisher Creek levee (same pile as in Photograph 52).

Northing (ft): 1902803.47 **Easting (ft):** 6198646.85 **Angle:** 176° **Date:** 10/4/19

Location: 54

Photograph: 54

Tires and concrete under tree at northeast portion of 708-28-002, south of Fisher Creek levee.

Northing (ft): 1902753.57 **Easting (ft):** 6198629.64 **Angle:** 310° **Date:** 10/4/19

Location: 55

Photograph: 55

Northern portion of the Emado Compound. One cinder block building, one raised concrete area, and one small tin shed. Concrete pad on the ground has old tracks for fruit carts.

Northing (ft): 1901416.72 **Easting (ft):** 6201709.65 **Angle:** 333° **Date:** 10/4/19

Location: 56

Photograph: 56

Northern portion of the Emado Compound. Debris piles to the west of cinder block building. Old tracks in the concrete pad for fruit carts.

Northing (ft): 1901581.86 **Easting (ft):** 6201588.36 **Angle:** 332° **Date:** 10/4/19

Location: 57

Photograph: 57

Northern portion of the Emado Compound. Tires, bikes, and other debris on north side of cinder block building.

Northing (ft): 1901671.12 **Easting (ft):** 6201574.53 **Angle:** 148° **Date:** 10/4/19

Location: 58

Photograph: 58

Southern portion of the Emado Compound. Well and tin roofed pole barn with collection of debris.

Northing (ft): 1901492.24 **Easting (ft):** 6201755.38 **Angle:** 143° **Date:** 10/4/19

Location: 59

Photograph: 59

Eastern portion of the Emado Compound. Concrete pads found at location of decommissioned well.

Northing (ft): 1901627.42 **Easting (ft):** 6201788.50 **Angle:** 345° **Date:** 10/4/19

Location: 60

Photograph: 60

Southern portion of the Emado Compound. Old trailer, a pile of large tractor tires in front of barn.

Northing (ft): 1901462.01 **Easting (ft):** 6201806.86 **Angle:** 77° **Date:** 10/4/19

Location: 61

Photograph: 61

Southern portion of the Emado Compound. Eastern cinder block building and turntable for fruit carts in foreground.

Northing (ft): 1901448.98 **Easting (ft):** 6201823.69 **Angle:** 114° **Date:** 10/4/19

Location: 62

Photograph: 62

Southern portion of the Emado Compound. Western side of the barn.

Northing (ft): 1901431.87 **Easting (ft):** 6201826.67 **Angle:** 33° **Date:** 10/4/19

Location: 63

Photograph: 63

Southern portion of the Emado Compound. Southern side of the tin roofed pole barn.

Northing (ft): 1901423.35 **Easting (ft):** 6201846.96 **Angle:** 255° **Date:** 10/4/19

Location: 64

Photograph: 64

Southern portion of the Emado Compound. Eastern cinder block building to south of tin roofed pole barn.

Northing (ft): 1901364.01 **Easting (ft):** 6201837.71 **Angle:** 333° **Date:** 10/4/19

Location: 65

Photograph: 65

Southern portion of the Emado Compound. Second tin roofed pole barn south of eastern cinder block building with concrete pad with missing portions of the roof.

Northing (ft): 1901334.32 **Easting (ft):** 6201807.76 **Angle:** 65° **Date:** 10/4/19

Location: 66

Photograph: 66

Southern portion of the Emado Compound. South side of western cinder block building, east of barn

Northing (ft): 1901344.34 **Easting (ft):** 6201858.58 **Angle:** 0° **Date:** 10/4/19

Location: 67

Photograph: 67

Southern portion of the Emado Compound. South side of the barn.

Northing (ft): 1901378.26 **Easting (ft):** 6201925.09 **Angle:** 260° **Date:** 10/4/19

Location: 68

Photograph: 68

Southern portion of the Emado Compound. Debris located to south of the barn.

Northing (ft): 1901391.66 **Easting (ft):** 6201917.30 **Angle:** 177° **Date:** 10/4/19

Location: 69

Photograph: 69

Southern portion of the Emado Compound. North and east side of the barn with coops on the eastern side and old farm equipment in front.

Northing (ft): 1901510.98 **Easting (ft):** 6201884.29 **Angle:** 169° **Date:** 10/4/19

Location: 70

Photograph: 70

Southern portion of the Emado Compound. North side of western single-family residence with overhang on western side and addition on eastern side. Well and gray tank in front of residence. Debris on ground around the home.

Northing (ft): 1901549.43 **Easting (ft):** 6201930.22 **Angle:** 140° **Date:** 10/4/19

Location: 71

Photograph: 71

Southern portion of the Emado Compound. North and west side of eastern single-family residence.

Northing (ft): 1901549.78 **Easting (ft):** 6201930.44 **Angle:** 83° **Date:** 10/4/19

Location: 72

Photograph: 72

Southern portion of the Emado Compound. Residential well located to the north of the western single-family residence (also shown in Photograph 71).

Northing (ft): 1901477.60 **Easting (ft):** 6201954.59 **Angle:** 232° **Date:** 10/4/19

Location: 73

Photograph: 73

Southern portion of the Emado Compound. Eastern side of western single-family residence.

Northing (ft): 1901476.02 **Easting (ft):** 6202013.59 **Angle:** 244° **Date:** 10/4/19

Location: 74

Photograph: 74

Southern portion of the Emado Compound. Southern side of eastern single-family residence with debris scattered to the south.

Northing (ft): 1901472.91 **Easting (ft):** 6202019.01 **Angle:** 319° **Date:** 10/4/19

Location: 75

Photograph: 75

Southern portion of the Emado Compound. Northern side of eastern single-family residence with wooden fence to the east.

Northing (ft): 1901579.36 **Easting (ft):** 6201937.87 **Angle:** 99° **Date:** 10/4/19

Location: 76

Photograph: 76

Emado Avenue entrance and driveway to the Emado Compound.

Northing (ft): 1901584.48 **Easting (ft):** 6201936.44 **Angle:** 33° **Date:** 10/4/19

Location: 77

Photograph: 77

Well and well equipment on southeast corner of 708-28-002; appears to be inactive.

Northing (ft): 1900031.40 **Easting (ft):** 6201067.59 **Angle:** 100° **Date:** 10/4/19

Location: 78

Photograph: 78

North side of municipal pump house #21-1C and Southeast Perimeter Road

Northing (ft): 1901317.48 **Easting (ft):** 6202530.90 **Angle:** 124° **Date:** 10/4/19

Location: 79

Photograph: 79

South side of municipal pump house #21-1C and Southeast Perimeter Road

Northing (ft): 1901157.31 **Easting (ft):** 6202631.21 **Angle:** 269° **Date:** 10/4/19

Location: 80

Photograph: 80

North side of municipal pump house #22-1B and Southeast Perimeter Road

Northing (ft): 1900819.86 **Easting (ft):** 6202915.94 **Angle:** 97° **Date:** 10/4/19

Location: 81

Photograph: 81

South side of municipal pump house #22-1B and Southeast Perimeter Road

Northing (ft): 1900700.66 **Easting (ft):** 6203008.42 **Angle:** 262° **Date:** 10/4/19

Location: 82

Photograph: 82

North side of municipal pump house #23-1A and Southeast Perimeter Road

Northing (ft): 1900359.50 **Easting (ft):** 6203283.22 **Angle:** 100° **Date:** 10/4/19

Location: 83

Photograph: 83

South side of municipal pump house #23-1A and Southeast Perimeter Road

Northing (ft): 1900207.08 **Easting (ft):** 6203388.93 **Angle:** 250° **Date:** 10/4/19

Location: 84

Photograph: 84

Sidewalk along north side of Bailey Avenue to the east of the turnout.

Northing (ft): 1899106.69 **Easting (ft):** 6202665.06 **Angle:** 52° **Date:** 10/4/19

Location: 85

Photograph: 85

Sidewalks along north side of Bailey Avenue to the west of the turnout.

Northing (ft): 1899103.16 **Easting (ft):** 6202639.25 **Angle:** 218° **Date:** 10/4/19

Location: 86

Photograph: 86

Sidewalk along the east side of Santa Teresa Boulevard to the south of the turnout.

Northing (ft): 1899929.27 **Easting (ft):** 6200106.48 **Angle:** 115° **Date:** 10/4/19

Location: 87

Photograph: 87

Sidewalk along the east side of Santa Teresa Boulevard to the north of the turnout.

Northing (ft): 1899979.94 **Easting (ft):** 6200076.04 **Angle:** 301° **Date:** 10/4/19

Location: 88

Photograph: 88

Entrance to Calpine Road off Blanchard Road.

Northing (ft): 1903746.269 **Easting (ft):** 6199225.56 **Angle:** 46° **Date:** 10/8/19

Location: 89

Photograph: 89

Eastern terminus of sidewalk along the north side of Bailey Avenue.

Northing (ft): 1899365.834 **Easting (ft):** 6202960.746 **Angle:** 202° **Date:** 10/8/19

Location: 90

Photograph: 90

Gate on north side of Bailey Avenue west of the overcrossing and Southeast Perimeter Road.

Northing (ft): 1899390.544 **Easting (ft):** 6202954.081 **Angle:** 54° **Date:** 10/8/19

Location: 91

Photograph: 91

Planned entrance to property off of Bailey Avenue, showing dilapidated fence and western concrete block wall and mature gum trees (*Eucalyptus sp.*).

Northing (ft): 1899077.641 **Easting (ft):** 6202622.722 **Angle:** 238° **Date:** 10/8/19

Location: 92

Photograph: 92

Sidewalk along north side of Bailey Ave. to east of intersection of Santa Teresa Boulevard and Bailey Avenue.

Northing (ft): 1898208.629 **Easting (ft):** 6201589.27 **Angle:** 47° **Date:** 10/8/19

Location: 93

Photograph: 93

Sidewalk along east side of Santa Teresa Boulevard to north of intersection of Santa Teresa Boulevard and Bailey Avenue.

Northing (ft): 1898213.300 **Easting (ft):** 6201583.851 **Angle:** 309° **Date:** 10/8/19

Location: 94

Photograph: 94

Wall and ornamental trees and shrubs including gum (*Eucalyptus spp*.) and *Oleander* sp.

Northing (ft): 1898201.955 **Easting (ft):** 6201599.734 **Angle:** 311° **Date:** 10/8/19

Location: 95

Photograph: 95

Chain link gate and fencing and steel barrier gate (opened) at southern turnout along Santa Teresa Boulevard.

Northing (ft): 1900007.388 **Easting (ft):** 6200054.866 **Angle:** 331° **Date:** 10/8/19

Location: 96

Photograph: 96

Entrance to Calpine Road on Santa Teresa Boulevard with chain across road, chain linked fencing along both sides of road and chain linked gate.

Northing (ft): 1901325.949 **Easting (ft):** 6198888.490 **Angle:** 50° **Date:** 10/8/19

Location: 97

Photograph: 97

Northern terminus of sidewalk along eastern side of Santa Teresa Boulevard.

Northing (ft): 1901334.930 **Easting (ft):** 6198872.827 **Angle:** 169° **Date:** 10/8/19

Appendices

Appendix A: Conservation Easement
Appendix B: Santa Clara County Wildlife Corridor Technical Working Group Report
Appendix C: Legal Description of "Temporary Access Easement", dated January 11, 2005
Appendix D: Legal Description of "Public Service Easement", dated August 8, 2000
Appendix E: Municipal Water System Easement, dated July 17, 1986
Appendix F: Metcalf Energy Center Waterline Easement, dated June 11, 2002
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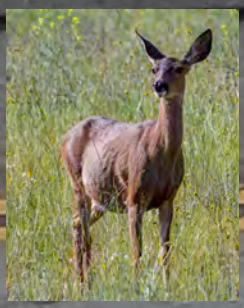
Appendix H: Legal Description of "Public Service Easement, dated January 11, 2005
Appendix I: AgCo Hay Lease
Appendix J: Master Agreement
Appendix K: Preliminary Title Report

Appendix A: Conservation Easement

Appendix B: Santa Clara County Wildlife Corridor Technical Working Group Report

Recommendations to reduce wildlife-vehicle collisions on the Monterey Road corridor in Coyote Valley, Santa Clara County



Santa Clara County Wildlife Corridor Technical Working Group
Coyote Valley Subcommittee

APRIL 2019

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Cover photos by Pathways for Wildlife (Monterey Road), Bob Gunderson (coyote, black-tailed deer), cc Jack Wolf (jackrabbit), and USFWS Pacific Southwest Region (bobcat). Photos on opposite page and back cover (Monterey Road) by Pathways for Wildlife.

Recommendations to reduce wildlife-vehicle collisions on the Monterey Road corridor in Coyote Valley, Santa Clara County

Santa Clara County Wildlife Corridor Technical Working Group
Coyote Valley Subcommittee

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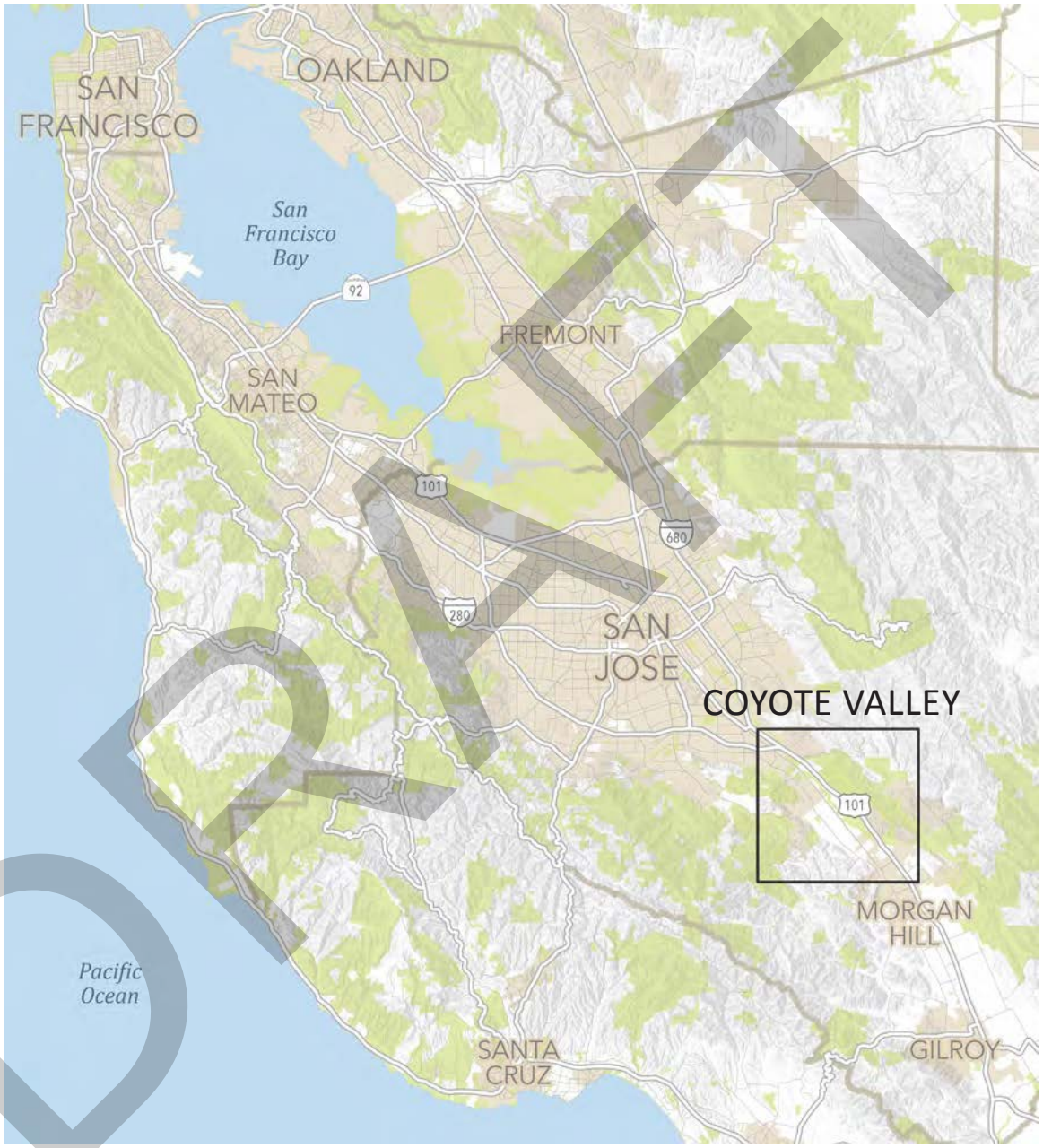
SAN
FRANCISCO
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FREMONT
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COYOTE VALLEY
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MORGAN
HILL
Pacific
Ocean
SANTA
CRUZ
GILROY

EXECUTIVE SUMMARY

Coyote Valley is a 7,400-acre greenbelt between the Cities of San José and Morgan Hill, consisting primarily of agricultural lands and open space, with some commercial and residential development. Numerous scientific assessments have identified Coyote Valley as an area of tremendous regional significance for conservation and climate resilience, due in large part to the rare habitats that survive there and its role as an irreplaceable and unique opportunity to functionally connect the biodiversity (especially wildlife populations) of the Santa Cruz Mountains with the Diablo Range (Thorne *et al.* 2006; Spencer *et al.* 2010; Penrod *et al.* 2013).

Experts have long recognized that conservation of wildlife movement corridors and landscape linkages is important to support healthy and resilient ecosystems and plant and wildlife populations, particularly in the face of a changing climate.

The Coyote Valley Subcommittee of the Santa Clara County Wildlife Corridor Technical Working Group has studied the impacts of wildlife-vehicle collisions along Monterey Road in Coyote Valley. Roadkill data indicate that the Monterey Road corridor is the area's leading contributor to wildlife-vehicle collisions. Surveys along Highway 101, Monterey Road, Santa Teresa Boulevard, and Bailey Avenue show that more than 63% of all roadkill was on Monterey Road, more than 5x the number of roadkill documented on any other road within the focus area. Of the documented roadkill on Monterey Road, 78% was within the section that runs between Metcalf Road and Bailey Avenue (Diamond and Snyder 2018).

This report makes recommendations for wildlife crossing improvements and infrastructure to reduce these collisions, increase the permeability of Monterey Road for wildlife movement, and address an acute issue that poses a threat to landscape-scale conservation efforts in the South Bay and more broadly throughout the region. These recommendations are informed by data from local research, scientific literature, relevant case studies, and expert opinion:

- **Installation of roadway signs and reduced speed limit.** Signs that alert drivers about wildlife crossing areas can influence driver awareness and behavior. Lower speeds provide drivers with additional time and distance to react to wildlife. (The City of San José installed two signs along Monterey Road in November 2018. Installation of an additional sign is recommended, for northbound traffic entering Monterey Road from Bailey Avenue.)
- **Modifications of the median barrier.** Reducing the height and length of the barrier, increasing the number and spacing of gaps, and replacing some or all of the barrier with a design that is more permeable for wildlife will make it easier for wildlife attempting to cross the road at-grade, reducing entrapment and collisions.
- **Improvement of the Fisher Creek culvert as an undercrossing.** Retrofitting the existing culvert at Fisher Creek, which was not designed for wildlife but provides safe passage for some species, will help keep wildlife off roads by offering a safe undercrossing.
- **Creation of wildlife crossing infrastructure.** Construction of wildlife infrastructure at key locations, including Tulare Hill, Emado Avenue, and Bailey Avenue, will provide safe alternatives to at-grade crossing, and accommodate the ranges and habitat needs of various wildlife species.

These recommendations present an opportunity for continued collaboration between the City of San José and interested stakeholders to reduce wildlife-vehicle collisions on Monterey Road. Implementation of these measures will improve the long-term local and regional resilience of wildlife populations and associated ecological processes.

AUTHORS AND ACKNOWLEDGEMENTS

This report was prepared by the Coyote Valley Subcommittee of the Santa Clara County Wildlife Corridor Technical Working Group:

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The Santa Clara County Wildlife Corridor Technical Working Group is an information-sharing forum consisting of representatives of agencies and organizations involved in efforts to improve habitat connectivity and increase landscape permeability. The group includes staff from the Santa Clara Valley Water District, Santa Clara Valley Open Space Authority, Santa Clara Valley Transportation Authority, Santa Clara Valley Habitat Agency, POST, Santa Clara County Parks, Pathways for Wildlife, California Department of Fish and Wildlife, US Fish and Wildlife Service, Land Trust of Santa Cruz County, The Nature Conservancy, De Anza College, California High-Speed Rail Authority, California Department of Transportation (Caltrans), Committee for Green Foothills, Land Trust of Santa Clara Valley, H.T. Harvey & Associates, Midpeninsula Regional Open Space District, San Francisco Bay Bird Observatory, Santa Clara County Planning Department, Sempervirens Fund, Bay Area Open Space Council, University of California, Berkeley, and the University of California, Santa Cruz.

The authors of this assessment recognize and appreciate the many years of research into Coyote Valley's wildlife populations that preceded and informed this report, as well as the commitment and leadership demonstrated by members of the community, elected officials, and other stakeholders throughout the City of San José and Santa Clara County.

KEY TERMINOLOGY

At-grade

On the same level (e.g. on the same surface as vehicular travel).

Crossing infrastructure

A physical structure, such as an overcrossing or undercrossing and directional fencing that facilitates landscape connectivity and wildlife movement across barriers such as a road and/or railway.

Connectivity

The degree to which a landscape facilitates ecological processes and/or movement by ecological communities and specific plants and wildlife; the antithesis of habitat fragmentation.

Corridors and linkages

Corridors are distinct, commonly linear features whose primary function is to connect two or more significant (or core) habitat areas (Beier and Loe 1992). Corridors can be naturally occurring, or designed to facilitate the movement of selected wildlife species (wildlife corridors) or to accommodate diverse guilds of plants, animals, and ecological processes.

