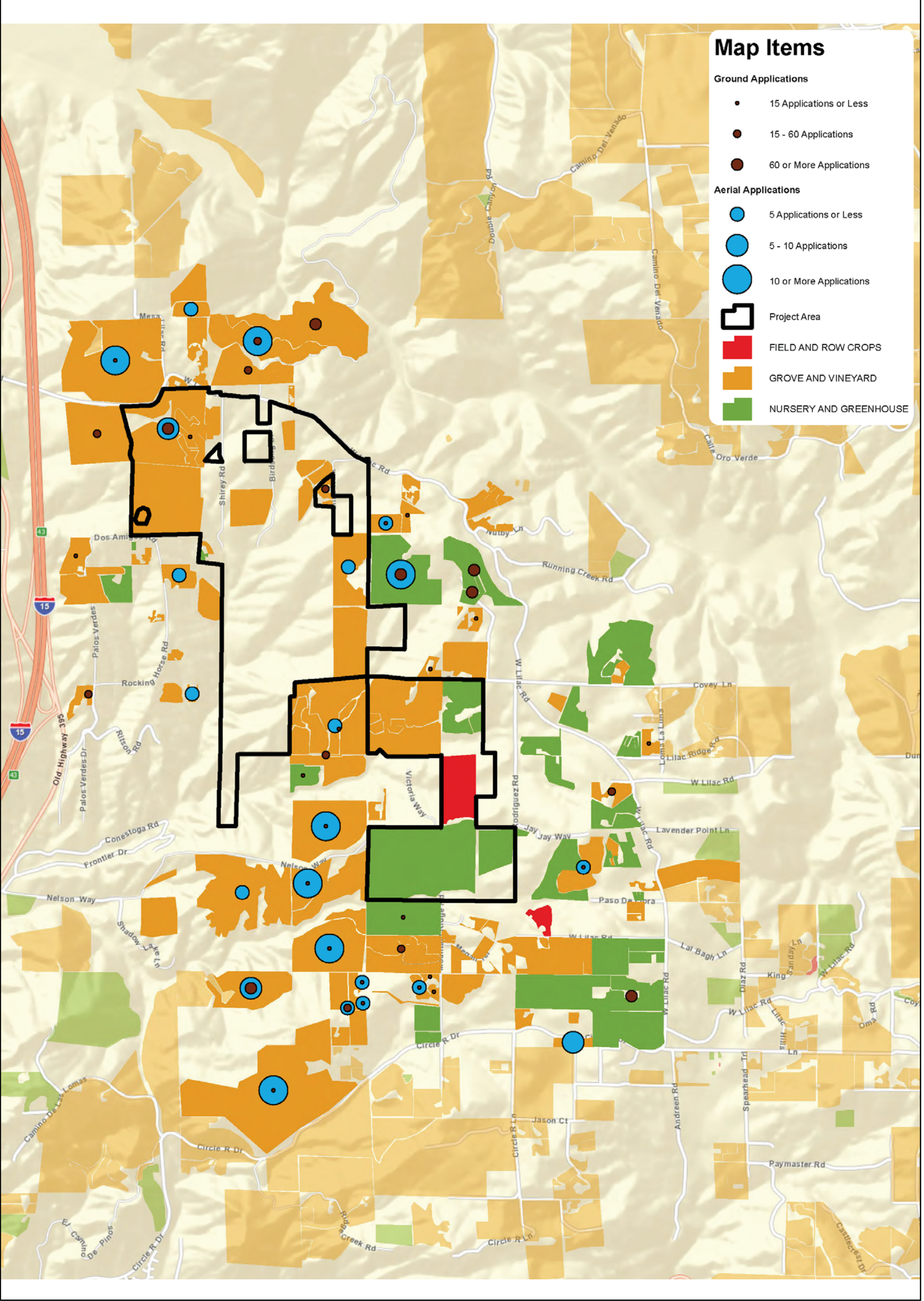




Not to Scale



FIGURE 10
Pesticide Application Permits

THIS PAGE IS INTENTIONALLY BLANK.

Phase I Environmental Site Assessments (ESAs) were prepared for the 17 properties that now comprise the project site. This subchapter presents a summary of those ESAs, prepared for the project by Environmental Equalizers, Inc. To provide some background, soils contaminated by agricultural activities are a concern because of land use changes involving

the construction of housing developments, on former agricultural lands. There is a potential that past agricultural activities may have contaminated soils and these soils may cause health concerns to the new homeowners who live on previously farmed land. As discussed in the Phase I ESAs, the agricultural activities, which have occurred across much of the project site, have included the application of fertilizers, herbicides, and pesticides. As such, most of the Recognized Environmental Conditions (RECs) investigated are associated with agricultural use.

The investigation of suspected pesticide contamination included soil sampling in areas where materials were stored, handled, and mixed, in addition to identifying the historical crops grown, pesticides applied, and the methods of application. Constituents of concern associated with active and former agricultural operations, within the project site include organochloride pesticides and metals, which may pose a human health risk. Several soil samples found on the project site were above the applicable thresholds. Previous soil sampling on one of these properties in 2007–2008 showed toxaphene levels in soils, above the screening levels. On another property, elevated levels of chlordane and toxaphene were documented during soil testing. Thus, there is a possibility that on-site soils could contain significant levels of chemical residues and the Phase I ESAs provide recommended remediation measures, to reduce the identified impacts to less than significant levels, such as removal of the soils in question (in compliance with regulatory requirements) and replacement with clean soils.

1.4.2.4 Climate

San Diego County is divided into a series of "plantclimates," which are defined as areas "[i]n which specific plants, groups or associations are evident and will grow satisfactorily, assuming water and soil are favorable." Plantclimates in San Diego County occur as a series of five generally north-south trending linear zones, including the Maritime, Coastal, Transitional, Interior and Desert zones. These areas are influenced by factors including topography and proximity to the ocean, and are generally gradational inland, with the project site located in the Transitional Zone (County of San Diego 2007).