Landscape linkages are broad areas that support natural ecological processes and allow gene flow of wildlife and plant species to move among areas of suitable habitat (Ament *et al.* 2014). Functional landscape linkages provide landscape connectivity (see definition above), with characteristics and scale that can:

- Support historical ecological processes and resilience by allowing all organisms to complete life cycles naturally and ensure gene flow within a regional biome.
- Contain wildlife corridors, which vary based on species needs.
- Allow for daily travel by animals throughout their home ranges (the area an animal travels to meet its daily needs).
- Accommodate migration (or periodic, round-trip movements by wildlife) to support their life history needs (e.g. breeding, dispersal, capture of food).
- Support dispersal of individuals, allowing for the continued maintenance of demographic connections among populations and supporting genetic diversity, which prevents the negative consequences of genetic bottlenecks and inbreeding. In some cases, it is important and necessary for individuals to use landscape linkages to recolonize areas where local extinctions have occurred (Beier and Noss 1998; Hilty *et al.* 2006; Groom *et al.* 2006).
- Allow species and populations to adapt to climate change by providing routes (usually along environmental gradients) that facilitate necessary range shifts. Without these landscape linkages, populations could easily become isolated and eventually extirpated from local environments.

Habitat fragmentation

The result of the loss of ecosystem function in a specific geographic area which damages the ability of an area to provide historical (i.e. fully functional) levels of habitat value. Most commonly seen as direct loss of habit, breaking large, connected areas of habitat into smaller disconnected patches, but which can also be the result of indirect activities such as increased light or noise, introduction of non-native species, and/or pathogens or other factors.

Movement barrier

A physical obstruction or discontinuity in habitat – such as a major road, railway, or impassable fence or median barrier – that prevents all or nearly all movement by a particular species or ecosystem process (e.g. predator-prey relationship) and can isolate plant or wildlife populations on either side.

Passage

The action of wildlife moving between habitat patches using wildlife corridors or the movement of genes over multiple generations of less mobile species.

Permeability

The relative ease with which organisms can move from one habitat area to another.

Riparian corridor

The areas in and along creeks, streams, and rivers, often occupied by vegetation, that provide cover, facilitate movement of aquatic and terrestrial species, and promote ecological processes and flows, such as movement of sediment, water, and nutrients.

Definitions compiled from Sonoma Land Trust (2014) and
Santa Clara Valley Open Space Authority and Conservation Biology Institute (2017).

1 INTRODUCTION

"Coyote Valley is a last chance landscape. The Valley is situated in one of the world's top 25 most important biodiversity hotspots (the San Francisco Bay Region) and one of the six most important conservation areas in the US. (Stein et al. *2000). Coyote Valley is a conservation focal area of tremendous significance. It has been identified by the scientific community as an irreplaceable and unique opportunity to functionally connect the biodiversity (especially wildlife populations) of the Santa Cruz Mountains with the Diablo Range (Thorne* et al. *2006; Spencer* et al. *2010; Penrod* et al. *2013)."*

– *Coyote Valley Landscape Linkage: A Vision for a Resilient, Multi-benefit Landscape*. Santa Clara Valley Open Space Authority, San José, CA.

COYOTE VALLEY

Coyote Valley is a 7,400-acre area between San José and Morgan Hill, consisting of primarily open space and agricultural lands, with some commercial and residential development throughout. Coyote Valley is a significant landscape for long-term ecosystem function and climate resilience in the San Francisco Bay Area, serving as an essential habitat connection between two large habitat areas of the Santa Cruz Mountains and the Diablo Range. Plant communities and wildlife depend on this linkage for migration, to find mates, and maintain genetic diversity – particularly in response to climate change (Santa Clara Valley Open Space Authority and Conservation Biology Institute 2017).

The level of development in Coyote Valley generally increases from north to south, with the south valley having the greatest concentration of buildings, smaller agricultural and other business operations, and parcelization. The north Coyote Valley is recognized as having particularly high conservation value, as it includes rare ecological features such as the Laguna Seca wetland complex, Tulare Hill, and valley floor habitat (Santa Clara Valley Open Space Authority and Conservation Biology Institute 2017).

Monterey Road, which runs north-south through the entirety of Coyote Valley (Figure 1), is a well-documented barrier to wildlife movement in this ecologically significant region (Penrod *et al.* 2013; Diamond and Snyder 2018a). The existing physical characteristics of Monterey Road present challenges for wildlife attempting to cross (Diamond and Snyder 2016). With the exception of the Fisher Creek culvert, there are no entirely safe opportunities for wildlife to travel across the road. The existing median barrier, which includes an anti-glare fencing extension, impedes the ability of wildlife to successfully cross-at grade. This can lead to entrapment and increased risk of wildlife-vehicle collisions.

Roadkill surveys conducted on Highway 101, Bailey Avenue, Santa Teresa Road, and Monterey Road show that more than half of the documented roadkill in this region is along the section of Monterey Road between Bailey Avenue and Metcalf Road (Diamond and Snyder 2018a). This same area, north Coyote Valley, is recognized as an area of particularly high conservation value (Santa Clara Valley Open Space Authority and Conservation Biology Institute 2017).

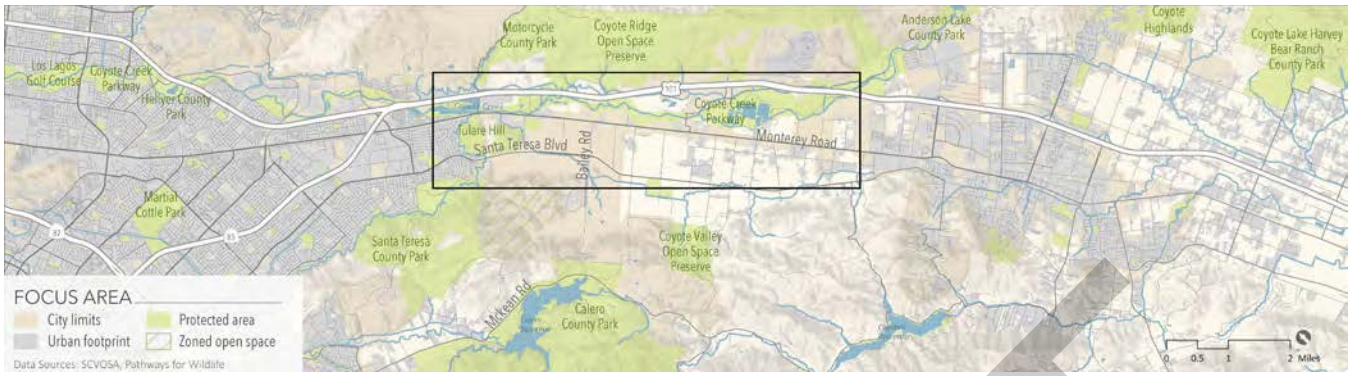


Figure 1 • Focus area: The Monterey Road corridor through Coyote Valley.

With the goal of identifying opportunities for reducing wildlife-vehicle collisions and making the Monterey Road corridor more permeable to wildlife, the Coyote Valley Subcommittee of the Santa Clara County Wildlife Corridor Technical Working Group studied local research, scientific literature, and relevant case studies, in order to inform the recommendations in this report.

THE IMPORTANCE OF ECOLOGICAL CONNECTIVITY

Ecological connectivity is a fundamental principle in the conservation of wildlife, ecosystems, and the native biodiversity they comprise (Crooks and Sanjayan 2006). Linkages that connect habitats are critical as they provide a means for sustaining the ongoing viability of regional ecosystems and the life cycles of the organisms within them. Examples include, but are not limited to the ability for species to access food and water (Soulé and Gilpin 1991), offspring to establish their own home ranges (Beier 1995), and to find mates (Hilty *et al.* 2006). As the Bay Area becomes increasingly fragmented due to development, these linkages are severed, and wildlife become isolated from these resources and each other. Conservation of remaining habitat and linkages is necessary to sustain wildlife populations and prevent local extinctions (Soulé and Terborgh 1999).

As urban development increases, habitat is reduced and can support fewer individuals. Particularly when coupled with habitat fragmentation, this can lead to negative genetic effects such as inbreeding (Hilty *et al.* 2006). Inbreeding can result in reduced fertility, increased birth defects, and increased recessive genetic diseases. Compounded with reduced habitat availability, a population may go locally extinct. Apex predators such as mountain lions, with low population density and large home ranges, are particularly vulnerable to impacts of habitat fragmentation and isolation (Stier *et al.* 2016). Decline in top predators is a cause for concern, given the fundamental role that they can play in ecosystem functioning, disease regulation, and biodiversity maintenance (Stier *et al.* 2016).

As natural communities respond to climate change, wildlife need to be able to travel between core habitats to access areas of refuge, find food and water, and/or move into different habitats as the landscape changes over time. More importantly, overall ecosystem resilience depends upon the ability of habitats to colonize new areas as historical areas become unusable. Connectivity is fundamental to the survival and resilience of natural communities across species and guilds (Noss *et al.* 1999; Heller and Zavaleta 2009; Benson *et al.* 2016). As such, it is important that conservation and climate change planning efforts at local and regional scales include critical wildlife linkages, including addressing the barrier effect of roads.

WILDLIFE AND ROADS

Roads have increasingly fragmented (and continue to fragment) North America's landscapes (Ritters and Wickham 2003) and constitute one of the greatest threats to maintaining landscape connectivity and conservation of biodiversity (Lee *et al.* 2012). In addition to the potential to sever gene flow, the primary effects of roads on wildlife include habitat loss, degradation, and fragmentation, direct mortality, and road avoidance behaviors (Forman and Alexander 1998). The road itself reduces habitat available to wildlife, and may contribute additional impacts due to street and vehicle lights, median barriers, changes in roadside vegetation, and garbage. These habitat degradations influence wildlife's ability or interest in crossing the road. If successful crossing is possible at-grade, it comes with increased risk of mortality.

These negative effects are compounded when the impact extends beyond an individual to the regional population level. When roads create significant barriers to wildlife movement, they can lead to genetic isolation (Beckman *et al.* 2010) and reduced population health (Forman *et al.* 2003). There is evidence that roads are likely already impacting wildlife populations in Santa Clara County. For example, the mountain lion (*Puma concolor*) population in the Santa Cruz Mountains has been found to exhibit low genetic diversity, which may be attributed in part to habitat loss and highways creating a barrier to animal movement and genetic exchange among populations in the Santa Cruz Mountains, Gabilan Range, and Diablo Range (Ernest *et al.* 2003; Gustafson *et al.* 2018). Another local study found genetic differentiation between ground squirrels on either side of US Highway 101 (Gray 2017), suggesting that roads are acting as an effective barrier to gene flow within California ground squirrels in Coyote Valley – and likely other taxa as well.

Bobcat kill on Monterey Road. Photo by Pathways for Wildlife.

In addition to the impacts on wildlife, wildlife-vehicle collisions also have a direct and substantial human cost. A national study estimated that each year in the US, there are between one and two million collisions between vehicles and large animals, resulting in approximately 26,000 injuries to drivers and/or passengers annually (Huijser *et al.* 2007a; Huijser *et al.* 2008, Huijser *et al.* 2009). The financial costs of these collisions include medical care, vehicle repairs, and law enforcement and emergency response (Huijser *et al.* 2008).

PLANNING AND POLICIES

Several state and regional plans identify Coyote Valley as a vital linkage for wildlife, including the California Essential Connectivity Project (Spencer *et al.* 2010), the Conservation Lands Network (Bay Area Open Space Council 2011), and the Bay Area Critical Linkages Project (Penrod *et al.* 2013).

Conservation in Coyote Valley is discussed in a number of plans and policies, several of which include issues relating to Monterey Road acting as a barrier to wildlife movement:

Envision San José 2040, the City of San José General Plan, recognizes that Coyote Valley serves as a landscape linkage between the Santa Cruz Mountains and the Diablo Range. Wildlife studies prepared to support the General Plan recommended, "On-going acquisition and preservation of strategic lands by either public or non-profit agencies can further promote beneficial connectivity between [these] wildlife habitat areas" (H.T. Harvey & Associates 2009). The General Plan includes a number of goals and policies related to natural communities and wildlife habitat protection that support the planning and implementation of a "multi-benefit" landscape linkage across Coyote Valley. These goals reflect the City's recognition of the need for, "… multiple jurisdictions to cooperate in the management of natural communities and wildlife habitat. Recognizing this interdependence, San José seeks to demonstrate environmental leadership through advocacy and cooperative efforts with other jurisdictions."

Relevant policies include:

- ER-2.1: Ensure that new public and private development adjacent to riparian corridors in San José are consistent with the provisions of the City's Riparian Corridor Policy Study and any adopted Santa Clara Valley Habitat Conservation Plan/Natural Communities Conservation Plan (HCP/NCCP).
- ER-7.2: In areas important to terrestrial wildlife movement, design new or improve existing roads so that they allow wildlife to continue to move across them (e.g., either over the road surface or through under-crossings or over-crossings designed for the animals moving through the areas).
- ER-7.4: To facilitate the movement of wildlife across Coyote Valley, work with the appropriate transportation agencies to replace portions of the median barrier on Monterey Road with a barrier that maintains human safety while being more permeable to wildlife movement and implement other improvements to benefit wildlife movement.
- ER-7.5: Support the ongoing identification and protection of critical linkages for wildlife movement in the Mid-Coyote Valley.

As part of San Jose's **Vision Zero** transportation safety initiative, a focus is being placed on the 17 major streets identified and established as "Priority Safety Corridors," including Monterey Road. While the Priority Safety Corridors represent only 3% of San Jose's approximate 2,400-mile roadway system, they experience a higher incidence of fatalities and severe injuries due to traffic collisions. This initiative aims to eliminate fatalities and reduce severe injuries caused by traffic collisions. Although there is no known analysis regarding the relationship, if any, between wildlife-vehicle collisions on overall collisions on Monterey Road, research has shown that wildlife-vehicle collisions can be costly to society (Huijser *et al.* 2008) and that mitigations such as wildlife crossing structures have been proven in reducing wildlife-vehicle collisions (Huijser and Clevenger 2011).

The Santa Clara Valley Habitat Conservation Plan/Natural Communities Conservation Plan (Habitat Plan [ICF 2012]) is designed to "protect, enhance, and restore ecosystem integrity and functionality for threatened and endangered species; enhance the diversity of plant and animal communities; and conserve habitat and contribute to the recovery of species listed or likely to be

listed under the federal ESA [Endangered Species Act] or the California ESA" (ICF International 2012). As a Co-Permittee and Governing Board member, the City of San José is responsible for successful implementation of the Habitat Plan. The Habitat Plan identifies the Coyote Valley linkage as one of three focus areas critical to meeting regional connectivity goals. The Habitat Plan requires implementation of several conservation actions to protect and improve this linkage including:

- Land acquisition west and east of Coyote Creek
- Habitat restoration of the valley floor to benefit rare and endangered species
- Replacement or upgrade of key culverts and bridges to improve access to Coyote Creek
- Removal of median barriers and installation of directional fencing to reduce roadkill
- Funding for targeted studies to inform land acquisition, restoration, and enhancement actions

The Santa Clara Valley Greenprint (Santa Clara Valley Open Space Authority 2014) is a 30-year roadmap for the Santa Clara Valley Open Space Authority's goals, priorities, and strategies for land conservation in Santa Clara Valley. Coyote Valley is identified as one of ten of the Open Space Authority's conservation focus areas and as an area critical for wildlife movement. Coordination with transportation agencies on projects to enhance wildlife movement across road barriers is one of the strategies identified in the Greenprint.

Coyote Valley Landscape Linkage: A Vision for a Resilient, Multi-benefit Landscape (Santa Clara Valley Open Space Authority and Conservation Biology Institute 2017) makes some specific recommendations for wildlife crossings of Monterey Road:

- Improve wildlife permeability of existing infrastructure: Improve permeability of existing infrastructure, such as cleaning of culverts, removing the Monterey Road median barrier, and installing road crossing signs. The coordination of this work should be organized through the Santa Clara County Wildlife Corridor Technical Working Group.
- Plan, design, and implement additional wildlife crossings and make significant improvements to existing infrastructure: Install or redesign wildlife crossings in key locations as a component of landscape-scale restoration and management planning. Some existing infrastructure needs significant design and engineering (such as the Monterey Road culvert at Fisher and Coyote Creeks, or widening the Bailey overpass). New wildlife crossings will need to be designed and engineered to ensure multiple passage opportunities for all taxonomic guilds. Planning for new infrastructure for wildlife is a major undertaking and should follow the models of multiple agency partnerships, including the High-Speed Rail Authority, Valley Transportation Authority, Santa Clara County Parks, Caltrans, and local conservation and open space agencies, as has been modeled at other successful wildlife crossing projects in the Bay Area and across the state.

Santa Clara Valley Water District Safe, Clean Water and Natural Flood Protection Program (Santa Clara Valley Water District 2012) - **Priority D: Restore Wildlife Habitat and Provide Open Space - Project D2: Revitalize Stream, Upland and Wetland Habitat** allows the SCVWD to remove non-native, invasive plants and revegetate habitat with native species when needed. Funding also restores degraded habitat between revegetated sites to create a more contiguous habitat corridor for wildlife. This project includes targeted control of especially damaging non-native, invasive plant species such as Arundo donax, and education for nearby landowners and other stakeholder groups on the control of harmful species.

SCVWD One Water Plan is the SCVWD's approach to integrated water resources management. The standardized approach compares competing and complementary water functions and helps long range planning for the SCVWD's flood risk reduction, stream stewardship, and water supply functions. This effort is organized as a framework and five focused watershed-scale plans with prioritized portfolios of projects. Since One Water is built on science-based objectives, metrics,

and targets, and builds in elements of resilience, any proposed projects should show a measurable improvement in watershed conditions. With consideration of water supply, flood protection, water quality, and ecological resources, One Water also looks to highlight areas of collaboration and partnership. One such example is coordination with the Santa Clara Valley Open Space Authority in the Coyote Valley area of south San Jose, where potential restoration, flood risk reduction, and wildlife corridor crossing improvements are all being discussed.

The County of Santa Clara Parks and Recreation Department operates over 52,000 acres of open space and parklands. The County of Santa Clara, Parks and Recreation Department 2018 Strategic Plan (County of Santa Clara, 2018) is the guiding document for the sustainment of parklands for the enjoyment, education, and inspiration of this and future generations. Nine strategic goals were identified during the planning process to achieve the Department's vision. Together, these goals provide a comprehensive ideal for management of the Department and the stewardship for the natural, cultural, and historic resources under its care. The Department is committed to protect natural resources in the context of the greater region (Goal #1 of the 2018 Strategic Plan) by cooperating with regional partners and taking a landscape-level approach to natural resource management and land acquisition, including working to ensure the viability of critical habitat linkages. Protecting and managing critical habitat linkages are vital to managing natural resources at a landscape-level. To meet the goal of protecting natural resources, the Department strives to actively participate in regional efforts to unify and prioritize natural resource management actions (Strategy 1.1 of the 2018 Strategic Plan). In addition, the Department prioritizes land acquisition, planning, and management according to scientific evidence and data about important habitat and connecting ecological systems, specifically by working with others to protect priority habitat linkages through management actions and advocacy within identified priority areas (Strategy 1.2).

2 WILDLIFE AND ROAD CROSSINGS IN COYOTE VALLEY

Major roads traversing Coyote Valley consist of Highway 101, Monterey Road, Bailey Avenue and Santa Teresa Boulevard. Each of these roadways presents challenges for wildlife attempting to cross as well as opportunities for increasing permeability for wildlife and reducing wildlife-vehicle collisions. While some of the roads described below extend outside of Coyote Valley, the following descriptions pertain specifically to the portion within Coyote Valley.

Highway 101 is a 10-lane highway that features several locations where wildlife have been documented successfully crossing under the roadway through existing culverts and underpasses. In September and October 2016, Caltrans cleared two blocked culverts that had previously been utilized by wildlife to travel under the highway, after which wildlife use resumed (Diamond and Snyder 2018b). Efforts to improve additional culverts are underway (e.g. Caltrans maintenance activities including fence realignment and habitat restoration work by the Santa Clara Valley Water District) and present ongoing opportunities to improve this roadway for wildlife passage.

Santa Teresa Boulevard is a two-lane road that runs north-south and features several culverts in north Coyote Valley. Certain wildlife species have been documented utilizing the culverts to travel under the road, when the culverts are not inundated with water (Diamond and Snyder 2016). An increase in roadkill along this road is expected if there is an increase in traffic and/or development.

Bailey Avenue is a four-lane road that runs east-west through Coyote Valley. Two existing culverts (one at Fisher Creek and the other in the immediate vicinity) provide opportunities for certain wildlife to pass safely under the road, when the culvert is not inundated (Diamond and Snyder 2016; CVWPID 2017).

Monterey Road. Photo by Pathways for Wildlife.

Monterey Road is a four-lane road running through Coyote Valley from approximately Metcalf Road in the north to approximately Tilton Avenue to the south. Much of this eight-mile stretch of the road includes a 32" tall concrete median with a 24" anti-glare fence on top. Together, these present a nearly 5'-high visual and physical barrier to wildlife attempting to cross the road. An existing culvert located at the confluence of Fisher Creek and Coyote Creek provides a suitable undercrossing for certain wildlife species and is the only infrastructure that supports safe-passage.

WILDLIFE USE OF COYOTE VALLEY: PREVIOUS RESEARCH

A substantial amount of research has been done on wildlife use of Coyote Valley over the past decade. These studies used a number of techniques to document animal movement:

Roadkill surveys identify roadkill hotspots – locations where there is a concentration of wildlife mortality on a road. These highlight locations where measures to reduce wildlife-vehicle collisions would be most effective (Huijser *et al.* 2007b).

Remote, motion-sensor cameras (i.e. trail camera, field camera, camera traps) inventory species in a given area, document behaviors (O'Brien 2011), and monitor use of infrastructure such as underpasses and bridges, and more (Cramer 2012).

Radio telemetry uses radio signals to locate a transmitter attached to an animal (GPS-enabled collar) and provide movement and GPS-based location data. This can track animal movement and location, and also provide behavioral information (Cagnacci *et al.* 2010).