Localized climate zones were adapted from the described plantclimates, and are termed Generalized Plantclimate Zones, or Sunset Zones. Sunset Zones differentiate local microclimates, freeze/frost potential, and air/water drainage, based on conditions, such as latitude, elevation, topography, and the influence of oceanic and/or continental air masses. Sunset Zones were not developed as a tool to determine the suitability for commercial

agricultural production; therefore, their use is not intended to determine suitability for specific crops. They are a measure of overall climate suitability for the typical agricultural commodities produced in San Diego County (County of San Diego 2007).

The project site is located, within Sunset Zone 23, which has a rating of “high” and is one of the most favorable for growing subtropical plants and most favorable for growing avocados (County of San Diego 2007). Climate conditions for the project site are typical of a Mediterranean climate regime, with a wet winter rainy season followed by a hot, dry summer. Spring and fall months tend to be mild in temperature and variable in rainfall amounts. The average January low temperature for the area is approximately 40 degrees Fahrenheit (°F), and the average July high temperature is between 85°F and 90°F. Average annual rainfall is 15 inches (Pryde 2004).

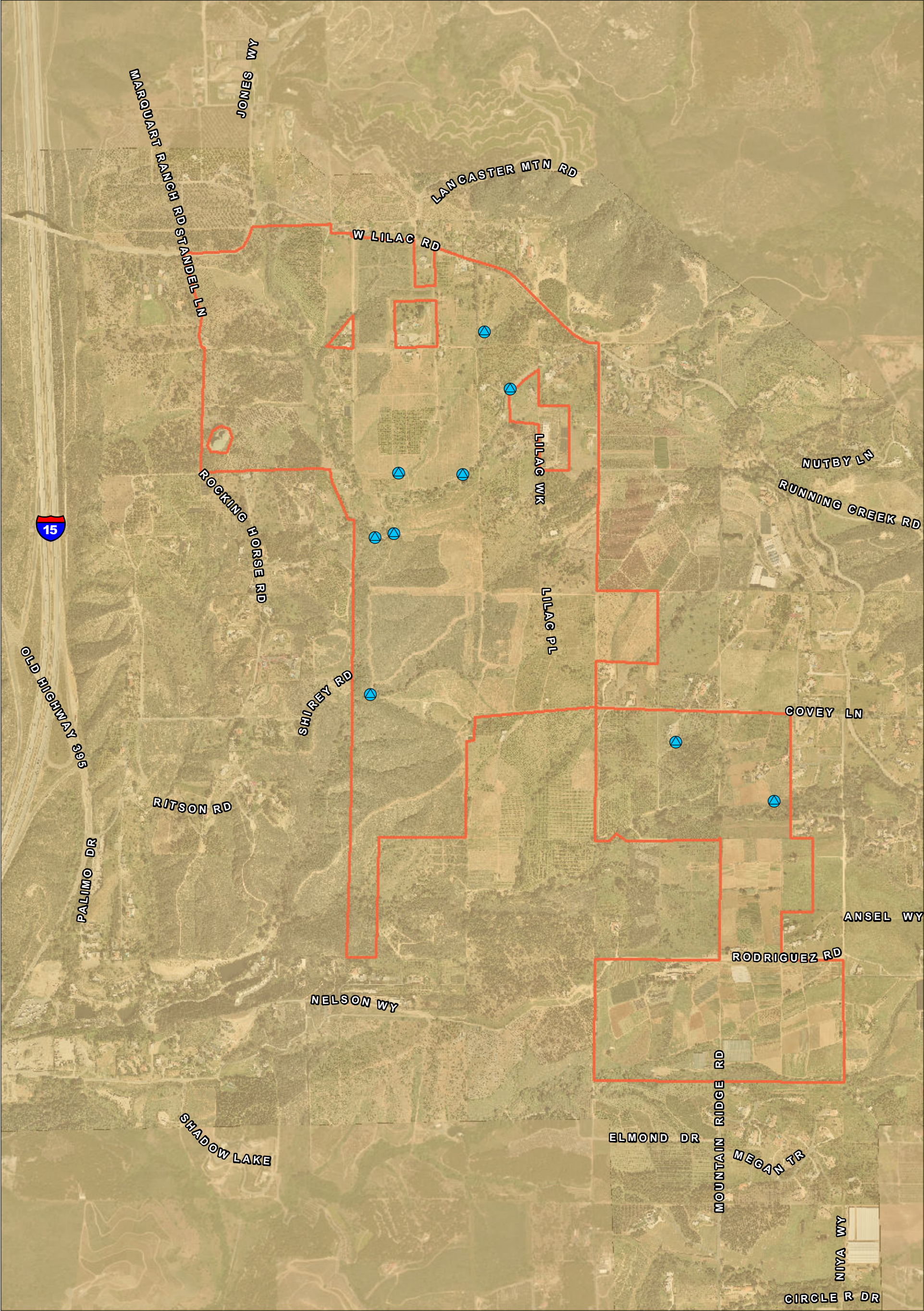
1.4.2.5 Water Resources

The project site is within the County Water Authority (CWA) and is served by the Valley Center Municipal Water District (VCMWD), which has existing water transmission, storage, and distribution facilities, in the vicinity of the project site. The VCMWD has delivered in excess of 250 acre-feet of water-per-year, to the 608 acre project site, principally for irrigation. Many of the properties also contain working wells (Figure 11) and use groundwater to supplement water from the VCMWD, in order to irrigate orchards and common area landscaping, during drier and hotter periods of the year. The groundwater aquifer type, under the project site, is Fractured Crystalline Rock, which can store groundwater, but is not considered to have as much capacity, as other aquifer types.