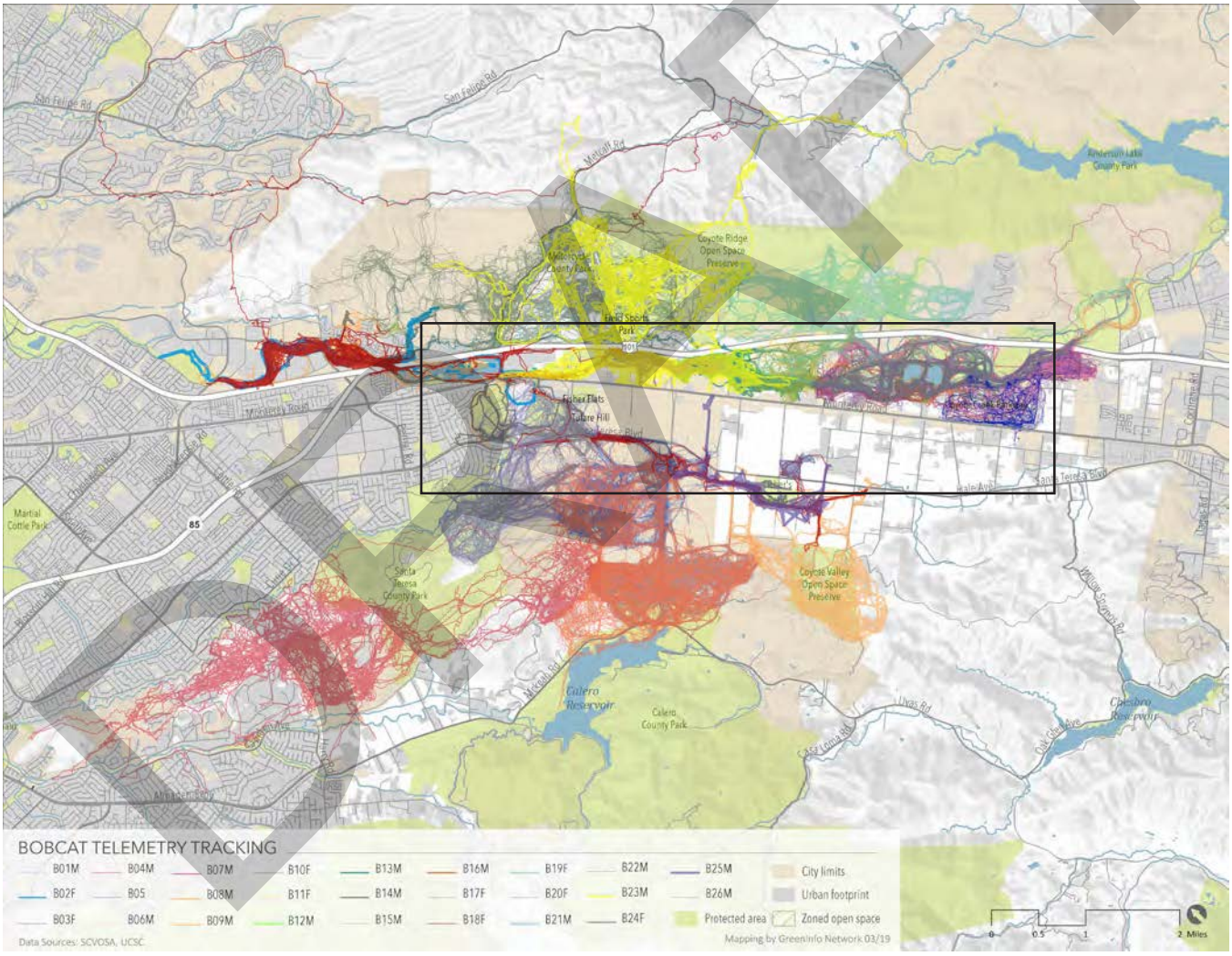
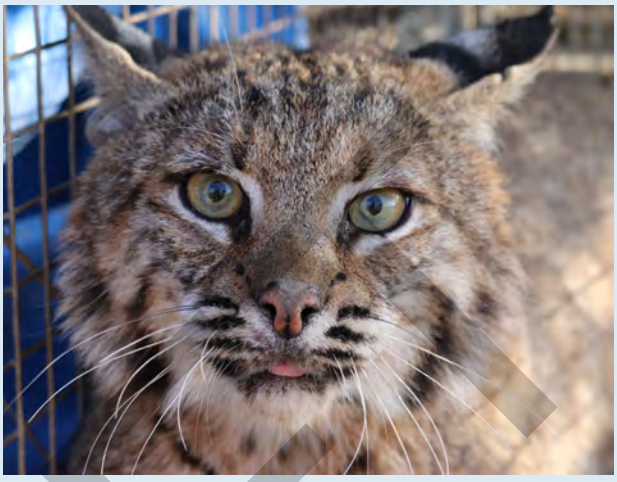


Figure 2 • Movement of 26 bobcats, as tracked by GPS collars.

PROFILE: BOBCAT B11F

B11 was collared on November 19, 2017 in Coyote Creek County Park.

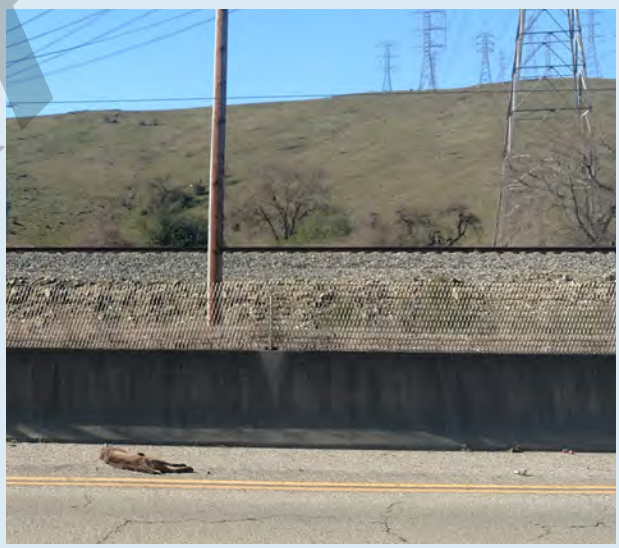
B11 was recorded on a field camera crossing under US Highway 101 several times in November 2017, December 2017, and January 2018, using an existing 3'x3' round concrete culvert to access habitat on Coyote Ridge and Coyote Creek Parkway.



On February 17, 2018, B11 attempted to cross Monterey Road in the vicinity of Fisher Creek and Tulare Hill. When the GPS collar transmitted a mortality signal, the research team located the carcass and determined the cause of death to be a wildlife-vehicle collision.

After reviewing the dataset, the team determined that B11 had successfully crossed Monterey Road four times before being killed.

Photos by Pathways for Wildlife.



The recommendations in this report are particularly informed by data from three studies:

Safe Passage for Coyote Valley 2007 - 2012 (Phillips *et al.* 2012)

- Inventoried species and use of habitat in Coyote Valley. Methods included bird surveys, camera studies, field tracking methods, and vegetation sampling.
- Funded and completed by the De Anza College Wildlife Corridor Technician Program.

Coyote Valley Linkage Assessment Study 2014 - 2016 (Diamond and Snyder 2016)

- Identified wildlife movement pathways in Coyote Valley, species use (including breeding females and offspring), and movement barriers (including evidence of influence on genetic diversity of ground squirrels).
- Methods included camera studies, roadkill surveys, and collection of California ground squirrel scat. Completed by Pathways for Wildlife with genetic work completed by the University of California, Berkeley. Funded by California Department of Fish and Wildlife, the Santa Clara Valley Open Space Authority, and the Guadalupe-Coyote Resource Conservation District.

Coyote Valley Bobcat and Gray Fox Connectivity Study (2017 - 2019) (Serieys *et al.* in preparation 2019, Diamond and Snyder 2018a)

- Study will identify location and frequency of road crossings, movement corridors, and preferred habitat. Final report available summer 2019; initial findings from the study have been provided by the lead scientist and are included in this report.
- Methods include the use of GPS-enabled collars to track bobcats, camera monitoring, and roadkill surveys.
- Led by the Wilmers Lab at the University of California, Santa Cruz with Pathways for Wildlife. Funded by POST, the Gordon and Betty Moore Foundation, California Department of Fish and Wildlife, Santa Clara Valley Open Space Authority, and Santa Clara Valley Habitat Agency.

ROADKILL DATA

Scientists collected roadkill data in Coyote Valley for a number of years (2006-2010 and 2014-2018). These data provide important inputs to the report recommendations, as wildlife species and size are both important considerations when designing mitigations to reduce wildlife-vehicle collisions (Clevenger and Huijser 2011). Wildlife size is also relevant when assessing the risk to drivers and associated cost to society (Huijser *et al.* 2008).

ROADKILL – SPECIES INVENTORY

Large

Mule deer (*Odocoileus hemionus*)

Puma (*Puma concolor*)

Wild pig (*Sus scrofa*)

Medium

American badger (*Taxidea taxus*)

Bobcat (*Lynx rufus*)

Coyote (*Canis latrans*)

Gray fox (*Urocyon cinereoargenteus*)

Northern raccoon (*Procyon lotor*)

Small

Black-tailed jackrabbit (*Lepus californicus californicus*)

California ground squirrel (*Otospermophilus beecheyi*)

Striped skunk (*Mephitis mephitis*)

Virginia opossum (*Didelphis virginiana*)

Western pond turtle *(Actinemys marmorata)*

Includes all available roadkill data

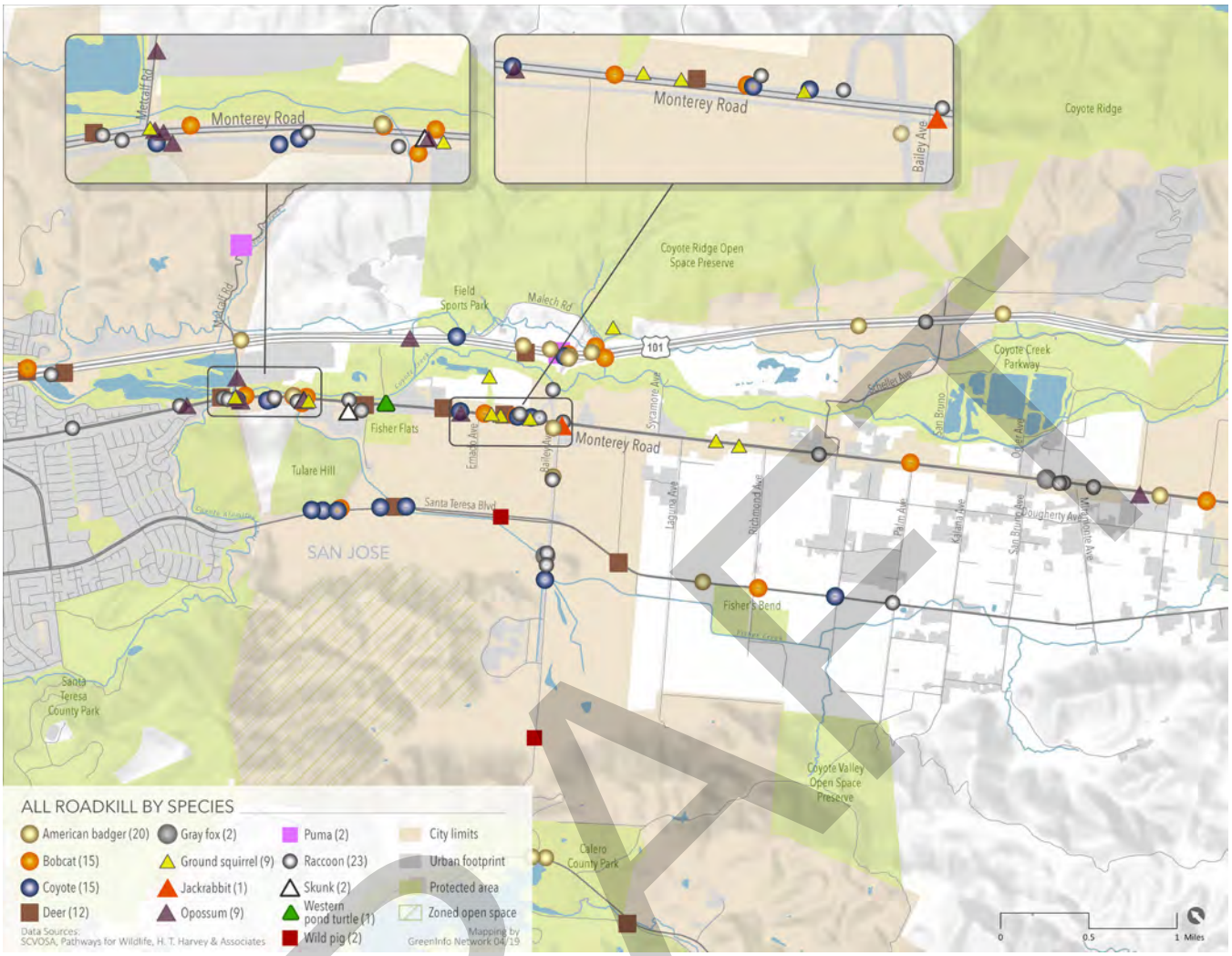
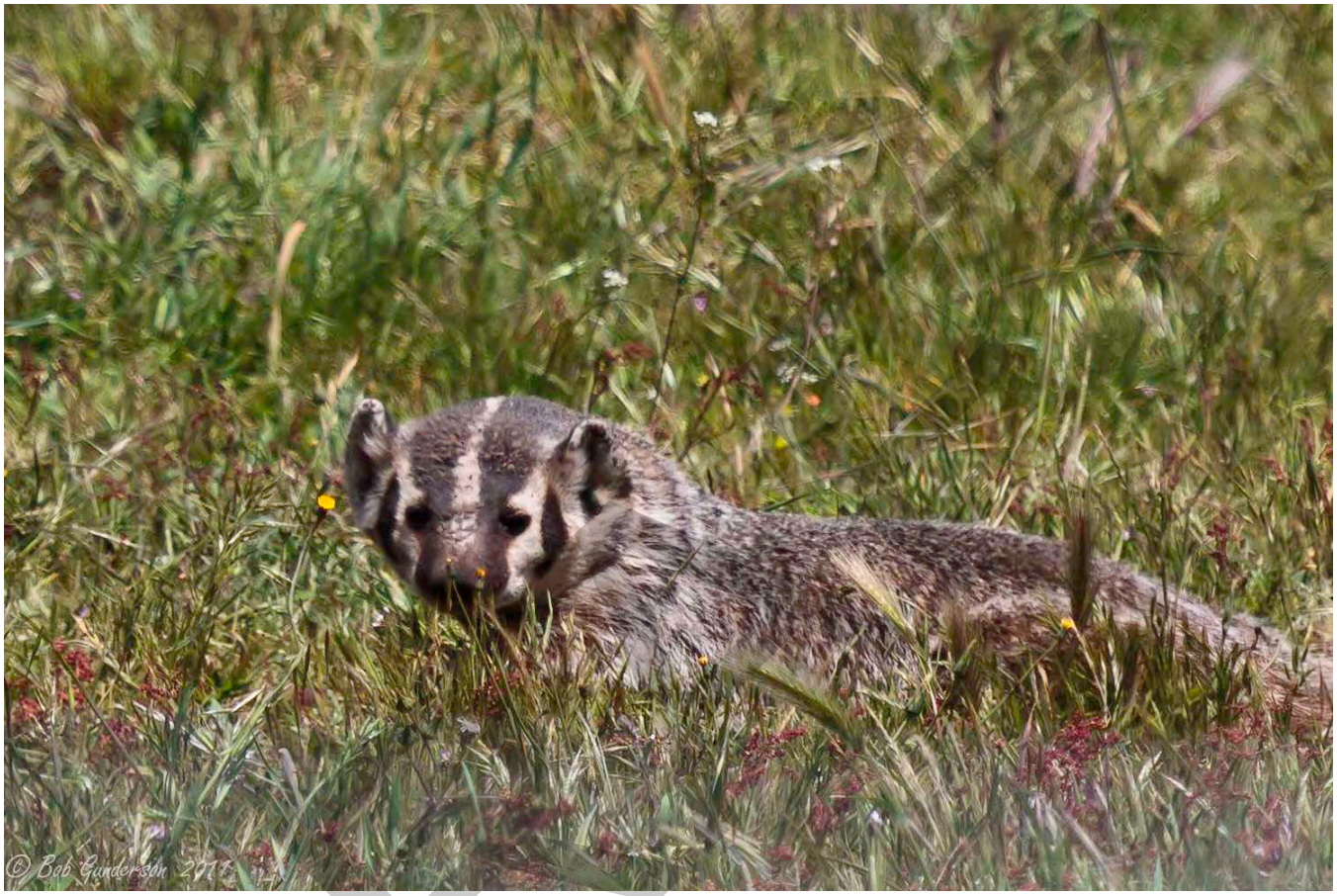


Figure 3 • Roadkill documented in Coyote Valley, by species. Includes all available roadkill data.

Western pond turtle kill on Monterey Road. Photo by H.T. Harvey & Associates.



American badger. Photo by Bob Gunderson.

3 ANALYSIS: MONTEREY ROAD HOTSPOTS

While the previous section of this report includes all available reliable data (whether collected opportunistically or during routine surveys), this section of the report includes only roadkill data collected by Pathways for Wildlife during routine survey efforts (Diamond and Snyder 2018a).

During 2015-2016 and 2017-2018, routine and extensive roadkill surveys were conducted every week. For 2015-2016, weekly surveys were conducted from Jan 2015-Jan 2016. For 2017-2018, weekly surveys were conducted from May 201-Sept 2018.

The roads that were surveyed during 2015-2016 and 2017-2018 for the wildlife-vehicle collision data included Highway 101, Monterey Road, Santa Teresa Road, Bailey Road, Laguna Road, Richmond Road, and Palm Ave.

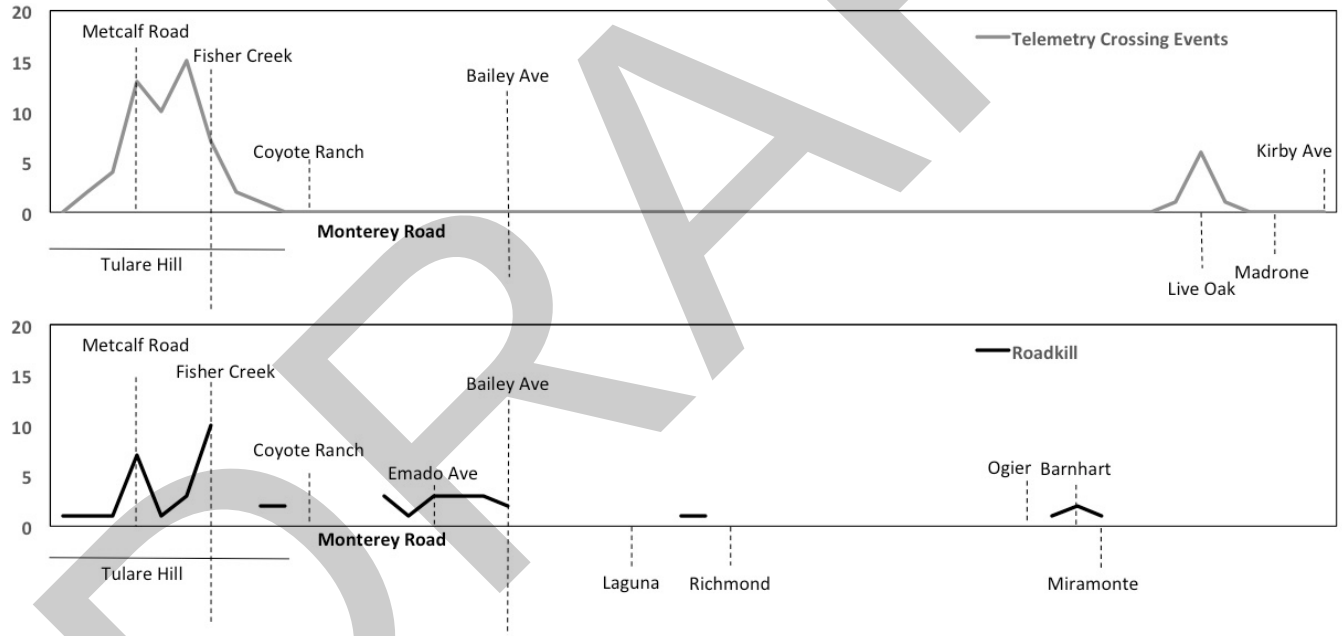


Figure 4 • Telemetry crossing events and roadkill on Monterey Road. These graphs depict the bobcat telemetry crossing events (9 animals, 62 crossing events) and roadkill (53 animals) on Monterey Road.

Moving north to south, 1/8 mile indexed boxes were established along Monterey Road (x-axis), and the number of crossing events or roadkill summed (y-axis). East-west roads and Fisher Creek are indicated on the x-asis at the appropriate interval. Most of these end at their intersection with Monterey Road either from the east or west. This is indicated by a dotted line intersecting the axis – roads radiating eastward are above the x-axis, those radiating westward are below the x-axis. Fisher Creek and Bailey Avenue cross Monterey Road and their dotted lines extent beyond the x-axis. The relative position of Tulare Hill along Monterey Road is also displayed.