If constructed, the project could use recycled water from an on-site water reclamation facility to irrigate common and agricultural areas, at the discretion of VCMWD. The project would include the construction of recycled water production and distribution facilities (“purple pipes”) for irrigation of common area landscaping, slopes, parks, school fields, and as the primary method for irrigation of the retained groves; thereby, reducing the need for imported water.

1.4.2.6 Williamson Act Contracts and Agricultural Preserves

The California Land Conservation Act of 1965, better known as the Williamson Act (California Administrative Code §51200 et. seq.), creates an arrangement; whereby, private landowners contract with local governments to voluntarily restrict land, to agricultural and open space uses. In return, restricted parcels are assessed for property tax purposes, at a rate consistent with their actual use, rather than potential market value, which saves landowners from 20 percent to 75 percent in property tax liability each year. Agricultural preserves are areas that are eligible for Williamson Act Contracts; the boundaries of the preserve areas are drawn by the County and are adopted by resolution of the Board of



- Project Boundary
- Fractured Crystalline Rock Aquifers
- Existing Well

FIGURE 11

THIS PAGE IS INTENTIONALLY BLANK.

Supervisors (U.S. Dept. of Conservation; 2005). Williamson Act contracts are currently being phased out due to the current state budgetary constraints.

There are no Williamson Act Contracts or Agricultural Preserves within the project site.

1.4.3 Off-site Agricultural Resources

1.4.3.1 Active Agricultural Operations

As described in the regional setting (subchapter 1.4.1), the off-site land uses within the project vicinity are similar to those within the project site. These land uses have historically been composed primarily of undeveloped open space, rural residential, and agricultural uses. The primary land uses found within the vicinity of the project site are agricultural related (i.e., orchards, vineyards, row crops, and nursery operations). See subchapter 1.4.2.3 for descriptions of these crop types, value, and acreage harvested within the County.

Additional detail regarding surrounding agricultural resources within one-mile of the project site is provided below and impacts are discussed within Chapter 3.0 of this report. The one-mile study area is measured from the project site boundary and is based on the County's "Report Format and Content Requirements" regarding the development of school sites, in agriculturally zoned areas. Specifically, the Report Requirements state that, "any project that proposes a school must evaluate potential impacts within one mile from the project site because existing regulations can restrict certain normal agricultural activities within one mile of a school". The extensive agricultural operations located within one-mile of the project site are shown on Figure 12 and are categorized as one of the following general types: "mixed use orchards," "nurseries and greenhouses," "row crops," and minor vineyard/minor orchard ("estate residential") uses as well as "undeveloped." These are described in more detail as follows:

a. Mixed-use Orchards

There are approximately 1,347 acres, within the one-mile zone around the project site, that fall into this category. This category consists of citrus and avocado orchards, with the citrus orchards being most prevalent, within the flatter portions of the site with well-developed soils and avocados being present, within the steeper areas. Orchards within the one-mile zone consist primarily of commercial scale operations located to the north and south of the project site. A few additional smaller operations are located to the east and west. Most of the smaller scale orchards (approximately 2–4 acres) were considered part of the "estate residential" category discussed below.

b. Row Crops

Row crops are those areas used to grow labor intensive crops such as tomatoes, beans, strawberries, cucumbers, potatoes, squash, cauliflower, and peppers. The majority of row

cropping operations that exist in the project area are those located within the project site. Within the one-mile zone, there are only three acres of row crops mapped. This category is also sometimes referred to as “truck crops” and should be distinguished from “Intensive Agriculture” (which generally includes operations such as chicken farms, dairies, and feed lots) and from “Field Crops,” which are crops that require few inputs, such as alfalfa, oats, wheat, and other similar crops.

c. Nursery and Greenhouse

Nurseries and greenhouses are usually small in scale, with respect to acreage. They typically contain structures used to cultivate high-value products, such as flowering/foliage plants and gourmet food products such as mushrooms. They may also be used to grow commodities, such as landscaping, decorative plants, fruit trees, herbs, and flowers. This category can sometimes be associated with adjacent outdoor areas that are used for cultivation in a manner similar to “row crops.” There are 306 acres of this type present within one mile.

d. Estate Residential

Estate residential is a category, in which agricultural operations are an incidental use to the primary land use of large lot residential. This category can be typically characterized by small orchards located, on two- to four-acre residential parcels. It should be noted that, although small in size, orchards that fall within this category can be an important agricultural resource because more than two-thirds of farms within San Diego County are between one and nine acres in size and four acres is the median farm size. Despite their small size, farms in San Diego County generated over \$1.6 billion in 2010. There are 724 acres of this category within the one mile buffer area.

e. Undeveloped

The remaining 2,500 acres, within the one-mile zone around the site, is comprised primarily of undeveloped open space with native habitat, although it was noted during the site visit that there were a few areas which may once have been agriculture that has been allowed to revegetate with native habitat types.

1.4.3.2 Williamson Act Contract Lands/Agricultural Preserves

There are no Williamson Act Contract lands or Agricultural Preserves, within the project site. However, there is an Agricultural Preserve (Preserve #88) located adjacent to the southeast corner of the project site. In addition, there are parcels within a Williamson Act Contract to the northeast (Figure 13). The two closest Williamson Act parcels total 59.34 acres and are both within the same Williamson Act Contract (#72-56), and within Agricultural Preserve Number 24. These Williamson Act parcels are geographically separated from the project site by a major drainage (Keys Canyon) and there are no major access points connecting to

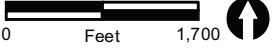
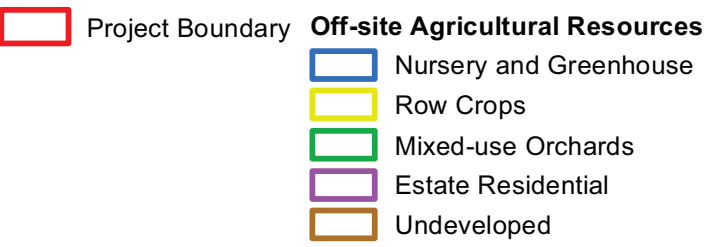
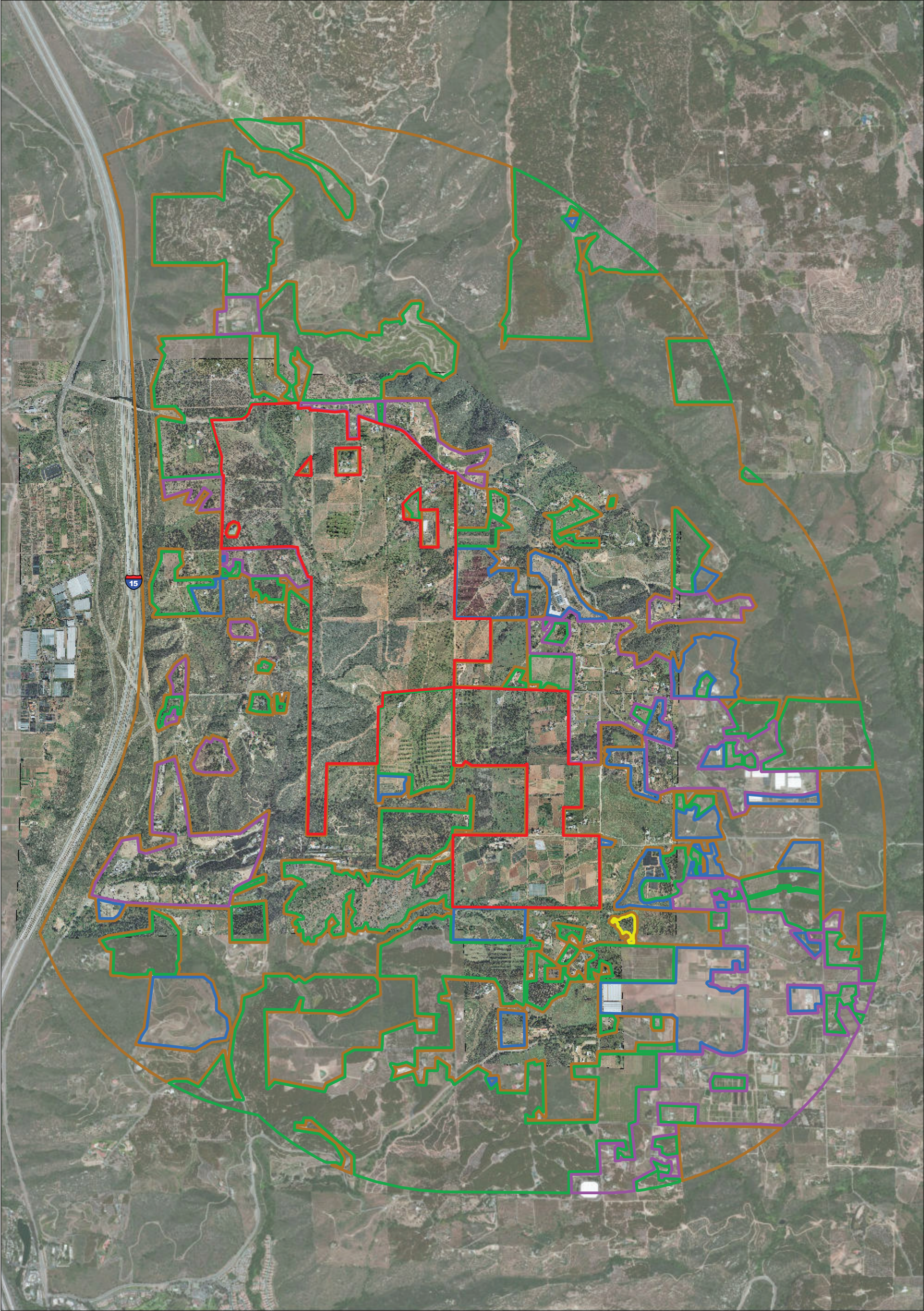
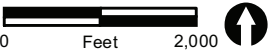
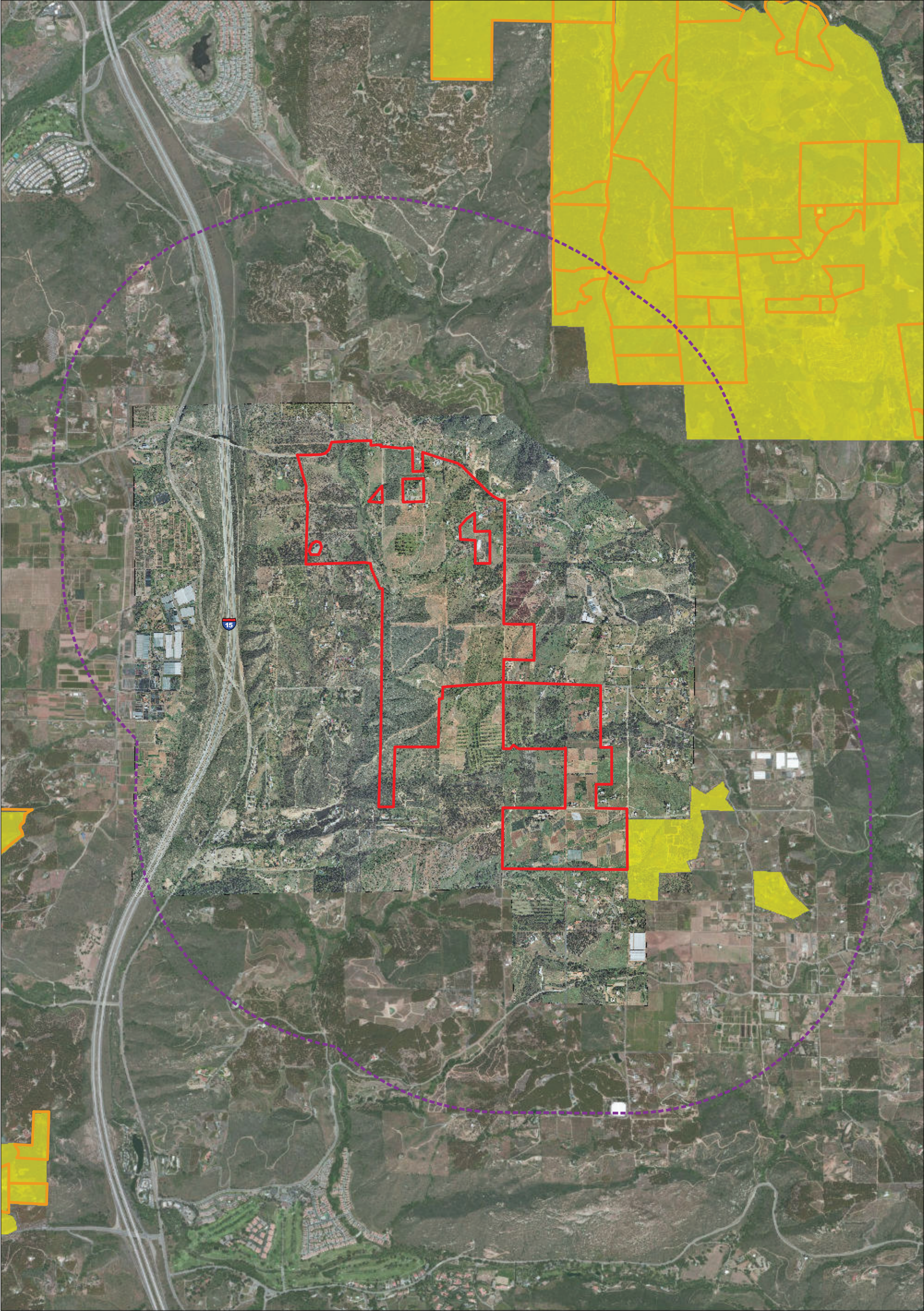