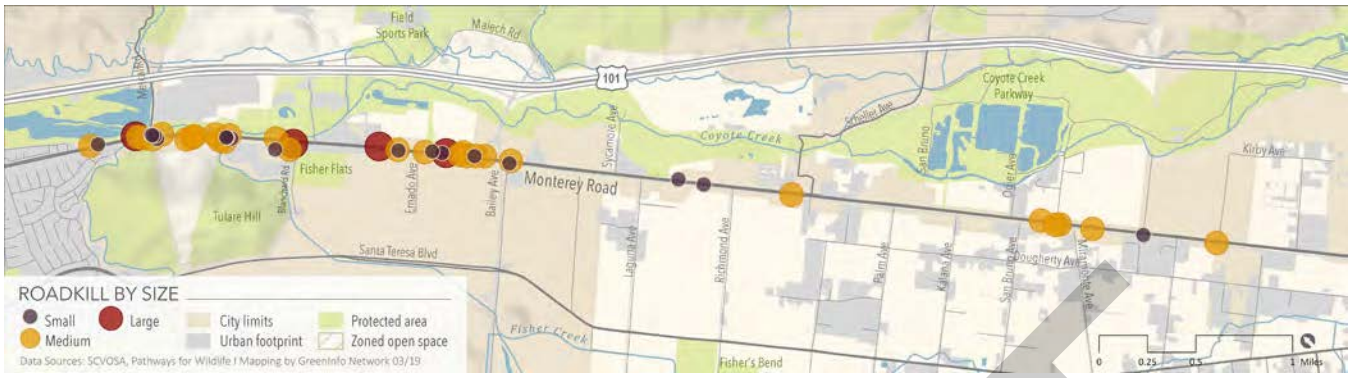


Figure 5 • Roadkill by size, along Monterey Road.

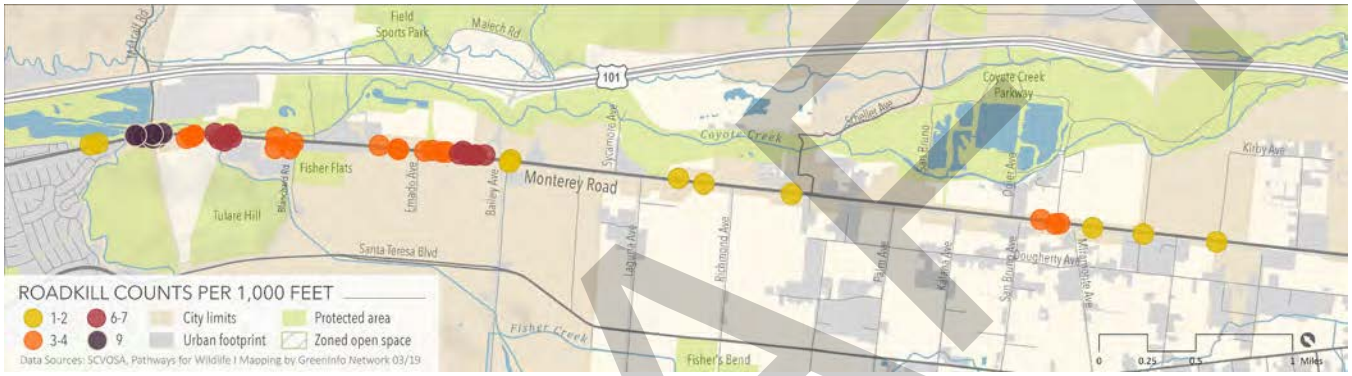


Figure 6 • Roadkill counts on Monterey Road, highlighting hotspots north of Bailey Avenue.

In the periods during which routine surveys were not conducted, data were also collected opportunistically during the years 2013-2014 and 2016-2017. Data collected during these years followed the same survey and collection protocols. For 2016-2017, surveys were conducted twice a month from February 2016-April 2017. During the years 2006-2010 and 2013-2014, data were collected approximately once per month, but did not involve routine survey efforts along each road within the study area (Diamond, T. personal comm. 2018).

Surveys along Highway 101, Monterey Road, Santa Teresa Boulevard, and Bailey Avenue show that 63% of all roadkill in the study area was on Monterey Road (Figure 7) (Diamond and Snyder 2018a). Of the documented roadkill on Monterey Road, 78% was within the section that runs between Metcalf Road and Bailey Avenue. The concentration of roadkill suggests that Monterey Road presents a more substantial barrier to wildlife movement than Highway 101, Santa Teresa Boulevard, or Bailey Avenue, and that the Monterey Road corridor is likely the main existing barrier to wildlife movement in the Coyote Valley.

Although documented outside of the routine survey periods, it is worth noting that western pond turtle and American badger, both listed as Species of Special Concern by the California Department of Fish and Wildlife, were documented as roadkill on Monterey Road between Bailey Avenue and Metcalf Road in 2015 and 2008, respectively (H.T. Harvey & Associates 2019; Diamond & Snyder 2018a). An American badger roadkill was also documented in 2008 in the westbound lane of Bailey Avenue at the intersection with Monterey Road and in 2009 on the southbound lane of Monterey Road, north of Live Oak Avenue (H.T. Harvey & Associates 2019).

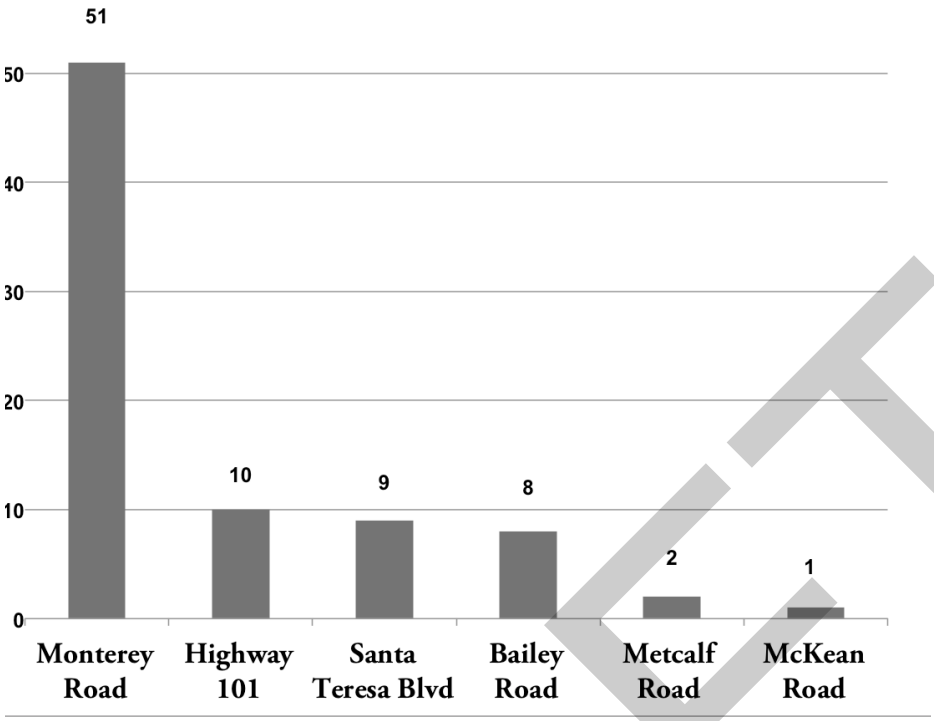


Figure 7 • Number of roadkill on major roads in the study area. Of 81 total, 51 were on Monterey Road.

The concentration of roadkill on Monterey Road is likely exacerbated by the physical characteristics of the road. The majority of the 8-mile stretch of Monterey Road features a 32"-high cement median barrier, with extensive sections that include an additional 2'-anti-glare fence, together measuring approximately 5' in height).

Median barrier on Monterey Road. Photo by Stephi Matsushima.

There is only one culvert under Monterey Road, at the confluence of Fisher Creek and Coyote Creek. Studies that documented use of the Fisher Creek culvert (under Monterey Road) by a subset of wildlife also documented roadkill in the immediate vicinity of the culvert. Despite its size, the culvert does not accommodate use by a wide variety of wildlife species, due to a lack of natural substrate and the presence of rip-rap and ponding water on the east side. In comparison, the stretch of Highway 101 that runs through Coyote Valley features numerous culverts and underpasses of various sizes and configurations. Studies have shown that wildlife use many of these culverts and underpasses to travel under Highway 101 (Diamond and Snyder 2016; Diamond and Snyder 2018a; Phillips *et al.* 2012).

Fisher Creek culvert under Monterey Road. Photo by Pathways for Wildlife.

Western pond turtle. Photo by Cait Hutnik.

Bobcat telemetry (GPS collar) data indicate concentrated activity in the north Coyote Valley and provide additional insight into wildlife interactions with Monterey Road (Figure 8). A study of 26 bobcats (Serieys *et al.* in preparation) showed that eight of the nine individuals that crossed Monterey Road did so between Metcalf Road and Bailey Avenue. Of these nine, two were killed by vehicle collisions near Fisher Creek and Tulare Hill (Serieys *et al.* in preparation). A third was killed in south Coyote Valley.

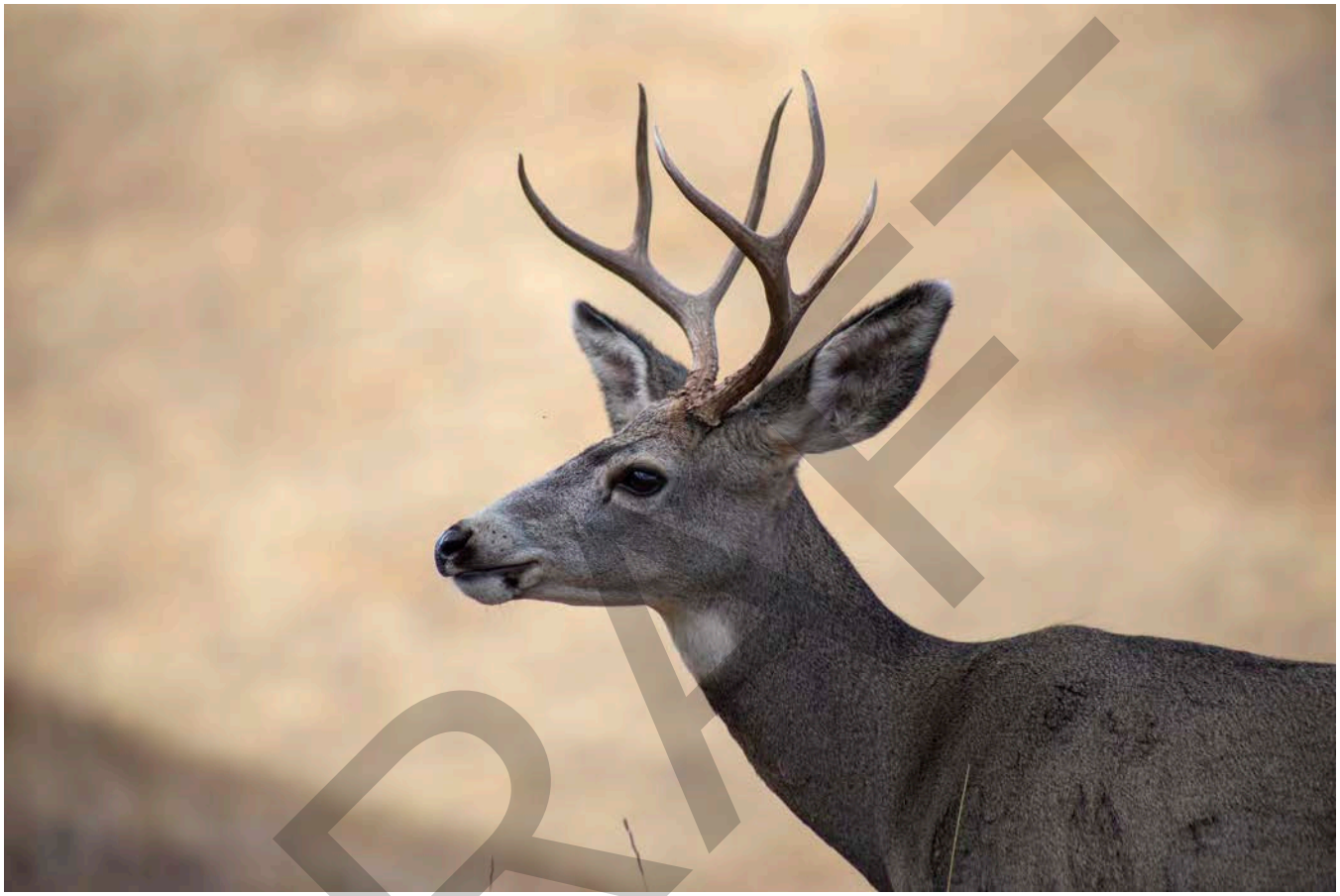
Figure 8 • Bobcat crossings of Monterey Road, as measured by GPS collars and roadkill.

Telemetry data for all 26 bobcats indicate that the median barrier on Monterey Road impacted their movement. For example, during the study period, B03F, a female bobcat with kittens, made more than 3,000 road crossings of Bailey Avenue and McKean Road, neither of which feature a median barrier. Though there were numerous GPS-collared individuals inhabiting areas adjacent to Monterey Road, there were fewer than 60 attempted road crossings.

These data also illustrate which areas of Coyote Valley are most heavily used by bobcats. While access to conduct trapping activities on private property was limited (particularly in the mid-valley), bobcat activity appears to mostly occur in areas with the most intact habitat, particularly that which provides vegetative cover (Serieys *et al.* in preparation).

Genetic data from ground squirrel populations in Coyote Valley indicate that roads present significant barriers to their movement, and other wildlife are likely to be similarly impacted. This is supported by research showing genetic differentiation among wildlife populations on either side of US Highway 101 in the Santa Monica Mountains (Riley *et al.* 2006) and the vicinity in southern California (Delaney *et al.* 2010).

These studies, together with roadkill and other local data, suggest that Monterey Road is the most serious barrier to wildlife movement in Coyote Valley, as it inhibits habitat access and is the main location of wildlife-vehicle collisions. Unless the permeability of the road is increased for wildlife movement, it may impact long-term population viability (e.g. by impeding gene flow), community composition (e.g. changes resulting from local extinction), and ecosystem function (e.g. processes facilitated by interrelationships between organisms).



Mule Deer. Photo cc by Andy Weeks.

4 RECOMMENDATIONS TO REDUCE WILDLIFE-VEHICLE COLLISIONS

KEY FACTORS FOR RECOMMENDATIONS

The following factors were used identify how and where wildlife crossing infrastructure would be most effective:

Habitat quality is the relative intactness of wildlife habitat on either side of Monterey Road, as well as larger landscape connectivity – the ability of wildlife to navigate to larger, higher-quality habitat crossing Coyote Valley into the Santa Cruz Mountains or Diablo Range.

Habitat protection refers to lands managed for ecological protection or as open space. Natural resources are protected by ownership or conservation easement held by a federal, state, or local open space agency, or non-governmental organization, or by enrollment in a mitigation bank. Protected lands in Coyote Valley include Coyote Creek Parkway, Tulare Hill, Coyote Valley Open Space Preserve, Coyote Ridge Open Space Preserve, Coyote Ridge Preserve, Consolidated Biological Mitigation Project, Coyote Ridge Conservation Area, Fisher's Bend, and Fisher Flats.

Roadkill hotspots are locations with documented concentrations of wildlife-vehicle collisions or wildlife mortality. Locations are identified by the presence of roadkill. These also provide information on species occurrence, which is relevant when designing wildlife crossing infrastructure

Successful crossings are locations where wildlife crosses a road without being killed. In this case, these are documented via bobcat telemetry data and/or appropriately-positioned motion-sensor cameras.

Wildlife crossing sign unveiling event, November 30, 2018. Left to right: Andrea Mackenzie, Santa Clara Valley Open Space Authority; State Assemblymember Marc Levine; State Senator Bill Monning; State Assemblymember Ash Kalra; San Jose City Councilmember Sergio Jimenez; State Assemblymember Mark Stone; Megan Medeiros, Committee for Green Foothills; Laura Wells, San José Department of Transportation.

WILDLIFE CROSSING INFRASTRUCTURE

The conservation value of wildlife crossing infrastructure is recognized as an effective measure to help species species persist in today's landscape and also to adapt to climate change (Clevenger and Huijser 2011).

A **wildlife overcrossing** (left) is similar to a bridge or overpass and is designed to provide a seamless habitat connection over roads and railways. Effective overcrossings are vegetated and constructed to certain specifications regarding slopes and grades. They include directional fencing and design features to minimize noise from vehicular traffic.

A **wildlife undercrossing** (below) is a culvert or tunnel that allows wildlife to pass safely under surface transportation infrastructure. Existing infrastructure (e.g., culverts) may be retrofitted to include characteristics that will encourage use by wildlife (e.g., increased width, native substrate). Regardless of whether the wildlife undercrossing is a modification of an existing structure or creation of a new structure, the most effective undercrossings are large, allow for good visibility through the structure, include a mix of openness and vegetative cover, incorporate directional fencing, and minimize exposure to noise (Cramer 2012). Although not designed for the needs of wildlife, the Fisher Creek crossing at Monterey Road (and the Union Pacific Railroad) is considered an undercrossing feature.

Directional fencing is an important component of most effective wildlife crossing infrastructure, as it inhibits wildlife from accessing the road or railway and directs them to opportunities for safe passage. Fencing design should consider the species of interest, which informs height, extent, and materials (such as features to inhibit small wildlife from passing through or under the fencing).

RECOMMENDATIONS

The recommended wildlife crossing infrastructure are based on proven, effective measures to reduce wildlife-vehicle collisions (Clevenger and Huijser 2011). Conceptual design criteria for this wildlife crossing infrastructure were developed with the guidance of Anthony P. Clevenger, PhD, a world-renowned expert in the field of road ecology and wildlife crossing infrastructure. Recommendations are grouped into (1) interim actions and (2) major wildlife crossing infrastructure investments.

INTERIM ACTIONS

Interim actions are recommended for implementation within the next five years along Monterey Road in Coyote Valley. They are lower-cost improvements to be implemented in advance of the major wildlife crossing infrastructure investments. Traffic volume remains high on this stretch of roadway and should be expected to continue to pose a threat to at-grade crossings by wildlife. While implementation of these measures may reduce wildlife-vehicle collisions, they should not be seen as safe-crossing alternatives.

- **Install roadway signs** to educate drivers and the general public about wildlife crossings.
    - Signs can influence driver behavior by raising awareness about wildlife activity and road crossings.
    - The City of San José installed two signs in November 2018 – one at the northern end of Monterey Road (at Metcalf Avenue) and one at the southern limit of where Monterey Road traverses Coyote Valley (at Tilton Avenue).
    - Installation of an additional sign for northbound traffic entering Monterey Road from Bailey Avenue is recommended.
- **Reduce speed limit.**
    - Lower speeds provide drivers with additional time and distance to react to wildlife crossings.
- **Modify the median barrier** in strategic locations identified in Figure 9.
    - Remove anti-glare fencing the entire length of the road.
    - Increase the length of the gaps in the median barrier at the Monterey Road intersections with Metcalf Road, Blanchard Avenue, and Bailey Avenue in order to reduce wildlife entrapment and collisions with vehicles by increasing the openness of the road.
    - Replace some or all of the median with a more wildlife-friendly design such as a "w-beam" guard rail.
    - In addition to further refinement based on vehicular safety and wildlife use criteria, any modifications to the median barrier should assess potential impacts on flood risk.
- **Implement interim modification of the Fisher Creek culvert** as it passes under Monterey Road and Union Pacific Railroad.
    - Restore habitat adjacent to the existing culvert to encourage wildlife use.
    - Improve conditions at the downstream side/outlet of the culvert, such as modification of rip rap and/or Sakrete retaining wall.
- **Develop and implement a monitoring program** to evaluate effectiveness of minor wildlife crossing improvements and inform adaptive management. Monitoring the effect of the signage may not be necessary.

MAJOR WILDLIFE CROSSING INFRASTRUCTURE INVESTMENTS

Implementation of major wildlife crossing infrastructure investments are recommended for implementation in the next five to ten years, and will require additional planning and substantial funding commitments. Major wildlife crossing infrastructure investments consist of proven enhancements that allow for safe passage over or under Monterey Road, Union Pacific Railway, and future infrastructure (e.g., High-Speed Rail) in Coyote Valley. They were designed to accommodate use by mountain lion and deer (target species), as well as bobcat, coyote, fox, and badger. Wildlife crossings designed to accommodate these wildlife allow for use by a diverse array of guilds and species.

A preliminary design and engineering evaluation determined that wildlife crossing structures with the proposed dimensions are feasible. A detailed engineering process will be necessary to refine the dimensions and design details, depending on the length of each structure and other site characteristics.

In addition to sizing, elements that influence the overall effectiveness of the structure include visibility, substrate, cover, and directional fencing. Given the complexity of site conditions along Monterey Road, additional planning will be needed in order to determine the inclusion and design of any directional fencing.

The first three recommendations have been further developed from previously-recognized priority sites (Santa Clara Valley Open Space Authority and Conservation Biology Institute 2017) and have also been included in all potential alternatives for High-Speed Rail.

- **Install a wildlife undercrossing under Monterey Road, connecting Tulare Hill and Coyote Creek.**
    - A preliminary design and engineering evaluation identifies an undercrossing of approximately 15’ (H) x 100’-150’ (W) as feasible at this location.
    - This action would facilitate wildlife passage under Monterey Road at a documented hotspot.
- **Retrofit/redesign of the Fisher Creek culvert** to enhance the connection between Fisher Creek and Coyote Creek.
    - A preliminary design and engineering evaluation identifies an undercrossing of approximately 15’ (H) x 40’ (W) as feasible at this location.
    - This action would facilitate wildlife passage under Monterey Road at a documented hotspot.
- **Install a wildlife undercrossing under Monterey Road south of Emado Avenue**, connecting lands on the west side and Coyote Creek Parkway.
    - A preliminary design and engineering evaluation identifies an undercrossing of approximately 15’ H x 40’ W as feasible at this location.
    - A wildlife crossing at this location would complement proposed infrastructure at Tulare Hill and Fisher Creek.
- **Install a wildlife overcrossing across Monterey Road immediately north of Bailey Avenue.**
    - A width of approximately 150’ is recommended for an overcrossing, based on a precedent of comparable scale that was constructed in Arizona (Coalition for Sonoran Desert Protection 2018).
    - A wildlife crossing at this location would complement proposed infrastructure in other locations. As the only proposed overcrossing, this would be expected to accommodate use by species or individuals that are averse to using undercrossings or riparian areas (Eco-Kare International 2017).