FIGURE 12

THIS PAGE IS INTENTIONALLY BLANK.



- | | | | |
|---|------------------|---|---------------------------------------|
|  | Project Boundary |  | Williamson Act Contracts |
|  | 1-mile Buffer |  | Williamson Act Agricultural Preserves |

FIGURE 13

THIS PAGE IS INTENTIONALLY BLANK.

the proposed project. In total, there are 97.3 acres of Williamson Act Contract lands and 242 acres of Agricultural Preserves within one mile of the project site.

1.4.3.3 FMMP Important Farmland Designations

As shown below in Table 5 and Figure 5, six FMMP Important Farmland categories occur within the one-mile buffer area around the project site including Farmland of Local Importance, Farmland of Statewide Importance, Prime Farmland, Unique Farmland, Urban and Built-up Land, and Other Land. These categories are defined above in subchapter 1.4.2.2 and the acreage of the Important Farmland found within the project site is detailed, in Table 4.

**TABLE 5
ACRES OF FMMP FARMLAND WITHIN
ONE MILE OF THE PROJECT SITE**

Category	Total Acres
Farmland of Local Importance	1,270
Farmland of Statewide Importance	140
Other Land	2,166
Prime Farmland	24
Unique Farmland	2,635
Urban and Built-up Land	25
TOTAL	6,260

1.4.4 Zoning and General Plan Designation

The project site's General Plan Land Use Element Regional Category is Semi-Rural. The General Plan Land Use Designations for the project site are Semi-Rural SR-10 and Semi-Rural SR-4c (1 unit per 4, 8, or 16 gross acres, depending on slope). The small portion of the site, which lies within the Bonsall Community Plan, is zoned Rural Residential (RR). The majority of the project site, which lies within the Valley Center Community Plan Area, is zoned "Limited Agriculture" (A70). The intent of the A-70 Use Regulations is to create and preserve areas intended primarily for agricultural crop production. Additionally, the A-70 zone allows property owners to raise a limited number of small farm animals, on the premises. Typically, the A70 Use Regulations would be applied to protect moderate-to high quality agricultural land.

THIS PAGE IS INTENTIONALLY BLANK.

2.0 On-site Agricultural Resources

2.1 Local Agricultural Resource Assessment Model (LARA)

The County of San Diego has approved a local methodology that is used to determine the importance of agricultural resources, in the unincorporated area of San Diego County, known as the LARA Model. The LARA Model takes into account three Required Factors, including water, climate, soil quality and three Complementary Factors surrounding land uses, land use consistency, and slope, in determining the importance of agricultural resources.

The following subheadings include a description of the project site's rating for each LARA Model factor, including justification for the factor ratings assigned to the project site. Each factor receives a rating of high, moderate, or low importance, based on site-specific information as detailed, in the LARA Model Instructions (Section 3.1 LARA Model Instructions, from the Agriculture Guidelines for Determining Significance). The factor ratings for the project site are summarized in Table 6, LARA Model Results. The final LARA Model result is based on the combination of factor ratings, in accordance with Table 7, Interpretation of LARA Model Results.

TABLE 6
LARA MODEL RESULTS

	LARA Model Rating		
	High	Moderate	Low
Required Factors			
Climate	✓		
Water	✓		
Soil Quality		✓	
Complementary Factors			
Surrounding Land Uses	✓		
Land Use Consistency		✓	
Slope		✓	

TABLE 7
INTERPRETATION OF LARA MODEL RESULTS

Scenario	Required Factors	Complementary Factors	LARA Interpretation
Scenario 1	All three factors rated high	At least one factor rated high or moderate	The site is an important agricultural resource
Scenario 2	Two factors rated high, one factor rated moderate	At least two factors rated high or moderate	
Scenario 3	One factor rated high, two factors rated moderate	At least two factors rated high	
Scenario 4	All factors rated moderate	All factors rated high	
Scenario 5	At least one factor rated low importance	N/A	The site is not an important agricultural resource
Scenario 6	All other model results		

2.1.1 LARA Model Required Factors

The following subchapters describe the site specific conditions that result in each LARA Model Required Factor rating, for the site.

2.1.1.1 Water

Many of the individual parcels that make up the project site contain working wells, but the groundwater aquifer type underlying the site is Fractured Crystalline Rock. As discussed in the Water Resources section above, this portion of the Valley Center community is within the boundaries of the CWA and is served by the VCMWD, which has existing water transmission, storage, and distribution facilities, in the vicinity of the project site. There are water connections and meters to portions of the project site and the VMCWD has delivered, in excess of 450 acre-feet of water per year, to irrigate the approximately 394 acres of existing agriculture. Thus, pursuant to LARA Model Table A-1 (see Attachment A), the project receives a **High** rating.

2.1.1.2 Climate

The project site lies within Zone 23 of the Sunset Zone plant climates. Zone 23 represents the thermal belts of the Coastal Area climate which is favorable for growing subtropical plants and is the most favorable for growing avocados. Zone 23 covers the coastal incorporated cities as well as unincorporated communities and is assigned a **High** rating due to the favorable growing conditions of this zone.

2.1.1.3 Soil Quality

The soil quality rating given by the LARA Model is based on the presence of Prime Farmland Soils or Soils of Statewide Importance that are available for agricultural use and have been previously used for agriculture. To determine the area of the project site that is “available for agriculture,” biological maps and aerial photos were examined (see Figure 8). Areas within the project site that are currently under active cultivation were included. Additionally, areas adjacent to existing agriculture that are flat and contain relatively high-quality soils, but that are currently vegetated with non-native grassland or other disturbed habitat, were included. Areas of the site that contain structures (e.g., residences, outbuildings, paved roads), have been compacted (e.g., unpaved roads), or that consist of undisturbed native vegetation or wetlands were not included.

A total of 400.38 acres of the 608-acre project site were identified as being available for agriculture. The soil quality rating is obtained by determining the proportion of the “available for agriculture” soils that are Prime Farmland soils or soils of Statewide Importance. As detailed in the LARA Model worksheets appended to this document as Attachment A, the project received a 0.115 rating out of a possible 1.0 maximum. Soil quality matrix scores that are less than 0.33 and have less than 10 acres of contiguous Prime Farmland or Statewide Importance soils receive a low rating pursuant to the LARA Model. The project’s 0.094 soil rating is less than 0.33; thus the next step was to evaluate LARA Model Table A-4’s qualifying statement “...or has a minimum of 10 acres of contiguous Prime or Statewide Importance Soils” (see Attachment A; Table 4). There is one soil type on-site that could potentially meet this criterion; the Fallbrook sandy loam, 5 to 9 percent slopes, eroded or “FaC2” soil type that comprises 32.59 acres of the site, 27.38 acres of which are “available for agriculture”. There are two separate concentrations of the FaC2 soils that comprise the 27.38 acres (Figure 14); the eastern area is 12.74 acres and the western area is 14.64 acres. Both of these areas could be considered fragmented because of overlying factors such as the presence of riparian corridors, native habitat, a residence and outbuildings, hard packed dirt roads, imported fill, and other factors that modify the characteristics of the soil. However, much of the fragmentation occurs due to the presence of hard-packed dirt roads used to access the groves and the estate residences (Figure 15). Many of the roads are not covered by an easement and could potentially be converted back to agricultural use through standard agricultural practices. Therefore, a conservative approach of considering only the baseline soils data as mapped by the NRCS was taken in order to provide a worst-case analysis. Accordingly, because both of these areas contain 10 acres or more of contiguous soils of Prime or Statewide Importance, a **Moderate** rating was applied to the Soils Quality primary factor.

2.1.2 LARA Model Complementary Factors

Because all of the LARA Model Required Factors were moderate or higher, the Complementary Factors must also be analyzed. The following subchapters below describe the analysis that results in each of the three LARA Model Complementary Factor ratings.

Analysis of the Complementary Factors requires utilization of the Zone of Influence (ZOI). The County Guidelines (page 33) provide the methodology for calculating the ZOI. In summary, the process generally consists of drawing (using Geographic Information Systems [GIS]) a $\frac{1}{4}$ mile buffer around the entire project site and then including all parcels in the ZOI that are within or intersect with the $\frac{1}{4}$ mile buffer line (excluding the parcels the comprise the project site itself). For the proposed project, the ZOI was calculated to be 2,604 acres.

2.1.2.1 Surrounding Land Use

The more compatible a site is with the surrounding land uses, the more likely it is to avoid nuisance complaints and other issues from non-farm neighbors. This factor accounts for the degree to which the vicinity is agricultural and assigns a higher rating to a site which is within an agriculture-dominated area. The LARA model recognizes that agriculture can be viable amongst urban uses, but that its long-term viability is generally less because of increased economic pressures to convert to urban uses. Within the proposed project's 2,604-acre ZOI, the areas determined to be Consistent with Agriculture totaled 1,650.5 acres or 63.4%. The site would therefore receive a **High** rating for the Surrounding Land Use Complementary Factor.

2.1.2.2 Land Use Consistency

The Land Use Consistency analysis consists of comparing the project's median parcel size with the median parcel size of all the parcels within the ZOI. The reason for this methodology is that the County recognizes that a site surrounded by larger parcels indicates the site is located in an area that has not already been significantly urbanized; whereas a site surrounded by smaller parcels would likely experience incompatibilities and the corresponding reduction in economic viability when considering foregone opportunity costs.