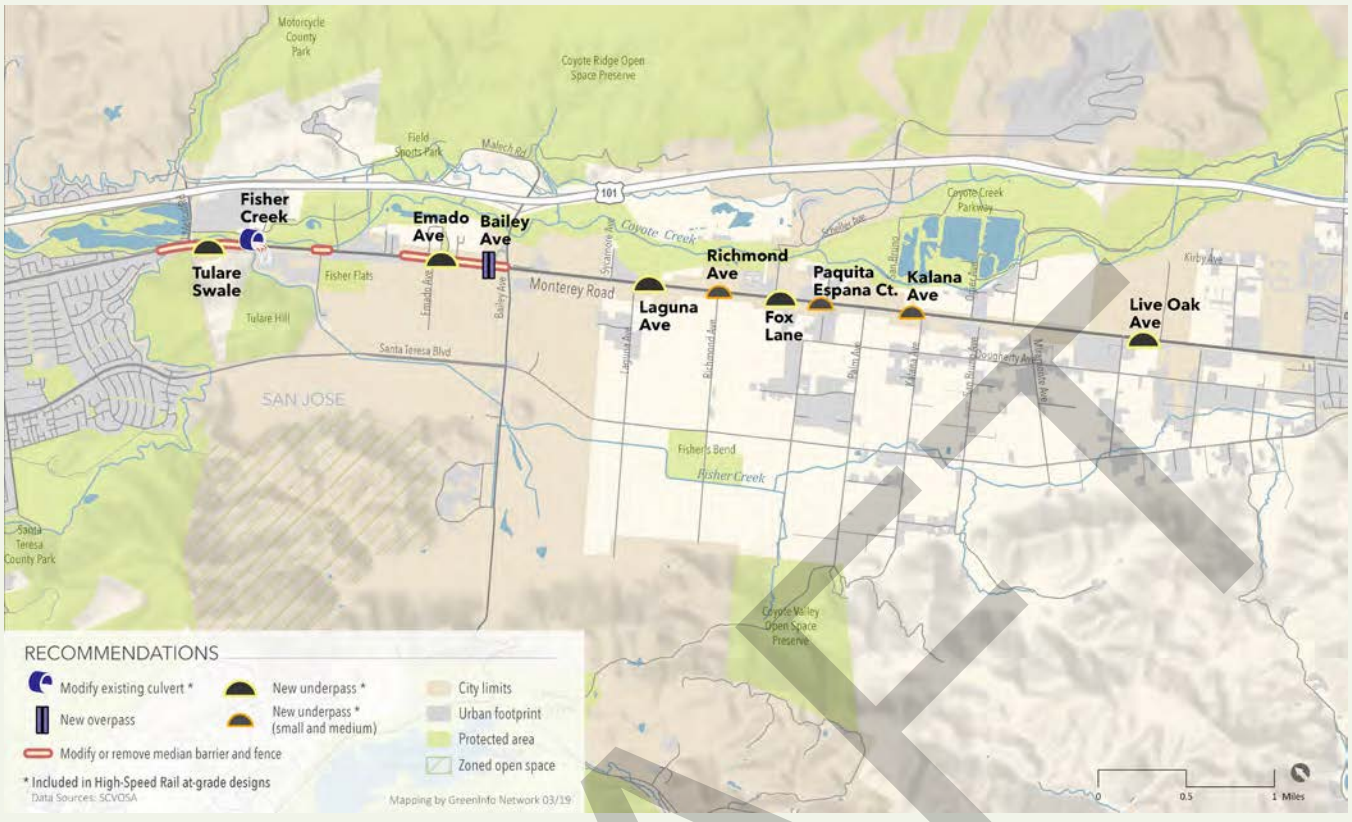


Figure 9 • Recommended interim and major wildlife crossing infrastructure improvements for Monterey Road.

Location	Structure type	Recommended dimensions*			Minimum dimensions*			Design notes*	Est. cost**
		H	W	L	H	W	L		
Tulare Hill	Underpass	15'	150'	TBD	15'	100'	TBD	Requires adequate light penetration. Multispecies riparian habitat crossing. Focal species mountain lion, but designed to accommodate deer, bobcat, coyote, fox, badger, and western pond turtle.	TBD
Fisher Creek	Underpass	15'	40'	TBD	15'	30'	TBD	Requires adequate light penetration. Multispecies riparian habitat crossing. Focal species mountain lion, but designed to accommodate deer, bobcat, coyote, fox, badger, and western pond turtle.	$1.3M-$1.5M
South of Emado Avenue	Underpass	15'	150'	TBD	15'	40'	TBD	Requires adequate light penetration. Multispecies crossing. Focal species mountain lion, but designed to accommodate deer, bobcat, coyote, fox, and badger.	$1.3M-$2M
North of Bailey Avenue	Overpass	N/A	150'	TBD	N/A	150'	TBD	Multispecies upland habitat crossing. Focal species mountain lion, but designed to accommodate deer, bobcat, coyote, fox, and badger.	$10M-$25M
South of Laguna Avenue	Underpass	15'	150'	TBD	15'	40'	TBD	Requires adequate light penetration. Multispecies crossing. Focal species mountain lion, but designed to accommodate deer, bobcat, coyote, fox, and badger.	$1.3M-$1.5M

Figure 10 • Major wildlife crossing infrastructure improvements recommended for Monterey Road in Coyote Valley.

* Assumes crossing designs integrate preferred crossing attributes (e.g. substrate, cover), including species-specific design considerations, to be developed at a later stage; undercrossing dimensions to be refined based on length of structure.

** Cost estimates were developed in 2016 by Sherwood Design Engineers, and are intended only for use in preliminary planning.

- **Install wildlife undercrossing under Monterey Road south of Laguna Avenue connecting existing open space habitat and Coyote Creek Parkway.**
    - This would further increase the permeability of the roadway for wildlife and provide opportunities for safe wildlife passage, especially due to the presence of large undercrossing features further south under Highway 101 (e.g. Golf course underpass, Coyote Creek Parkway).
- **Develop and implement a monitoring program** to evaluate effectiveness of wildlife crossing infrastructure (including any directional fencing) and inform adaptive management.

Implementation of certain recommendations will influence and potentially limit the appropriateness and effectiveness of others (e.g. potential incompatibility between median modification and installation of directional fencing). Project level planning should be undertaken with the appropriate agencies, experts, and stakeholders as any of the recommendations are implemented.

RELATED PLANNING EFFORTS

The California High-Speed Rail Authority is evaluating several alternatives for a **High-Speed Rail** alignment through Coyote Valley, although the timeline and process for the project are highly uncertain. All alternatives that have been identified to date would run within or along Monterey Road. Given the study results and recommendations provided in this report, additional impacts to the Coyote Valley landscape linkage could sever existing connections and negate the proposed recommendations or include major wildlife crossing infrastructure in the design. If project planning and construction proceed, exceptional care and attention must be taken to mitigate impacts and contribute to improved wildlife movement across the Monterey Road transportation corridor. Ongoing monitoring and adaptive management will be extremely important.

The Bay Area Ridge Trail Council began a feasibility study for a **Bay Area Ridge Trail connection through Coyote Valley** in November 2018. The primary objective is to identify a trail connection from the existing 1.8-mile section of the Bay Area Ridge Trail in Santa Teresa County Park to the Coyote Creek Trail, as well as a connection across US 101 to the Coyote Ridge Open Space on the east side. The secondary objective is to find and configure a trail alignment that will also benefit wildlife crossings of the intervening barriers – Santa Teresa Boulevard, Monterey Road and adjacent railroad line, and US 101. Like the High-Speed Rail alternatives, this effort should be informed by this report and make careful considerations so that public/human use will avoid impacts to wildlife behavior.

The Santa Clara Valley Open Space Authority and POST will initiate a **Coyote Valley Reptile and Amphibian Linkage Study** in Spring 2019. This study will characterize existing habitat suitability, identify impassable barriers or impediments to movement, and analyze the potential for broader habitat connectivity, listed species conservation, and recovery. The project is in support of the goals of the Santa Clara Valley Habitat Plan – a joint Habitat Conservation Plan and Natural Community Conservation Plan. The study findings may provide additional insight and detailed considerations for the implementation of recommendations described in this report. Additionally, it will serve as a tool for the Santa Clara Valley Habitat Agency, planners, land conservation organizations, transportation agencies, the City of San José, and resource agencies, to consider the focal species and connectivity for these species' populations during decisions on land use, transportation, and conservation in Coyote Valley.

Coyote. Photo by Bob Gunderson.

5 NEXT STEPS: POTENTIAL FUNDING AND PARTNERSHIPS

The citizens of San José and across California have demonstrated support for landscape conservation and protection of wildlife. Most recently, Proposition 68 on the June 2018 ballot was passed by voters and includes tens of millions of dollars identified to support wildlife linkages. In 2014, Santa Clara County passed Measure Q, which provided the Santa Clara Valley Open Space Authority funding to protect open space lands.

Conservation organizations, including the Santa Clara Valley Open Space Authority and POST, have recently committed to a campaign of conservation land acquisition in the Coyote Valley with up to $80 million in funding. This conservation campaign is well-aligned with the long-term recommendations of this report and prioritizes land necessary to invest in wildlife crossing infrastructure at key locations on Monterey Highway.

In addition to this campaign, the City of San José recently included up to $50 million for conservation acquisition of Coyote Valley lands in its Measure T, Public Safety and Infrastructure general obligation bond. The City of San José has convened public agency/NGO stakeholders and willing landowners to discuss the conservation of priority lands in Coyote Valley.

The recommendations provided in this report are intended to support further discussion, planning, and partnership for implementation. Interim enhancements are relatively inexpensive and easy to implement, and should be considered soon, starting with stakeholder meetings to discuss the findings of this report and identify near-term actions.

While the recommended major enhancements represent multi-year, multi-million dollar investments, they are proven mitigations that would effectively reduce wildlife-vehicle collisions and increase landscape connectivity. These long-term solutions should be pursued through targeted land protection (open space conservation), land use and transportation planning, and stakeholder collaboration.

Raccoon. Photo by Bob Gunderson.

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APPENDIX: ADDITIONAL SPATIAL ANALYSIS OF ROADKILL

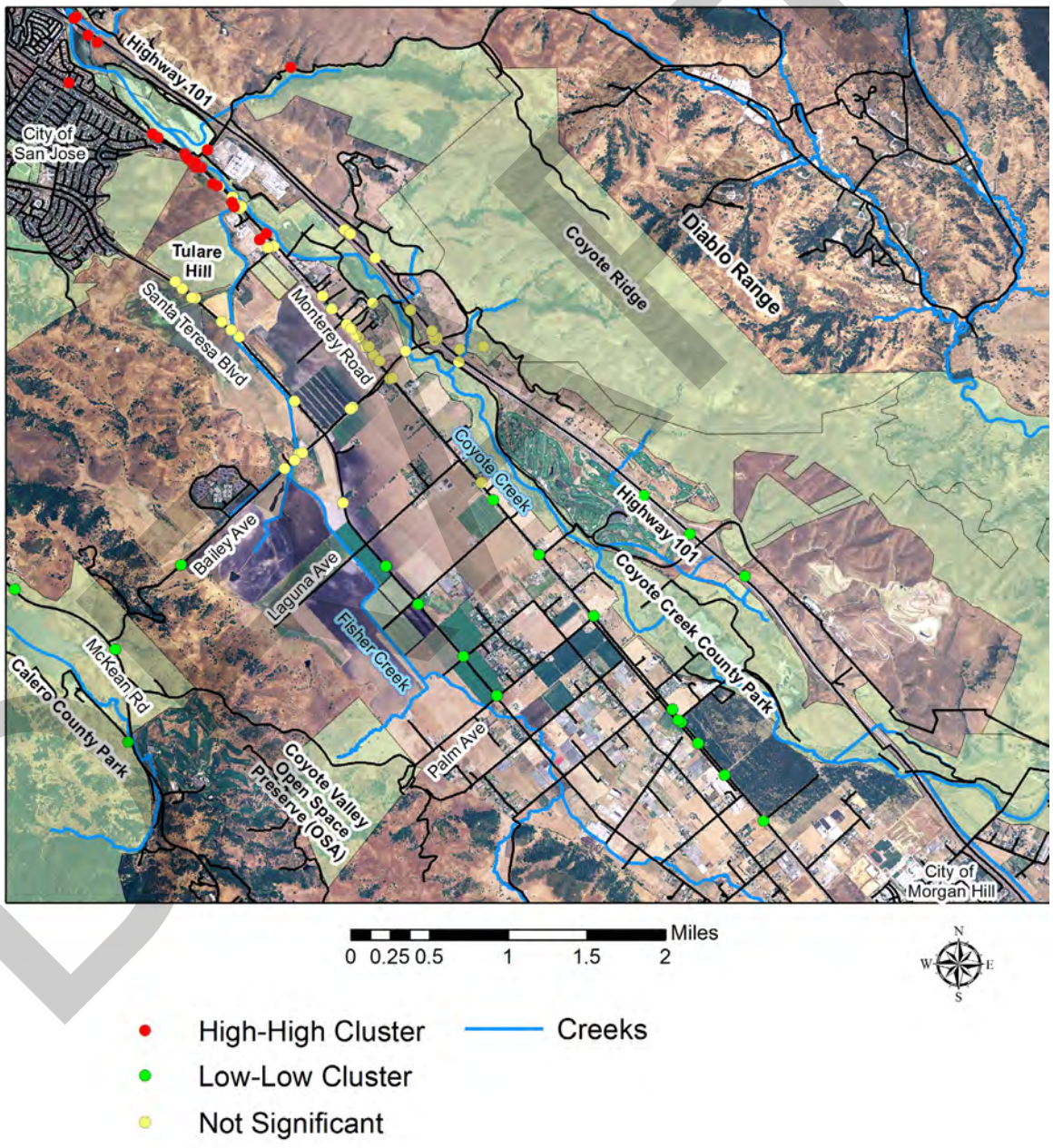


Figure A1 • Cluster and Outlier analysis with Coyote Valley animal-vehicle collision data from 2006-2010 and 2014-2018. Map and data by Pathways for Wildlife.

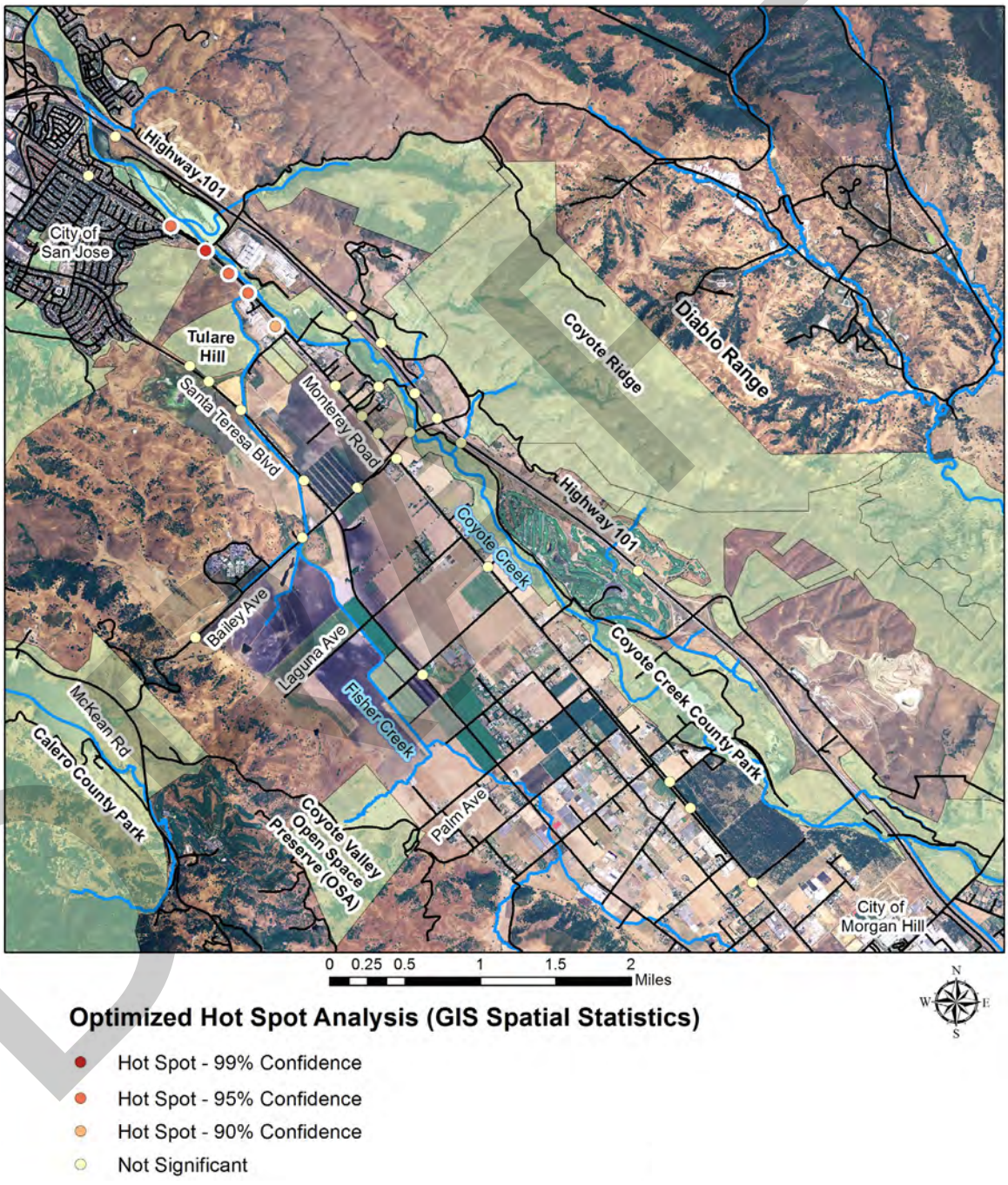
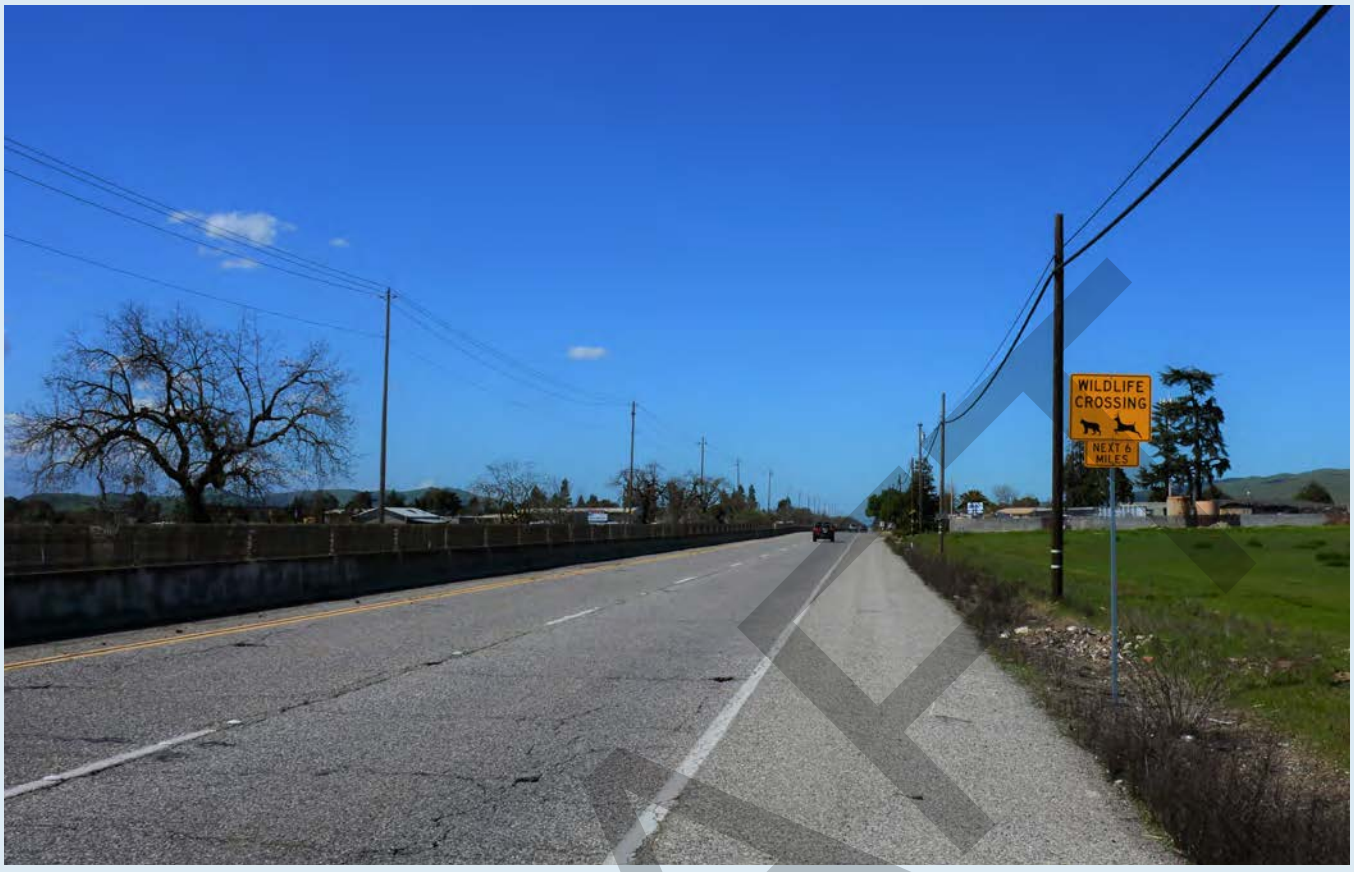


Figure A2 • Optimized hotspot analysis with Coyote Valley animal-vehicle collision data from 2015-2018. Map and data by Pathways for Wildlife.



Monterey Road, San Jose, CA.

The production of this report was funded by
Peninsula Open Space Trust and Santa Clara Valley Open Space Authority.

POST

OPEN SPACE AUTHORITY
SANTA CLARA VALLEY

Appendix C: Legal Description of "Temporary Access Easement", dated January 11, 2005

EXHIBIT "A"
TEMPORARY ACCESS EASEMENT

REAL PROPERTY in the City of San Jose, County of Santa Clara, State of California, being a portion of the parcel of land described in the deed from Santa Teresa Associates to Coyote Valley Research Park, LLC, recorded November 16, 1998, under Document Number 14503614 of Official Records, Santa Clara County Records, more particularly described as follows;

BEGINNING at the most easterly corner of Parcel One as described in said deed recorded under Document Number 14503614;

Thence along the northeasterly line of said Parcel One, North 39°01'23" West, 60.38 feet;

Thence South 38°00'00" West, 20.52 feet, to the TRUE POINT OF BEGINNING;

Thence North 39°01'23" West, 156.04 feet;

Thence South 50°58'37" West, 47.96 feet;

Thence North 39°01'23" West, 138.83 feet;

Thence North 50°58'37" East, 47.96 feet;

Thence North 39°01'23" West, 460.97 feet;

Thence South 50°58'37" West, 48.87 feet;

Thence North 39°01'23" West, 138.83 feet;

Thence North 50°58'37" East, 48.87 feet;

Thence North 39°01'23" West, 450.20 feet;

Thence North 39°31'14" West, 11.95 feet;

Thence South 50°28'46" West, 56.48 feet;

Thence North 39°31'14" West, 138.83 feet;

Thence North 50°28'46" East, 21.83 feet;

Thence North 41°27'12" West, 392.60 feet;

Thence North 42°09'08" West, 361.36 feet;

SAN JOSE
1570 Oakland Road
San Jose, California 95131
408.487.2200 Tel 408.487.2222 Fax
www.hmh-engineers.com

GILROY
7951 Wren Avenue, Suite D
Gilroy, California 95020
408.846.0707 Tel 408.846.0676 Fax

Thence along a tangent curve to the left, having a radius of 25.00 feet, through a central angle of 92°39'57" for an arc length of 40.43 feet;

Thence South 45°10'55" West, 9.85 feet;

Thence South 42°09'08" East, 385.66 feet;

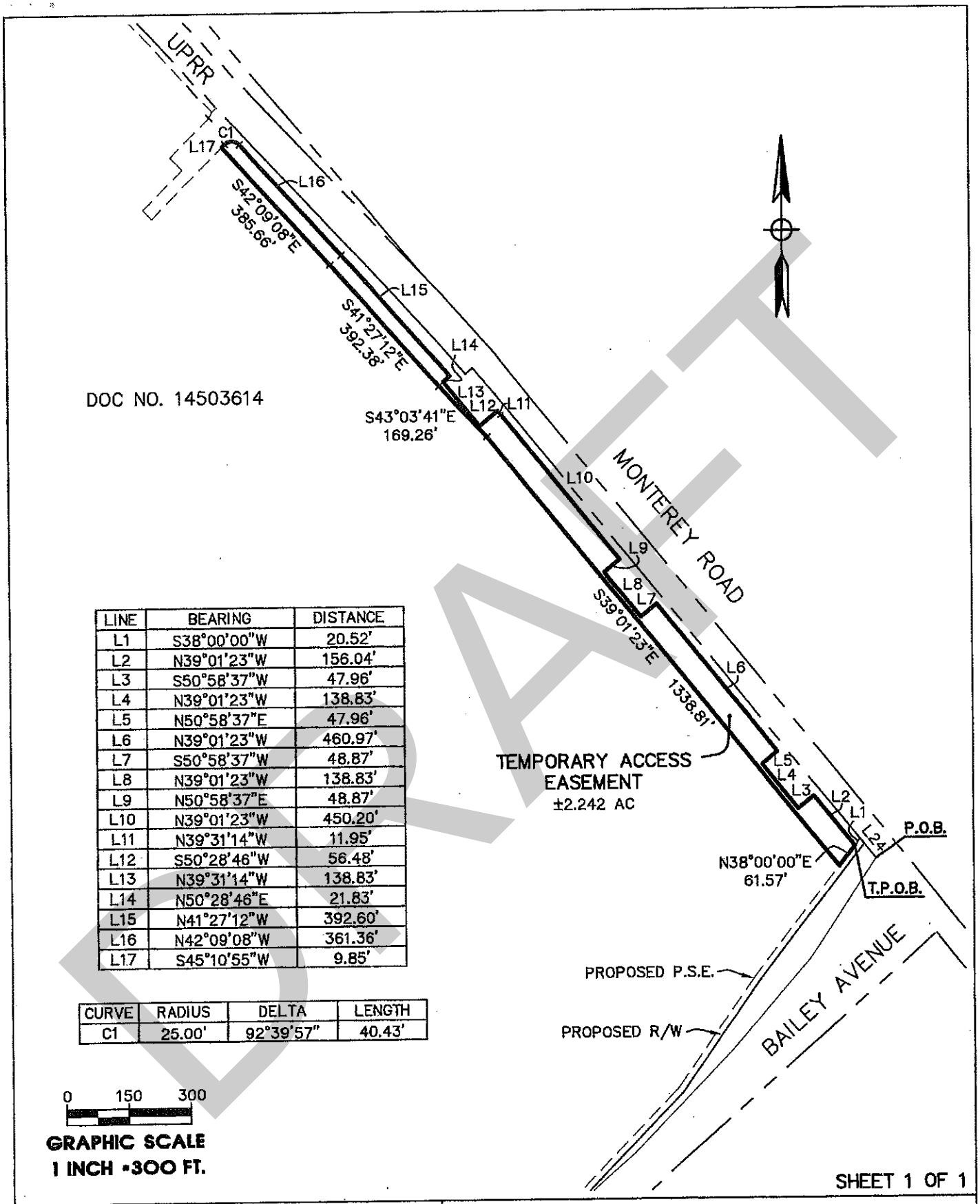
Thence South 41°27'12" East, 392.38 feet;

Thence South 43°03'41" East, 169.26 feet;

Thence South 39°01'23" East, 1338.81 feet;

Thence North 38°00'00" East, 61.57 feet, to the TRUE POINT OF BEGINNING.

Containing 2.242 acres, more or less.



LINE	BEARING	DISTANCE
L1	S38°00'00"W	20.52'
L2	N39°01'23"W	156.04'
L3	S50°58'37"W	47.96'
L4	N39°01'23"W	138.83'
L5	N50°58'37"E	47.96'
L6	N39°01'23"W	460.97'
L7	S50°58'37"W	48.87'
L8	N39°01'23"W	138.83'
L9	N50°58'37"E	48.87'
L10	N39°01'23"W	450.20'
L11	N39°31'14"W	11.95'
L12	S50°28'46"W	56.48'
L13	N39°31'14"W	138.83'
L14	N50°28'46"E	21.83'
L15	N41°27'12"W	392.60'
L16	N42°09'08"W	361.36'
L17	S45°10'55"W	9.85'

CURVE	RADIUS	DELTA	LENGTH
C1	25.00'	92°39'57"	40.43'

SHEET 1 OF 1

Date:	01-11-05
Scale:	1" = 300'
Designed:	–
Drawn:	TG
Checked:	SD
Proj. Engr.:	JET
Dwg Name:	2658PL79

HMH ENGINEERS

San Jose (408) 487-2200
Gilroy (408) 848-0707
www.hmh-engineers.com

Plat to accompany description:
TEMPORARY ACCESS EASEMENT

SAN JOSE CALIFORNIA

20050111.1541

Appendix D: Legal Description of "Public Service Easement", dated August 8, 2000

HMH, Incorporated
Civil Engineers • Planners • Surveyors

James T. Harper
William J. Wagner, R.C.E.

August 8, 2000
HMH 2658-03-45

EXHIBIT "A"
Public Service Easement
Lands of Coyote Valley Research Park, LLC

REAL PROPERTY in the City of San Jose, County of Santa Clara, State of California, described as follows:

Being a portion of Parcel A as shown on the Record of Survey filed in Book 276 of Maps at page 22, Santa Clara County Records, and more particularly described as follows:

Commencing at the northerly corner of Parcel One as described in the deed recorded July 17, 1986 in Book J769 of Official Records at page 579, Santa Clara County Records;

Thence along the northeasterly line of said Parcel A, also being the southwesterly line of the right of way of the Southern Pacific Transportation Company, North 39° 01' 23" West, 45.36 feet to the True Point of Beginning;

Thence continuing along said northeasterly line, North 39° 01' 23" West, 15.39 feet;

Thence South 38° 00' 00" West, 414.27 feet;

Thence South 35° 00' 00" West, 327.56 feet;

Thence South 44° 00' 00" West, 393.51 feet;

Thence South 41° 29' 30" East, 5.05 feet to the northwesterly line of Parcel One as described in the deed recorded July 17, 1986 in Book J769 of Official Records at page 615, Santa Clara County Records;

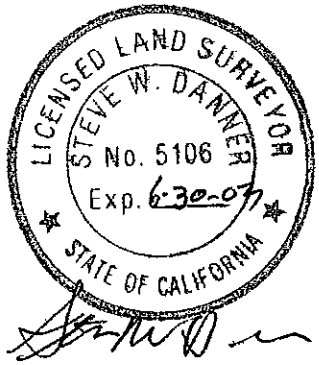
Thence along said northwesterly line, North 48° 30' 30" East, 126.83 feet;

Thence North 44° 00' 00" East, 268.65 feet;

Thence North 35° 00' 00" East, 328.35 feet;

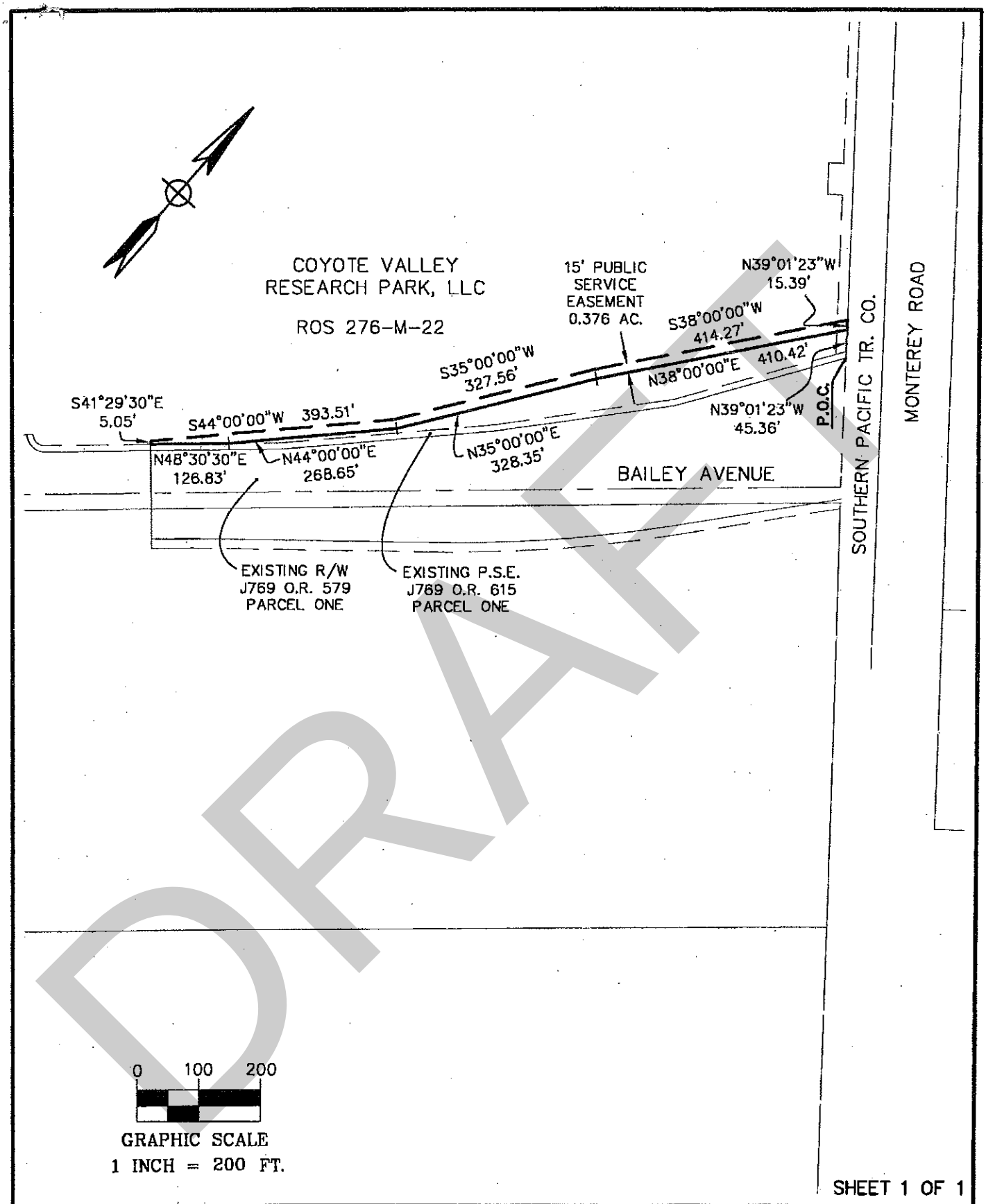
Thence North 38° 00' 00" East, 410.42 feet to the True Point of Beginning.

Containing 0.376 acres, more or less.



2658ld28.wpd

1570 Oakland Road, Suite 200 • P.O. Box 611510 • San Jose, CA 95161-1510 • Tel: (408) 487-2200 • Fax: (408) 487-2222



SHEET 1 OF 1

Date:	08/08/00
Scale:	1" = 200'
Designed:	–
Drawn:	TG
Checked:	SD
Proj. Engr.:	–
Dwg Name:	2658PL28

HMH, Incorporated
Civil Engineers · Planners · Surveyors
1570 OAKLAND ROAD, SUITE 200
P.O. BOX 611510 SAN JOSE, CALIFORNIA 95161-1510
(408) 487-2200 FAX: (408) 487-2222
Submitted by: _____

PLAT TO ACCOMPANY A
LEGAL DESCRIPTION

Appendix E: Municipal Water System Easement, dated July 17, 1986

RECORDING REQUESTED BY INSURED

Ticor Title Insurance Co. of CA
Order No TS-525081-SM

AND WHEN RECORDED MAIL TO

Name Sandra Fox, Esq. A-485
Street Address Chief Deputy City Attorney
151 West Mission Street
City & State San Jose, CA 95110

MAIL TAX STATEMENTS TO

Name Same as Above
Street Address
City & State

8863594

FILED FOR RECORD AT REQUEST OF
Santa Teresa
JUL 17 11 38 AM '86
OFFICIAL RECORDS
SANTA CLARA COUNTY
LAURIE KANE
RECORDER

REC FEE	D
RMF	
MICRO	
LIEN NOT	
SMPF	
PCOR	

J769 PAGE 634

SPACE ABOVE THIS LINE FOR RECORDER'S USE

Partnership EASEMENT Deed APN: 708-27-5

CAT. NO. NN00609
TO 1926 CA (11-83)

THIS FORM FURNISHED BY TICOR TITLE INSURERS

The undersigned grantor(s) declare(s):
Documentary transfer tax is N/A
( ) computed on full value of property conveyed, or
( ) computed on full value less value of liens and encumbrances remaining at time of sale.
( ) Unincorporated area: ( ) City of ____________, and

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

SANTA TERESA ASSOCIATES

a general partnership organized under the laws of the State of California hereby GRANTS to the CITY OF SAN JOSE, a municipal corporation of the City of San Jose, public service easements in, across, and above

the ~~following described~~ real property in the City of San Jose County of Santa Clara, State of California. described in EXHIBIT A attached hereto and made a part hereof, for the purposes, including, but not limited to, pedestrian and vehicular ingress and egress for the installation, construction, operation, use, maintenance and repair of a water line and three (3) wells and pumps, and any other facilities incident thereto.

OFFICIAL SEAL
WILLIAM M. BROWN
NOTARY PUBLIC - CALIFORNIA
SANTA CLARA COUNTY
MY COMMISSION EXPIRES FEB. 16, 1990

Dated: July 7, 1986

STATE OF CALIFORNIA
COUNTY OF Santa Clara } SS.

On July 7, 1986 before me, the undersigned, a Notary Public in and for said State, personally appeared Steven B. Speno and William J. Wilson

personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) who executed the within instrument as Partner(s) of the partners of the partnership that executed the within instrument, and acknowledged to me that such partnership executed the same.
WITNESS my hand and official seal.

Signature William M. Brown
William M. Brown

SANTA TERESA ASSOCIATES, a California general partnership

By New England Mutual Life Insurance Company, a Massachusetts corporation, Partner

By Copley Real Estate Advisors, Inc., a Massachusetts corporation, Asset Manager and Advisor hereunto duly authorized

By ____________

By Montague Partners, a California partnership, Partner

By The Koll Company, a California corporation, Partner

By Steven B. Speno

By ____________

(This area for official notarial seal)

Title Order No. ____________ Escrow or Loan No. ____________

MAIL TAX STATEMENTS AS DIRECTED ABOVE

DEED ACCEPTANCE SLIP

J769 PAGE 635

This is to certify that the interest in real property conveyed by the deed or grant dated July 7, 1986 from Santa Teresa Associates to the City of San Jose, a municipal corporation of the State of California, is hereby accepted by the undersigned officer of said City on behalf of the Council of the City of San Jose, pursuant to authority conferred by Resolution No. 17670, of the Council of the City of San Jose, adopted on the 2nd day of November, 1959, and recorded in Book 4597, Page 461. The Grantee consents to recordation thereof by its duly authorized officer.

GERALD E. NEWFARMER, CITY MANAGER

By: Rita Hardin

RITA HARDIN, DIRECTOR
NEIGHBORHOOD PRESERVATION, CITY OF SAN JOSE

570-102/Rev. 8/81

This document is for the benefit of the City of San Jose. Request for recordation without fee is made in accordance with Section 6103 of the Government Code of the State of California.

Attest: Rita Hardin

Rita Hardin, Director
Neighborhood Preservation
City of San Jose, County
of Santa Clara, State of
California.

570-104/Rev. 8/81

May 15, 1986
143-85-09

LEGAL DESCRIPTION

All that certain real property situate in the City of San Jose, County of Santa Clara, State of California, being a portion of Parcel One as described in the deed recorded October 11, 1983 in Book H972 of Official Records at page 543, Santa Clara County Records being more particularly described as follows:

Beginning at the most easterly corner of said Parcel One, said corner being on the centerline of Bailey Avenue;

thence along the northeasterly line of said Parcel One N 39° 01' 23" W, 216.43 feet to the TRUE POINT OF BEGINNING;

thence continuing along said northeasterly line N 39° 01' 23" W, 1390.06 feet;

thence N 39° 30' 17" W, 130.88 feet to the northeasterly corner of said Parcel One;

thence along the northwesterly line of said Parcel One S 49° 00' 33" W, 16.01 feet;

thence leaving said line S 39° 30' 17" E, 71.82 feet;

thence S 50° 29' 43" W, 24.00 feet;

thence S 39° 30' 17" E, 50.00 feet;

thence N 50° 29' 43" E, 24.00 feet;

thence S 39° 30' 17" E, 8.58 feet;

thence S 39° 01' 23" E, 491.42 feet;

thence S 50° 58' 37" W, 24.00 feet;

thence S 39° 01' 23" E, 50.00 feet;

thence N 50° 58' 37" E, 24.00 feet;

thence S 39° 01' 23" E, 550.00 feet;

thence S 50° 58' 37" W, 24.00 feet;

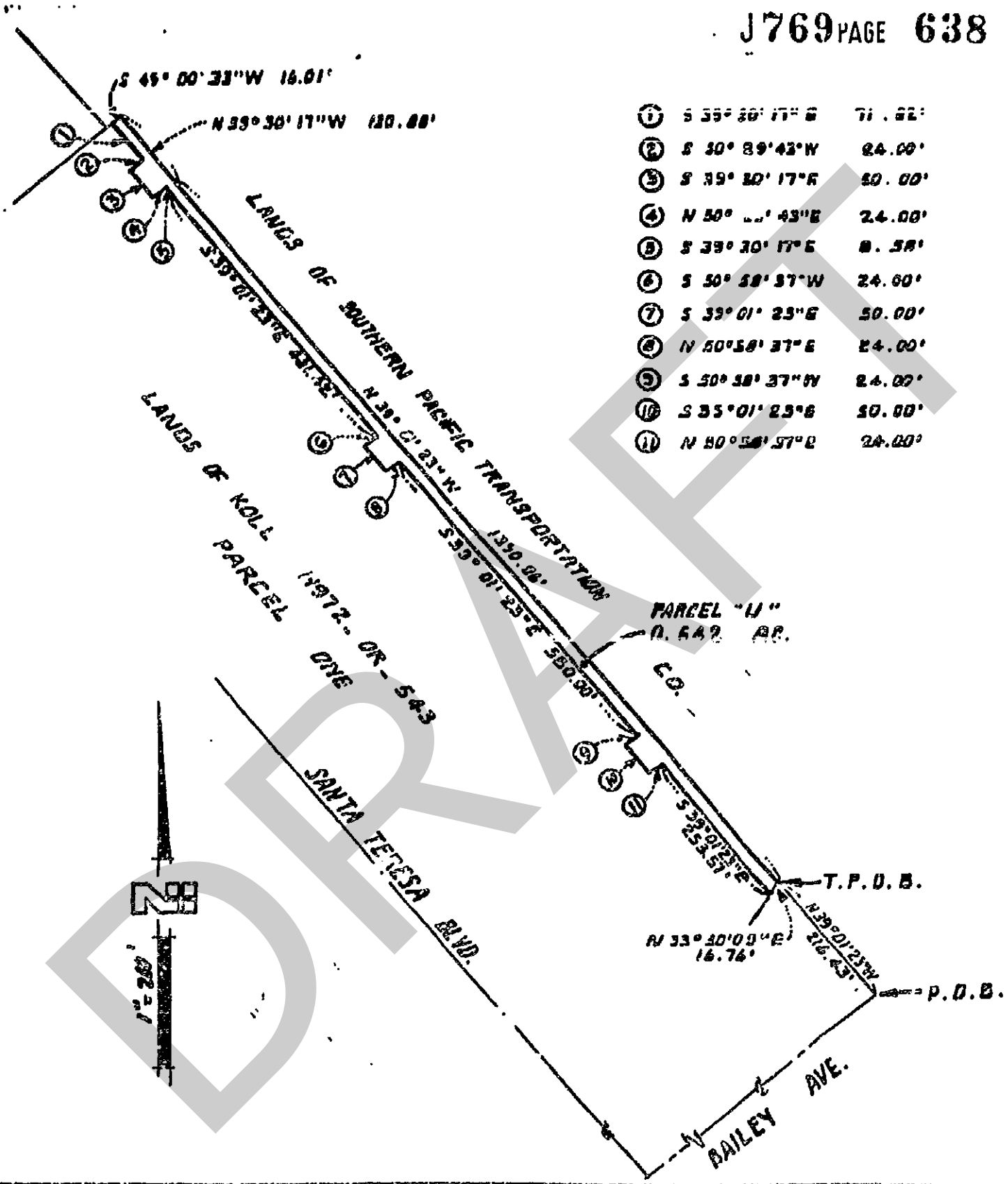
thence S 39° 01' 23" E, 60.00 feet;

thence N 50° 58' 37" E, 24.00 feet;

thence S 39° 01' 23" E, 253.57 feet;

thence N 33° 39' 05" E, 16.76 feet; to the TRUE POINT OF BEGINNING.