The median parcel size of the project site's 58 parcels was calculated to be 5.36 acres, while the median parcel size of all the parcels within the ZOI is 2.8 acres. Because the project site's median parcel size is greater than the ZOI median parcel size, but not by more than 10 acres; the project would receive a **Moderate** rating for Land Use Consistency.

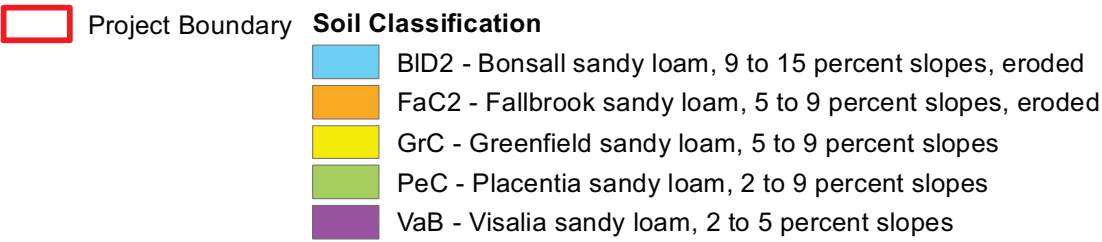
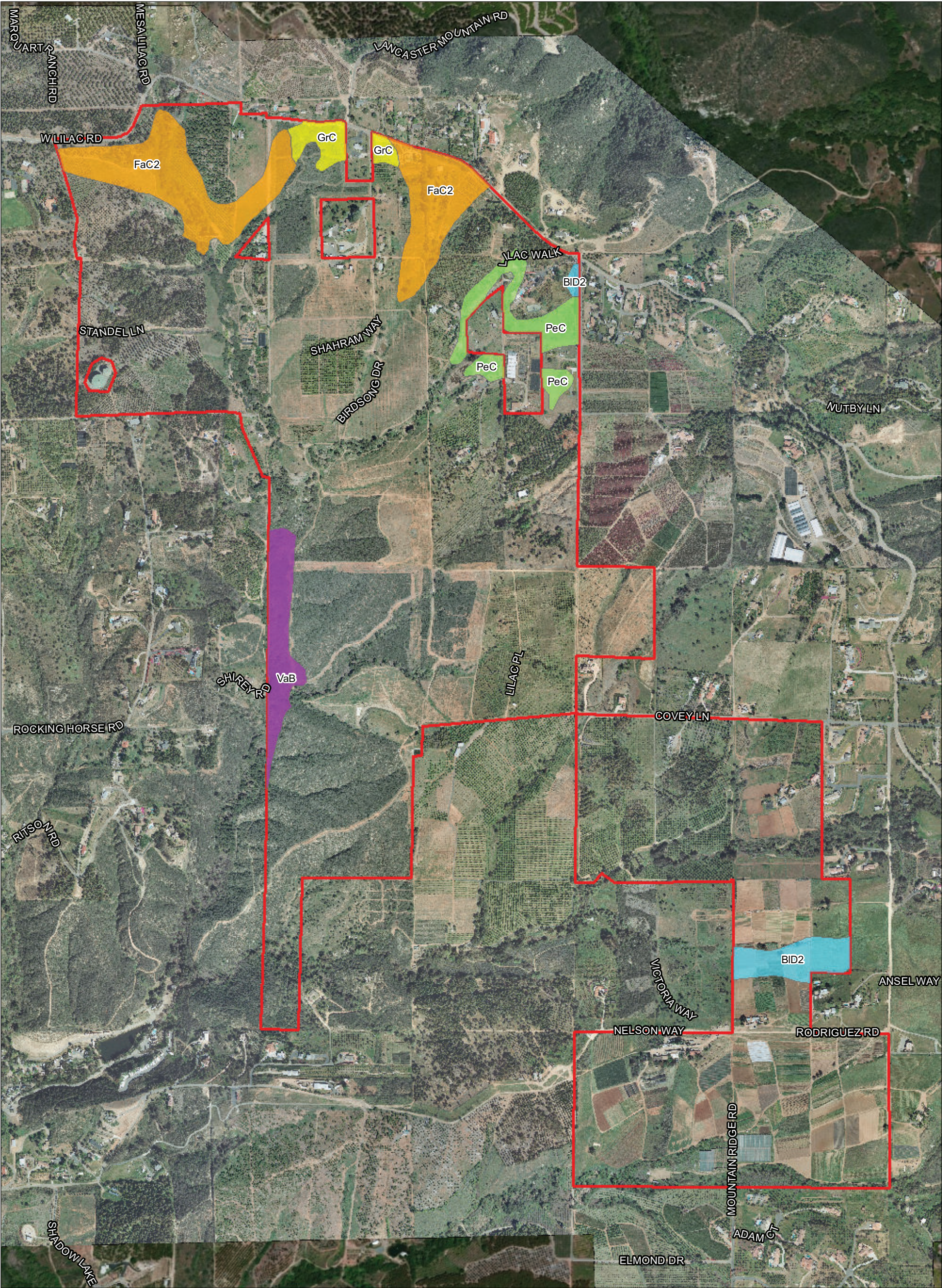
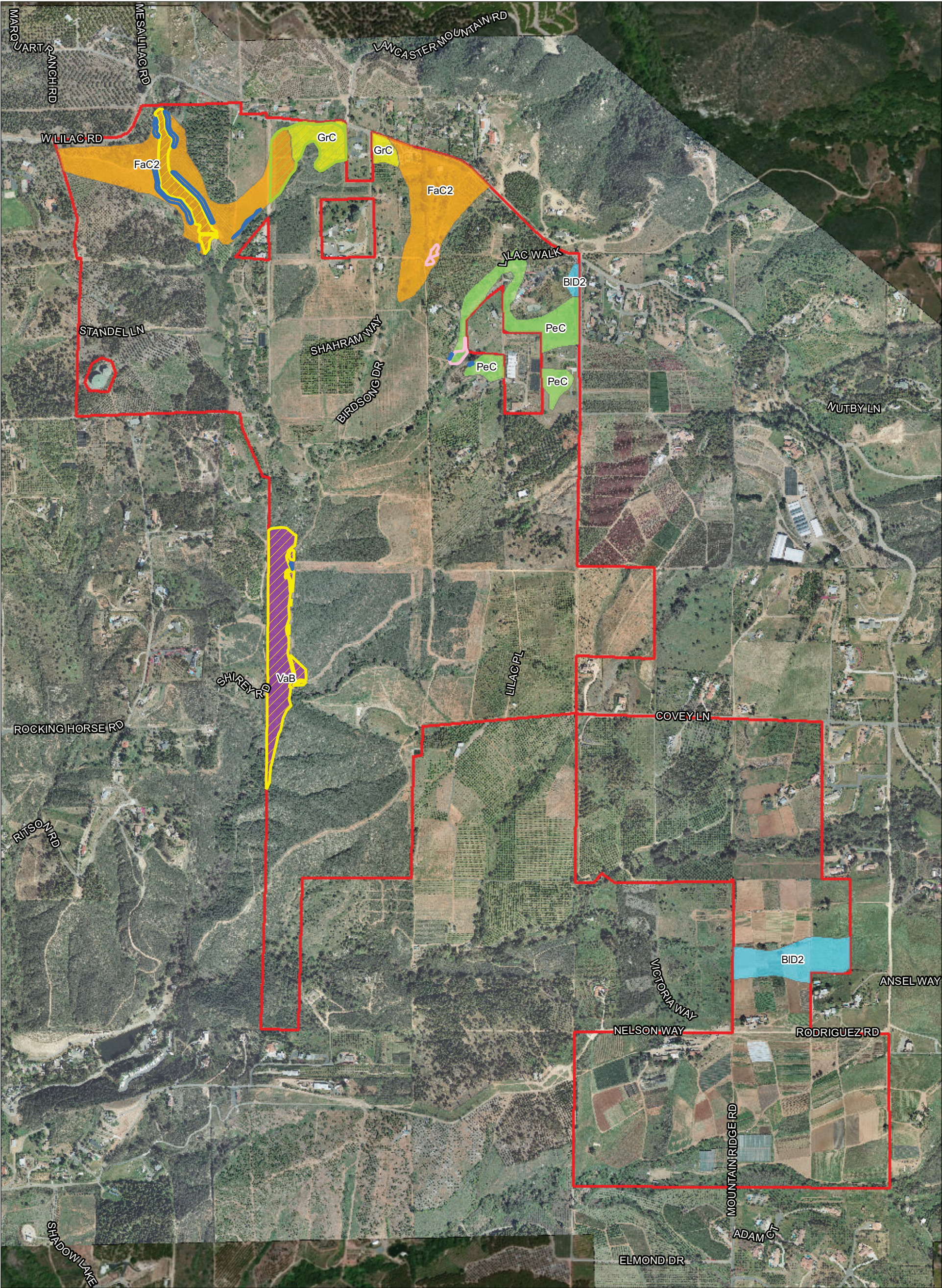