Containing .642 acres more less.



①	S 39° 30' 17" E	71.82'
②	S 50° 29' 43" W	24.00'
③	S 39° 30' 17" E	50.00'
④	N 50° [illegible] 43" E	24.00'
⑤	S 39° 30' 17" E	8.58'
⑥	S 50° 58' 37" W	24.00'
⑦	S 39° 01' 23" E	50.00'
⑧	N 50° 58' 37" E	24.00'
⑨	S 50° 58' 37" W	24.00'
⑩	S 39° 01' 23" E	50.00'
⑪	N 50° 58' 37" E	24.00'

DRAWN: F
DESIGNED
CHECKED

GEORGE S. HOLTE AND ASSOCIATES
SAN JOSE • WALNUT CREEK • SACRAMENTO • SAN DIEGO

PLAT TO ACCOMPANY DESCRIPTION FOR
PARCEL "U"
WATER WELL & LINE ESM'T

APPROVED DATE 5/19/86 SCALE 1" = 200' JOB NO. 142-85-09

EXHIBIT A Page 3 of 3

J769 PAGE 639

ACKNOWLEDGMENT

STATE OF MASSACHUSETTS)
) ss.
COUNTY OF Suffolk)

On the 2nd day of July, 1986 before me, the undersigned, a Notary Public in and for said State, personally appeared William J. Solomon, personally known to me or proved to me on the basis of satisfactory evidence to be the person who executed the within instrument as the Principal of COPLEY REAL ESTATE ADVISORS, INC., the corporation which executed the within instrument as agent on behalf of NEW ENGLAND MUTUAL LIFE INSURANCE COMPANY, a corporation known to me to be one of the partners of SANTA TERESA ASSOCIATES, a partnership, and acknowledged to me that such corporation executed the same as agent of such partner and that such partnership executed the same.

WITNESS my hand and official seal.

Jodie Ann Cash
Notary Public

JODIE ANN CASH
Notary Public
My Commission Expires April 16, 1993

(SEAL)

ACKNOWLEDGMENT

STATE OF CALIFORNIA)
) ss.
COUNTY OF SANTA CLARA)

On the 7th day of July, 1986, before me, the undersigned, a Notary Public in and for said State, personally appeared STEVEN G. SPANO, VICE PRESIDENT, and WILLIAM T. BEARD known to me to be the PRESIDENT, of THE KOLL COMPANY, the corporation that executed the within instrument and known to me to be the persons who executed the within instrument on behalf of said corporation, said corporation being known to me to be one of the partners of MONTAGUE PARTNERS, a general partnership, said partnership being known to me to be one of the partners of SANTA TERESA ASSOCIATES, the partnership that executed the within instrument, and acknowledged to me that such corporation executed the same as a partner of the partnership first-above named, and that said partnership executed the same as a partner of SANTA TERESA ASSOCIATES and that said last-named partnership executed the same.

WITNESS my hand and official seal.

OFFICIAL SEAL
WILLA M. BROWN
NOTARY PUBLIC CALIFORNIA
SANTA CLARA COUNTY
MY COMMISSION EXPIRES FEB 16, 1988

Willa M. Brown
Notary Public
WILLA M. BROWN

(SEAL)

Appendix F: Metcalf Energy Center Waterline Easement, dated June 11, 2002

RECORDING REQUESTED BY

DOCUMENT: 16308398

Titles: 1 / Pages: 5

Fees.... 19.00
Taxes...
Copies..
AMT PAID 19.00

WHEN RECORDED MAIL TO
Lucy A. Lofrumento, Esq.
Silicon Valley Law Group
152 N. Third Street, Suite 900
San Jose, CA 95112

BRENDA DAVIS
SANTA CLARA COUNTY RECORDER
Recorded at the request of
Beneficiary

RDE # 002
6/11/2002
10:57 AM

SPACE ABOVE THIS LINE FOR RECORDER'S USE

APN 708-25-005

EASEMENT DEED

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

Carmen Patane, Trustee of the Carmen Patane Revocable Trust Dated April 8, 1997 (*"Grantor"*), owner of that certain real property located in the City of San Jose, County of Santa Clara, State of California, described in Exhibit "B" attached hereto and made a part hereof (*"Lands of Patane"*),

hereby GRANT(S) to

Metcalf Energy Center, LLC, a Delaware limited liability company (*"Grantee"*),

A PERPETUAL RIGHT AND NON-EXCLUSIVE EASEMENT (this *"Easement"*) in, under, and along a portion of the Lands of Patane, as shown in Exhibit "A" attached hereto and made a part hereof (the *"Easement Area"*), for the construction, installation, operation, use, maintenance, repair, and replacement of water pipelines and related equipment and facilities, all in accordance with applicable ordinances and regulations of the City of San Jose and other governmental agencies;

TOGETHER WITH THE RIGHT OF INGRESS AND EGRESS by pedestrians and vehicles as reasonably necessary from time to time for the foregoing purposes.

THE EASEMENT AREA shall be kept open and free from buildings and structures of any kind except public service structures, irrigation systems and appurtenances thereto, lawful fences, roads necessary to access the Easement and all lawful unsupported roof overhangs.

THIS EASEMENT shall inure to the benefit of, and be binding upon, the heirs, successors, assigns, and personal representatives of the respective parties hereto. This Easement shall be transferable to the City of San Jose, a municipal corporation, or any other governmental agency or public utility for the purpose of providing potable water service.

DATED: April 30, 2002

CARMEN PATANE, Trustee of the Carmen Patane Revocable Trust Dated April 8, 1997

STATE OF CALIFORNIA }
}ss.
COUNTY OF SANTA CLARA }

On April 30, 2002, before me, R. L. Hofvendahl, a Notary Public in and for said County and State, personally appeared Carmen Patane, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s) or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature R. L. Hofvendahl

MGC-1
R. L. HOFVENDAHL
COMM. # 1323817
NOTARY PUBLIC-CALIFORNIA
SANTA CLARA COUNTY
COMM. EXP. OCT. 17, 2005
MGC-1

City of San Jose
County of Santa Clara
State of California

"EXHIBIT A"

Legal Description

A 15 foot wide Waterline easement situate in the City of San Jose, County of Santa Clara, State of California, described as follows:

WATERLINE EASEMENT

Commencing at the most southerly corner of Lot 1, Oliver Blanchard Subdivision, recorded in Book "P" Maps, Page 30, Santa Clara County Records; thence along the southeasterly line of said Lot 1, North 48°54'48"East, 459.92 feet to a point on the southwesterly line of a 10 foot strip of land fee to the Southern Pacific Rail Road, per Book 278 O.R., Page 583, Santa Clara County Records, said point being the True Point of Beginning; thence along said southeasterly line of Lot 1, South 48°54'48" West, 15.00 feet; thence leaving said southeasterly line along a line parallel to and 15.00 feet southwesterly, measured at right angles, to the said southwesterly Southern Pacific Rail Road line, North 42°20'12" West, 1368.27 feet; thence South 51°27'48" West, 130.38 feet; thence North 42°20'12" West, 15.03 feet to the southeasterly line of a 30 foot wide roadway easement as shown on said Oliver Blanchard Subdivision; thence along last said southeasterly line, North 51°27'48" East, 145.41 feet to the said southwesterly line of a 10 foot strip of land fee to the Southern Pacific Rail Road; thence along said southwesterly line South 42°20'12" East, 1382.64 feet to the True Point of Beginning.

Containing 22,700 square feet (0.52 acres) more or less.

The Basis of Bearings for the above description is the California Coordinate System (1983), Zone 3. All distances given are ground distances.

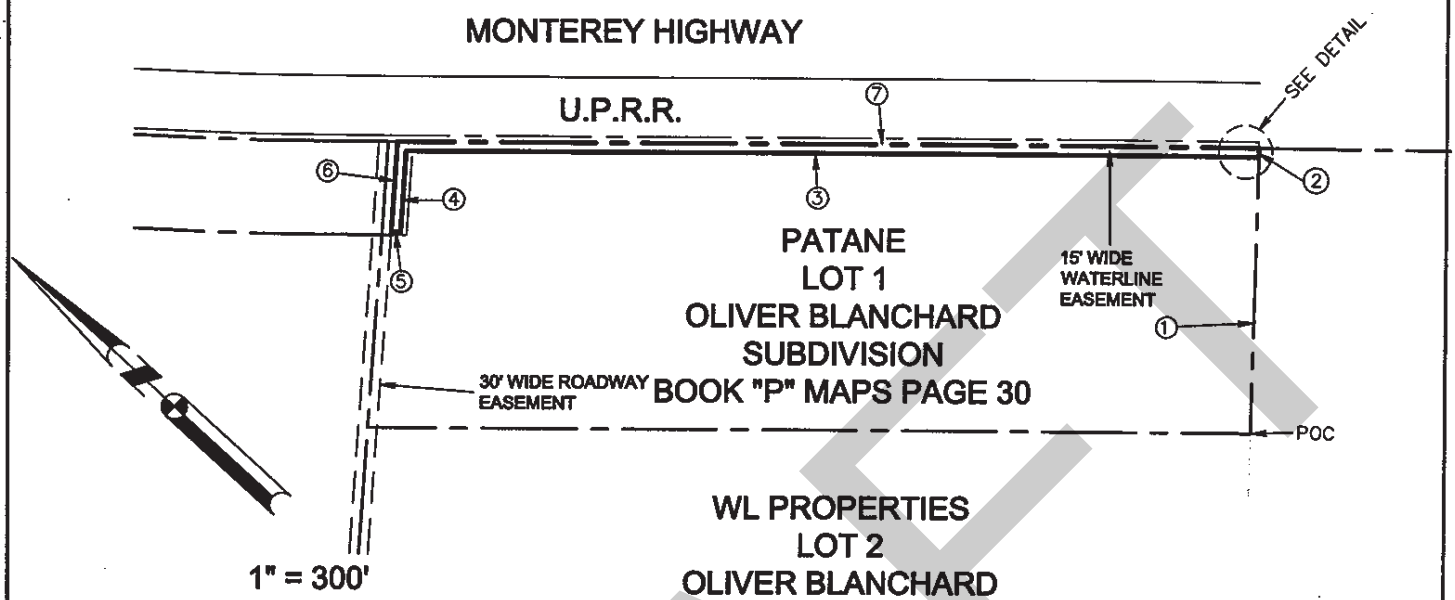
The above real property description has been prepared by me, or under my direction, in conformance with the California Land Surveyors Act.

Scott R. Tikalsky LS7608
Expires 12/31/04

LICENSED LAND SURVEYOR
SCOTT R. TIKALSKY
Exp. 12-31-04
No. LS #7608
STATE OF CALIFORNIA

04/15/2002
Date

\\Cabernet\Groups\TBG\SURVEY\CALPINE\Metcalf\PGE Easement\WLE_Patane_easement.doc Last printed 04/15/02 10:07 AM

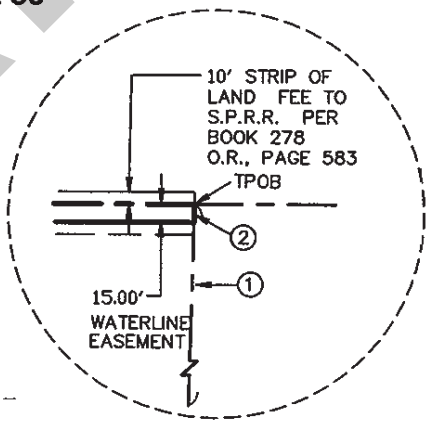


LEGEND

PROPERTY LINE
PERMENT EASEMENT
POINT OF COMMENCING POC
TRUE POINT OF BEGINNING TPOB

LINE TABLE

NO	BEARING	LENGTH
①	N48°54'48"E	459.92'
②	S48°54'48"W	15.00'
③	N42°20'12"W	1368.27'
④	S51°27'48"W	130.38'
⑤	N42°20'12"W	15.03'
⑥	N51°27'48"E	145.41'
⑦	S42°20'12"E	1382.64'



DETAIL

PLAT TO ACCOMPANY LEGAL DESCRIPTION

April 8, 2002 Project No. 153236.02.RE

CH2MHILL

FILE: easement plats WLE_1.dwg

EXHIBIT "B"

LEGAL DESCRIPTION OF LANDS OF PATANE

REAL PROPERTY in the City of San Jose, County of Santa Clara, State of California, described as follows:

PARCEL ONE:

Lot 1, as shown on that certain Map of the Oliver Blanchard Subdivision in the Rancho del Refugio de la Laguna Seca, made by Chas. Hermann, Surveyor and C.E., in July 1917, which said Map was recorded in the office of the Recorder of the County of Santa Clara, State of California in Book P of Maps page(s) 30, Records of said County containing 14.85 acres.

ALSO EXCEPTING THEREFROM that portion thereof conveyed by William L. Shepherd, et al, to Southern Pacific Railroad Company, a corporation, by Deed dated December 6, 1926, and recorded December 7, 1926 in Book 278 of Official Records, page 583, Records of Santa Clara County, as follows:

A strip of land 10 feet wide, being portion of Lot 1, as said Lot is designated upon Map entitled, "Map of the Oliver Blanchard Subdivision of the Rancho Del Refugio de la Laguna Seca, being part of the lands of Fiacro Fisher Est. Co.," filed for record December 17, 1927 in Book P of Maps, page 30, Records of Santa Clara County, State of California, more particularly described as follows:

Beginning at the most Easterly corner of said Lot 1, said point being in the Southwesterly right-of-way line of the S.P.R.R. Co., distant 40 feet at right angles Southwesterly from the center line of the original constructed main tract of said S.P.R.R. Co.,; thence North 43° 13' West along the said Southwesterly right-of-way line a distance of 1397.22 feet to the Northeast corner of said Lot 1; thence South 50° 58' West along the Northerly line of said Lot 1 a distance of 10.01 feet to a point; thence South 43° 13' East parallel to and 50 feet at right angles Southwesterly from the said center line a distance of 1397.68 feet to a point in the Southerly line of said Lot 1; thence North 48° 30' East along said Southerly line of Lot 1, a distance of 10.01 feet to the point of beginning.

PARCEL TWO:

That certain right of ingress and egress reserved in the Deed from William L. Shepherd, Alvin L. Shepherd and Anna Marguerite Shepherd to Southern Pacific Railroad Company, a corporation, dated December 6, 1926, and recorded December 7, 1926 in Book 278 of Official Records, page 583, as follows:

"RESERVING FROM the above described parcel of land the right of ingress and egress to and from the remaining portion of property of the parties of the first part over the Northerly 15 feet of the property hereinabove described."

APN: 708-25-005
ARB: 703-13-9.01

Appendix G: CVRP Waterline Easement, dated December 5, 2002

RECORDED WITHOUT FEE UNDER SECTION 6103 GOVERNMENT CODE OF THE STATE OF CALIFORNIA

RECORDING REQUESTED BY AND WHEN RECORDED MAIL TO:

City of San Jose - Real Estate
84 West Santa Clara Street, Suite 460
San Jose, CA 95113-1815

File/Doc. No.:
APN:

DOCUMENT: 16661030

0016661030

Titles: 1 / Pages: 9
Fees . .* No Fees
Taxes. .
Copies _____
AMT PAID

BRENDA DAVIS
SANTA CLARA COUNTY RECORDER
Recorded at the request of
First American Title Company

RDE # 010
12/05/2002
8:00 AM

520798

Space above this line for Recorder's use

GRANT OF EASEMENT

COYOTE VALLEY RESEARCH PARK, LLC, a Delaware limited liability company, GRANTOR, does hereby GRANT to the CITY OF SAN JOSE, a municipal corporation of the State of California, GRANTEE, subject to the conditions and reservations set forth below, a perpetual non-exclusive right and easement (the "Easement") to construct, install, maintain, repair, renew, replace, operate and use a potable water pipeline and related improvements and facilities ("Water Pipeline" or the "Improvements"), in, upon, and/or through the real property situate in the City of San Jose, County of Santa Clara, State of California, described as follows:

See Exhibit "A" attached hereto and made a part hereof (the "Easement Area").

The Easement Area and Improvements are for the sole purposes of (i) providing potable water service to the real property situate in the City of San Jose, County of Santa Clara, State of California, described in Exhibit "B" attached hereto and made a part hereof, and to other nearby properties as reasonably determined by the City of San Jose, and (ii) access as may be reasonably necessary to install and maintain the Improvements in good condition and repair.

The foregoing Grant is subject to the following terms and conditions:

1. GRANTOR shall have the right to use the Water Pipeline in common with GRANTEE, by installing lateral lines that tie into the Water Pipeline, in order to service buildings and other improvements on GRANTOR's property, subject to GRANTOR's compliance with all applicable regulations and requirements of the City of San Jose.

2. Any contractors, agents or employees authorized by GRANTEE (collectively, the "Improvement Contractors") to perform excavations or other earth removal work within the Easement Area, shall be required by GRANTEE to replace any earth

removed by it and restore the surface of the ground around any excavation of the Easement Area to as near the same condition as it was in prior to such excavation as is practicable (except for area occupied by the Improvements), including the replacement of plantings, pavement, utilities, etc., to substantially original condition.

3. GRANTEE shall require all Improvement Contractors to conduct their construction in a good workmanlike manner, and shall use its reasonable efforts to ensure that all such work is completed in a timely manner.

4. GRANTEE shall hold harmless, indemnify, protect and defend GRANTOR against any claim, demand, action, cause of action, damage, loss, liability, cost and expense that arises out of or results from the use or misuse of the Easement Area by GRANTEE or its authorized employees, agents, operators, licensees or contractors, except that GRANTOR shall not be indemnified for any such claim, demand, action, cause of action, damage, loss, liability, cost or expense that arises out of or results from the negligent or willful act or omission of GRANTOR or its authorized employees, agents, operators, licensees or contractors or the improvements or facilities that GRANTOR installs within the Easement Area as permitted in the reservation below.

5. During any period of construction by the Improvement Contractors, GRANTEE shall require the Improvement Contractors to carry reasonable liability insurance.

6. GRANTOR expressly reserves the right to construct, install, maintain, repair, review, replace, operate and use any one or more of all of the following improvements within the Easement Area; provided, however, that GRANTOR shall (i) obtain all required permits or approvals; (ii) exercise the reserved rights in such a manner so as not, at any time, to interfere with GRANTEE's ability to use the Improvements within the Easement Area or its rights under this Easement; and (iii) repair or restore any of GRANTEE's Improvements or other facilities that may be damaged in connection with GRANTOR's exercise of such reserved rights:

   a. Private roads or parking lots, or both, over, along or across the surface of the Easement Area;

   b. Any lines, conduits, pipelines, sewers and other like facilities deemed convenient by GRANTOR to provide or transport either public utility or private services, including but not limited to telephone, electricity, fuel, water (distribution and collection) and effluent within the Easement Area and over, on, or beneath its surface;

   c. Lawful fences and all lawful unsupported roof overhangs; and

   d. Landscaping, irrigation systems and appurtenances thereto.

In addition to the other requirements set forth above, GRANTOR shall provide reasonable notice to the Director of Public Works of the City of San Jose each time that GRANTOR intends to excavate within the Easement Area, and shall provide GRANTEE a reasonable opportunity to comment upon the plans, means and methods for the proposed work.

7. Except for improvements and facilities of the type identified in the above reservation, within the Easement Area, GRANTOR shall not permit to be constructed any building or any other permanent structure; or make or permit to be made any permanent excavation.

8. GRANTOR shall have the right to relocate the Water Pipeline, provided, however, that such relocation right shall be subject to the following conditions:

(a) GRANTOR shall pay all costs and expenses of any such relocation, including without limitation the costs of any related design or engineering services, improvement work, and fees for any necessary permits and approvals;

(b) GRANTEE's use of the Water Pipeline shall not be interrupted as a result of such relocation; and

(c) The location and design of the replacement water pipeline and related improvements and facilities (the "Replacement Pipeline") shall be approved by GRANTEE.

If the Replacement Pipeline is located within a public road ("Public Road"), then upon completion of the Replacement Pipeline and Public Road, and conveyance of the Public Road to GRANTEE, this Easement shall be extinguished.