FIGURE 14

THIS PAGE IS INTENTIONALLY BLANK.



- Project Boundary
- Retained Under Biological Easement
- Soil Availability for Agriculture**
- Habitat Constrained by Regulatory or Legal Exclusion
- Habitat Never Used for Agriculture
- Lands with Existing Structures

- Soil Classification**
- BID2 - Bonsall sandy loam, 9 to 15 percent slopes, eroded
- FaC2 - Fallbrook sandy loam, 5 to 9 percent slopes, eroded
- GrC - Greenfield sandy loam, 5 to 9 percent slopes
- PeC - Placentia sandy loam, 2 to 9 percent slopes
- VaB - Visalia sandy loam, 2 to 5 percent slopes

FIGURE 15

THIS PAGE IS INTENTIONALLY BLANK.

2.1.2.3 Slope

Slope is a Complementary Factor in the LARA model to account for the role that topography plays in the viability of a parcel for agricultural production. While certain crops (e.g., avocados) can thrive on steeply sloped land, gentle topography allows for a wider range of potential uses and is easier for the operator to manage with regard to runoff and soil erosion. The average slope across the project site's 608 acres is 18.3%; the site would, therefore, receive a **Moderate** Slope rating.

2.1.3 LARA Model Result

Based on the results of the LARA Model, the site is considered an important agricultural resource. The results of the model analysis, which are discussed above, are summarized in Table 6. Table 6 shows that the site received a moderate rating for soil quality and a high rating for climate and water resources. These three criteria are Required Factors, pursuant to the LARA Model. Since two of the three Required Factors were rated high and one was rated moderate, the Complementary Factors were also analyzed pursuant to the LARA Model requirements. The site received a high rating for the Surrounding Land Uses factor and a moderate rating for both Land Use Consistency and Slope factors. This result would place the project within Scenario 2, which means that the site is an **important agricultural resource**.

2.1.4 LESA Model Result

During the initial public review period, comments were submitted regarding the Land Evaluation and Site Assessment (LESA) Model. While the LESA model is used nationwide and in several other counties in California, it is no longer used in San Diego County. In 2007, the LESA model was replaced by the LARA model, which was created as a more locally appropriate method of evaluating the unique types of agriculture that occur in San Diego County. The LESA model methodology relies heavily upon the Land Compatibility Classification (LCC) and Storie Index (SI) soil quality rating methods. The LARA model acknowledges the LCC and Storie Index methods of rating soils, but explains that these soil quality rating methods are not a component part of the LARA model analysis because these ratings do not adequately account for locally important soils.

In order to address the aforementioned comment, an analysis of the Lilac Hills Ranch project site was conducted under the LESA model methodology and is included in this report for informational and comparative purposes only. The results of the analysis are summarized below.