If the Replacement Pipeline is not located within a Public Road, then GRANTOR shall, as a further condition to such relocation, provide GRANTEE with a right-of-way easement (or fee interest), to be conveyed to GRANTEE by an instrument in form and content reasonably satisfactory to GRANTEE, providing GRANTEE with legal easement title (or the equivalent) for the use of the Water Pipeline in the new location. Upon such conveyance and completion of the Replacement Pipeline, this Easement shall be extinguished.

GRANTOR shall deliver to GRANTEE a copy of the instrument proposed by GRANTOR to be recorded in the appropriate real property records of Santa Clara County, California, extinguishing this Easement in accordance with the foregoing provisions, and promptly after such delivery, GRANTOR and GRANTEE shall, in good faith, use reasonable efforts to resolve any reasonable objections to such recordable instrument.

9. GRANTEE agrees, in good faith, to process an abandonment of this Easement at such time that this Easement is no longer required to serve the purpose for which it was granted.

10. This Easement shall inure to the benefit of, and be binding upon, the heirs, successors, assigns, and personal representatives of the respective parties hereto.

Dated: 11/22, 2002

COYOTE VALLEY RESEARCH PARK, LLC,
a Delaware limited liability company

By: Coyote Valley Properties, LLC,
a Delaware limited liability company
Its: Manager

By: Coyote Valley Managers, LLC,
a Delaware limited liability company
Its: Manager

By: Divco Coyote Managers, LLC, a Delaware limited liability company
Its: Manager

By: _____
Name: David Taran
Its: Manager

[Add Notary Acknowledgement]

STATE OF CALIFORNIA)

COUNTY OF Santa Clara)

On November 22, 2002, before me, Maria L. Gabriel, a notary public, personally appeared David Taran, personally known to me ~~(or proved to me on the basis of satisfactory evidence)~~ to be the person~~(s)~~ whose name~~(s)~~ is~~/are~~ subscribed to the within instrument and acknowledged to me that he~~/she/they~~ executed the same in his~~/her/their~~ authorized capacity~~(ies)~~, and that by his~~/her/their~~ signature~~(s)~~ on the instrument the person~~(s)~~, or the entity upon behalf of which the person~~(s)~~ acted, executed the instrument.

WITNESS my hand and official seal.

Maria L Gabriel

Notary Public

MARIA L. GABRIEL
Commission # 1233761
Notary Public - California
Santa Clara County
My Comm. Expires Sep 3, 2003

CITY OF SAN JOSE
EASEMENT ACCEPTANCE

This is to certify that the interest in real property conveyed by the Grant of Easement, dated Nov. 27, 2002, from COYOTE VALLEY RESEARCH PARK, LLC, a Delaware limited liability company, to the CITY OF SAN JOSE, a municipal corporation of the State of California, is hereby accepted by the undersigned officer of said CITY on behalf of the Council of the CITY, pursuant to authority conferred by the City of San Jose Municipal Code. The Grantee consents to recordation thereof by its duly authorized officer.

DATE: November 27, 2002

CITY OF SAN JOSE, a municipal corporation

By: Peter Jensen

Its: PETER JENSEN
ASSISTANT TO THE CITY MANAGER

State of California,
County of Santa Clara

On 11/27/02, before me, Barbara Urias [name of notary], personally appeared Peter Jensen [name of signatory] personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal

Barbara Urias
Signature of Notary Public

BARBARA URIAS
Commission # 1232800
Notary Public - California
Santa Clara County
My Comm. Expires Sep 17, 2003

City of San Jose
County of Santa Clara
State of California

"EXHIBIT A"

Legal Description

A 15 foot wide Waterline easement situate in the City of San Jose, County of Santa Clara, State of California, described as follows:

WATERLINE EASEMENT

Commencing at the most southerly corner of Lot 1, Oliver Blanchard Subdivision, recorded in Book "P" Maps, Page 30, Santa Clara County Records; thence along the southeasterly line of said Lot 1, North 48°54'38"East, 459.92 feet to a point on the southwesterly line of a 20 foot strip of land fee to the Southern Pacific Rail Road, per Book 299 O.R., Page 334, Santa Clara County Records, said point being the True Point of Beginning; thence, along said southwesterly line, South 42°23'45" East, 1768.55 feet; thence, leaving said southwesterly line, South 49°13'19" West, 15.01 feet; thence, along a line parallel to and 15.00 feet southwesterly of the said southwesterly line of the Southern Pacific Rail Road 20 foot strip of land, North 42°23'45" West, 1768.47 feet to the said southeasterly line of Lot 1; thence, along said southeasterly line, North 48°54'38" East, 15.00 feet to the True Point of Beginning.

Containing 26,528 square feet more or less.

The Basis of Bearings for the above description is the California Coordinate System (1983), Zone 3. All distances given are ground distances.

The above real property description has been prepared by me, or under my direction, in conformance with the California Land Surveyors Act.

Scott R. Tikalsky LS7608
Expires 12/31/04

LICENSED LAND SURVEYOR
SCOTT R. TIKALSKY
Exp. 12-31-04
No. LS #7608
STATE OF CALIFORNIA

04/15/2002
Date

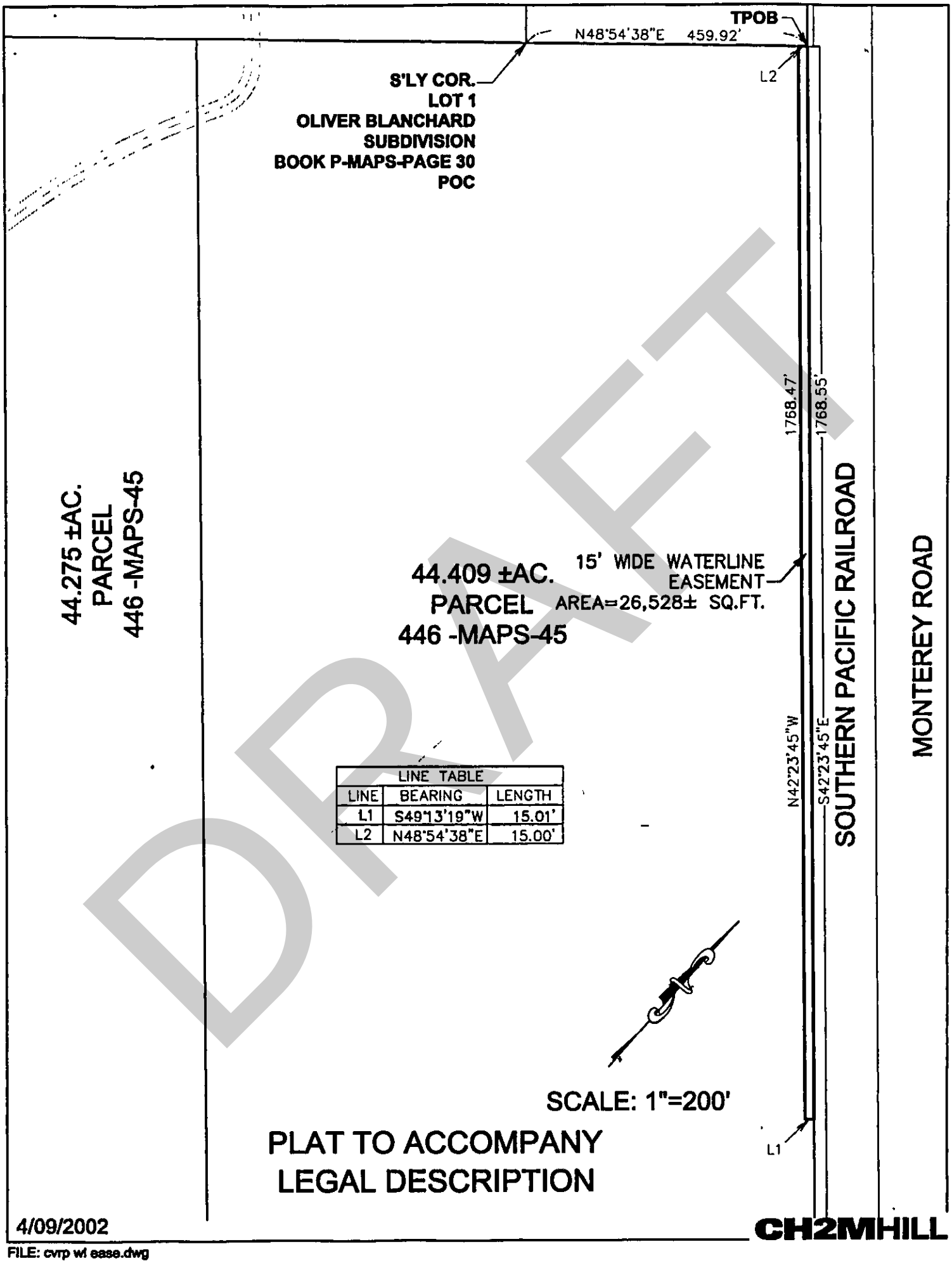

TPOB
N48°54'38"E 459.92'
L2
S'LY COR.
LOT 1
OLIVER BLANCHARD
SUBDIVISION
BOOK P-MAPS-PAGE 30
POC
1768.47'
1768.55'
44.275 ±AC.
PARCEL
446 -MAPS-45
44.409 ±AC.
PARCEL
446 -MAPS-45
15' WIDE WATERLINE
EASEMENT
AREA=26,528± SQ.FT.
N42°23'45"W
S42°23'45"E
SOUTHERN PACIFIC RAILROAD
MONTEREY ROAD
L1
LINE TABLE
LINE | BEARING | LENGTH
L1 | S49°13'19"W | 15.01'
L2 | N48°54'38"E | 15.00'
SCALE: 1"=200'
PLAT TO ACCOMPANY
LEGAL DESCRIPTION
4/09/2002
CH2MHILL
FILE: cvrp wl ease.dwg

Exhibit B

Real property in the City of San Jose, County of , State of California, described as follows:

All of Lot 7 as shown on the Map of the Oliver Blanchard Subdivision in the Rancho Del Refugio de la Laguna Seca, being part of the land of the Fiacro Fisher Estate Co., filed for record on December 17, 1917 in Volume P of Maps, pages 30 and 31, in the Office Santa Clara County Recorder, located in Santa Clara County, California.

Excepting that portion of said Lot 7 conveyed by George L. Stillwell to Southern Pacific Railroad Company, a corporation, by deed dated February 2, 1927 and recorded February 24, 1927 in Book 303 of Official Records of Santa Clara County at Page 185

And excepting that portion of said Lot 7 conveyed to Pacific Gas and Electric Company in a document filed for record May 1, 1964 in Book 6486 Official Records of Santa Clara County at page 441.

and, in addition thereto, the following area:

A portion of Lot 6 as shown on the Map of the Oliver Blanchard Subdivision in the Rancho Del Refugio de la Laguna Seca, being part of the land of the Fiacro Fisher Estate Co., filed for record on December 17, 1917 in Volume P of Maps, pages 30 and 31, in the Office Santa Clara County Recorder, located in Santa Clara County, California, more particularly described as follows: Commencing at the Northerly corner of said Lot 6; thence along the Northerly line of said Lot 6 South 31° 08' 46" West 10.74 feet to the point of beginning; thence leaving said Northerly line, South 36° 32' 32" East 663.85 feet along the Westerly line of that portion of Lot 6 conveyed by Samuel Scales, et ux, to Southern Pacific Railroad Company, a corporation, by deed dated December 20, 1926 and recorded January 8, 1927 in Book 293 of Official Records of Santa Clara County at Page 182, to the beginning of a curve concave to the Northeast having a radius of 5779.65 feet; thence continuing along said Westerly line and along said curve 559.85 feet through a central angle of 5° 33' 00"; thence continuing along said Westerly line South 42° 05' 32" East 110.25 feet to the Southerly line of said Lot 6; thence along said Southerly line of said Lot 6 South 51° 27' 48" West 150.29 feet; thence leaving the Southerly line of said Lot 6 North 42° 05' 32" West 100.98 feet to the beginning of a curve concave to the Northeast having a radius of 5929.65 feet; thence along said curve 574.38 feet through a central angle of 5° 33' 00"; thenceNorth 36° 32' 32" West 248.16 feet; thence South 51° 31' 48" West 755.62 feet more or less to the centerline of Fisher Creek; thence along the centerline of Fisher Creek North 40° 37' 12" West 3.72 feet more or less; thence continuing along the centerline of Fisher Creek North 27° 08' 12" West 166.01 feet; thence continuing along the centerline of Fisher Creek North 3° 18' 04" West 176.65 feet more or less to the Northerly line of said Lot 6; thence along the Northerly line of said Lot 6 North 53° 35' 48" East 307.91 feet more or less; thence continuing along the Northerly line of said Lot 6 North 5° 41' 12" West 89.76 feet; thence continuing along the Northerly line of Lot 6 North 51° 31' 48" East 334.49 feet; thence continuing along the Northerly line of said Lot 6 North 31° 08' 46" East 100.80 feet to the point of beginning.

Appendix H: Legal Description of "Public Service Easement, dated January 11, 2005

EXHIBIT "A"
PUBLIC SERVICE EASEMENT

REAL PROPERTY in the City of San Jose, County of Santa Clara, State of California, being a portion of the parcel of land described in the deed from Santa Teresa Associates to Coyote Valley Research Park, LLC, recorded November 16, 1998, under Document Number 14503614 of Official Records, Santa Clara County Records, more particularly described as follows;

BEGINNING at the most easterly corner of Parcel One as described in said deed recorded under Document Number 14503614;

Thence along the northeasterly line of said Parcel One, North 39°01'23" West, 60.38 feet to the TRUE POINT OF BEGINNING;

Thence South 38°00'00" West, 20.52 feet;

Thence North 39°01'23" West, 156.04 feet;

Thence South 50°58'37" West, 47.96 feet;

Thence North 39°01'23" West, 138.83 feet;

Thence North 50°58'37" East, 47.96 feet;

Thence North 39°01'23" West, 460.97 feet;

Thence South 50°58'37" West, 48.87 feet;

Thence North 39°01'23" West, 138.83 feet;

Thence North 50°58'37" East, 48.87 feet;

Thence North 39°01'23" West, 450.20 feet;

Thence North 39°31'14" West, 11.95 feet;

Thence South 50°28'46" West, 56.48 feet;

Thence North 39°31'14" West, 138.83 feet;

Thence North 50°28'46" East, 21.83 feet;

Thence North 41°27'12" West, 392.60 feet;

Thence North 42°09'08" West, 361.36 feet;

SAN JOSE
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Thence along a tangent curve to the left, having a radius of 25.00 feet, through a central angle of 92°39'57" for an arc length of 40.43 feet;

Thence South 45°10'55" West, 253.95 feet;

Thence North 42°59'24" West, 30.02 feet;

Thence North 45°10'55" East, 136.45 feet;

Thence North 44°49'05" West, 42.00 feet;

Thence North 45°10'55" East, 134.83 feet;

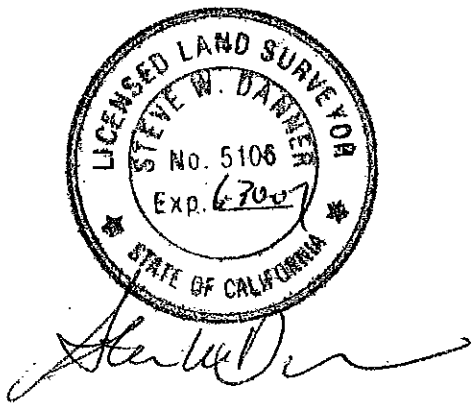
Thence North 28°00'29" East, 16.23 feet, to the southerly corner of the Water Pipeline Easement as described in the deed recorded December 5, 2002, under Document Number 16661030 of Official Records, Santa Clara County Records;

Thence along the southeasterly line of said Water Line Easement, North 48°37'40" East, 15.01 feet, to the northeasterly line of the parcel of land described in said deed recorded under Document Number 14503614;

Thence along said northeasterly line, the following five (5) courses:

1. Thence South 42°59'24" East, 624.20 feet;
2. Thence along a tangent curve to the right, having a radius of 5,679.65 feet, through a central angle of 02°34'24" for an arc length of 255.10 feet;
3. Thence North 49°00'44" East, 22.72 feet;
4. Thence South 39°31'14" East, 130.68 feet;
5. Thence South 39°01'23" East, 1,340.36 feet, to the TRUE POINT OF BEGINNING.

Containing 2.012 acres, more or less.



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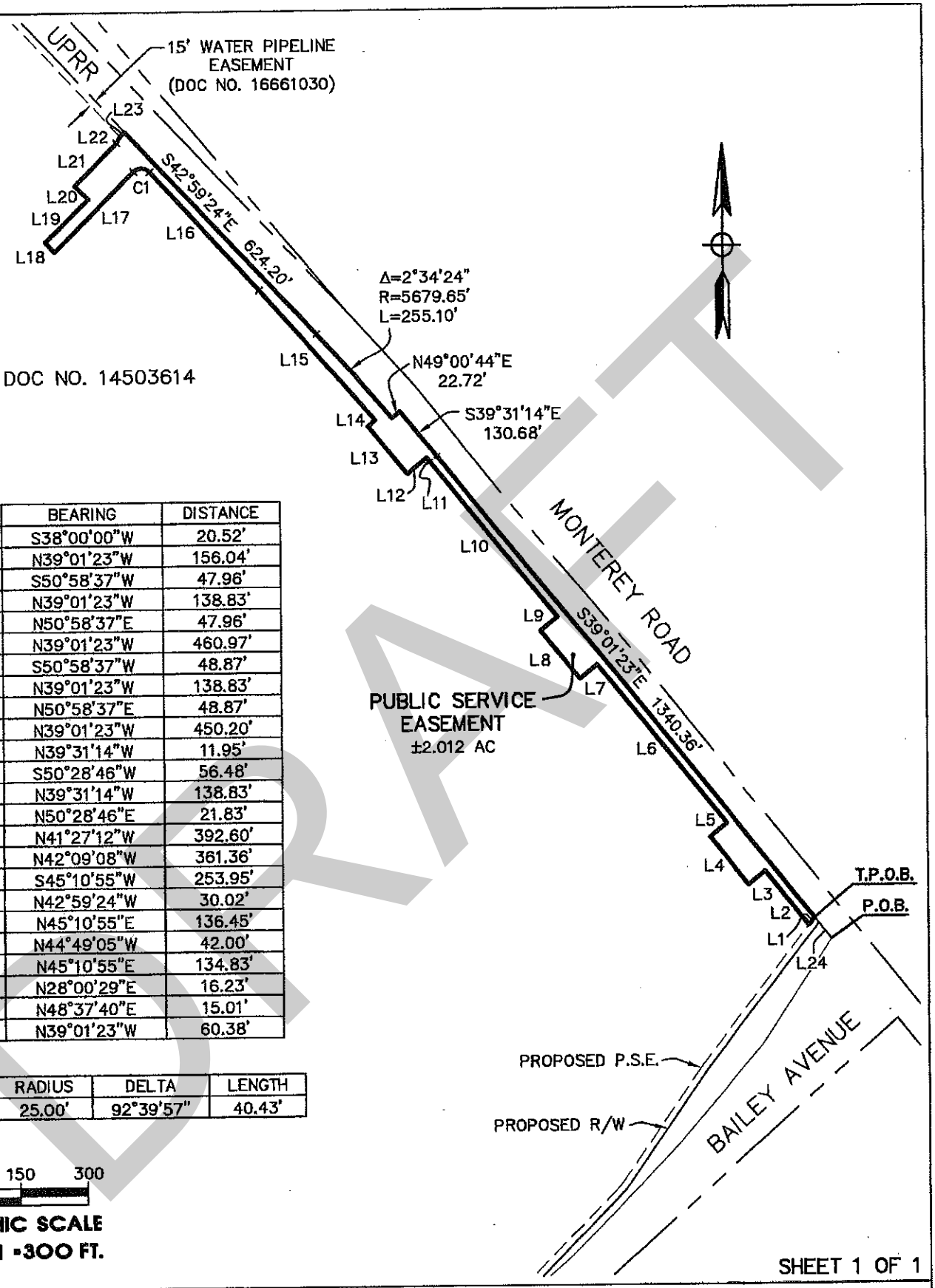

LINE	BEARING	DISTANCE
L1	S38°00'00"W	20.52'
L2	N39°01'23"W	156.04'
L3	S50°58'37"W	47.96'
L4	N39°01'23"W	138.83'
L5	N50°58'37"E	47.96'
L6	N39°01'23"W	460.97'
L7	S50°58'37"W	48.87'
L8	N39°01'23"W	138.83'
L9	N50°58'37"E	48.87'
L10	N39°01'23"W	450.20'
L11	N39°31'14"W	11.95'
L12	S50°28'46"W	56.48'
L13	N39°31'14"W	138.83'
L14	N50°28'46"E	21.83'
L15	N41°27'12"W	392.60'
L16	N42°09'08"W	361.36'
L17	S45°10'55"W	253.95'
L18	N42°59'24"W	30.02'
L19	N45°10'55"E	136.45'
L20	N44°49'05"W	42.00'
L21	N45°10'55"E	134.83'
L22	N28°00'29"E	16.23'
L23	N48°37'40"E	15.01'
L24	N39°01'23"W	60.38'

CURVE	RADIUS	DELTA	LENGTH
C1	25.00'	92°39'57"	40.43'

0 150 300

GRAPHIC SCALE
1 INCH = 300 FT.

SHEET 1 OF 1

Date:	01-11-05
Scale:	1" = 300'
Designed:	-
Drawn:	TG
Checked:	SD
Proj. Engr.:	JET
Dwg Name:	2658PL78

HMH ENGINEERS

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Plat to accompany description:
PUBLIC SERVICE EASEMENT

SAN JOSE CALIFORNIA

20050111.1541

Appendix I: AgCo Hay Lease

Appendix J: Master Agreement

Appendix K: Preliminary Title Report