

**CALIFORNIA ENERGY COMMISSION  
SMALL POWER PLANT EXEMPTION (SPPE) APPLICATION**

**ORANGE GROVE PROJECT**



*Submitted by*

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## TABLE OF ACRONYMS/ABBREVIATIONS

ACRONYM/ ABBREVIATION	DEFINITION
BACT	Best Available Control Technology
CTGs	Combustion Turbine Generators
DPLU	Department of Planning and Land Use
EPA	Environmental Protection Agency
GE	General Electric
J Power	J Power USA Development Co., LTD
LORS	Laws, Ordinances, Regulations and Standards
MW	Megawatt
Project	Orange Grove Project
SDAPCD	San Diego Air Pollution Control District
SPPE	Small Power Plant Exemption

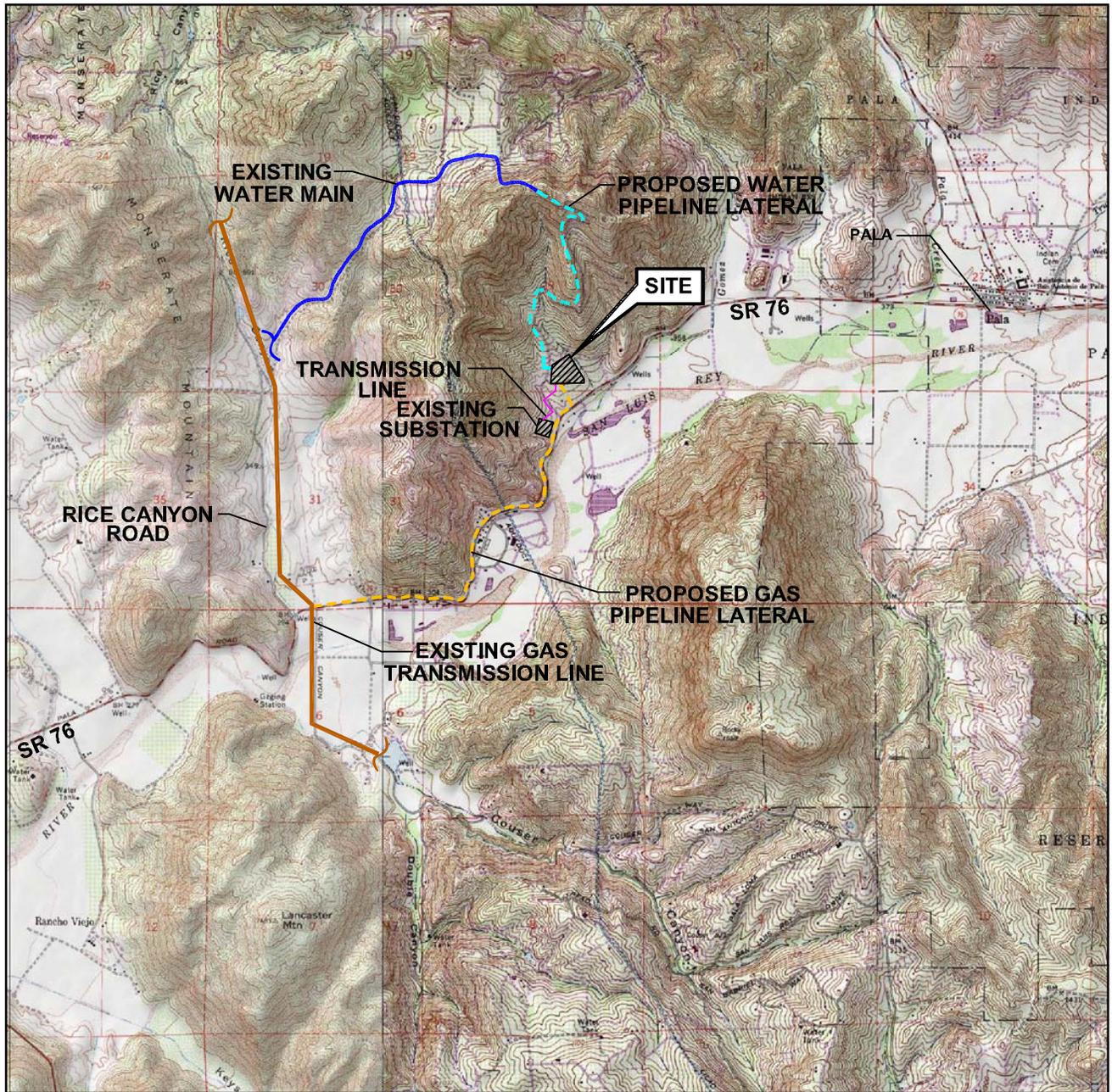
## 1.0 EXECUTIVE SUMMARY

### 1.1 PROJECT OVERVIEW

This Small Power Plant Exemption (SPPE) Application (the “Application”) is submitted to the California Energy Commission (CEC) pursuant to California Code of Regulations Title 20, Section 1936, for the construction and operation of the Orange Grove Project (the “Project”), a 96 megawatt (MW) simple-cycle electric generating plant and ancillary facilities to be located on unincorporated lands north of State Route (“SR”) 76 and east of Interstate 15 in rural San Diego County, California. The Project location and vicinity are shown in Figures 1.1-1 and 1.1-2. The Project applicant is Orange Grove Energy, L.P. (“Orange Grove Energy”) a limited partnership owned by J Power USA Development Co., LTD through intermediate entities. Orange Grove Energy is proposing the Project in response to a Request for Offers (RFO) by San Diego Gas & Electric Company (SDG&E) for new generating resources to be built to support local reliability. The Project is designed as a peaking facility to serve loads during peak demand. The Project is compatible with the CEC’s 2005 Integrated Energy Policy Report, and more specifically, with the CEC’s concern for improved local reliability of the grid in the San Diego area.

The Project is designed to comply with all relevant laws, ordinances, regulations and standards (LORS). The power plant will be constructed on an approximately 8.5-acre site (the “Site”) that will be leased by Orange Grove Energy. The Site is part of an approximately 202-acre property (the “Property”) owned by SDG&E, as shown in Figure 1.1-3. The power plant incorporates two General Electric (GE) LM6000 PC SPRINT combustion turbine generators (CTGs) that will be fueled with natural gas. A facility plot plan is shown in Figure 1.1-4. High-efficiency emission control technologies will be provided to meet Best Available Control Technology (BACT) requirements. Power will be transmitted to the grid at 69 kV via an approximately 0.2 mile underground electric transmission line to the existing SDG&E Pala substation located on the Property. An approximately 2.0 mile underground gas pipeline lateral will be constructed along State Route 76 to convey natural gas to the Site from an existing SDG&E gas transmission line. Approximately 1.5 miles of underground water pipeline will be constructed to convey water to the site from an existing Rainbow Municipal Water District water main. Sanitary wastewater will be managed with an onsite septic system and process wastewater from the plant will be trucked offsite for treatment at a licensed facility.





SOURCE:

United States Geological Survey  
7.5 Minute Topographic Map, 2000:  
Pala, Bonsall, Temecula,  
and Pechanga Quadrangles



SCALE 1:48,000



SITE  
LOCATION



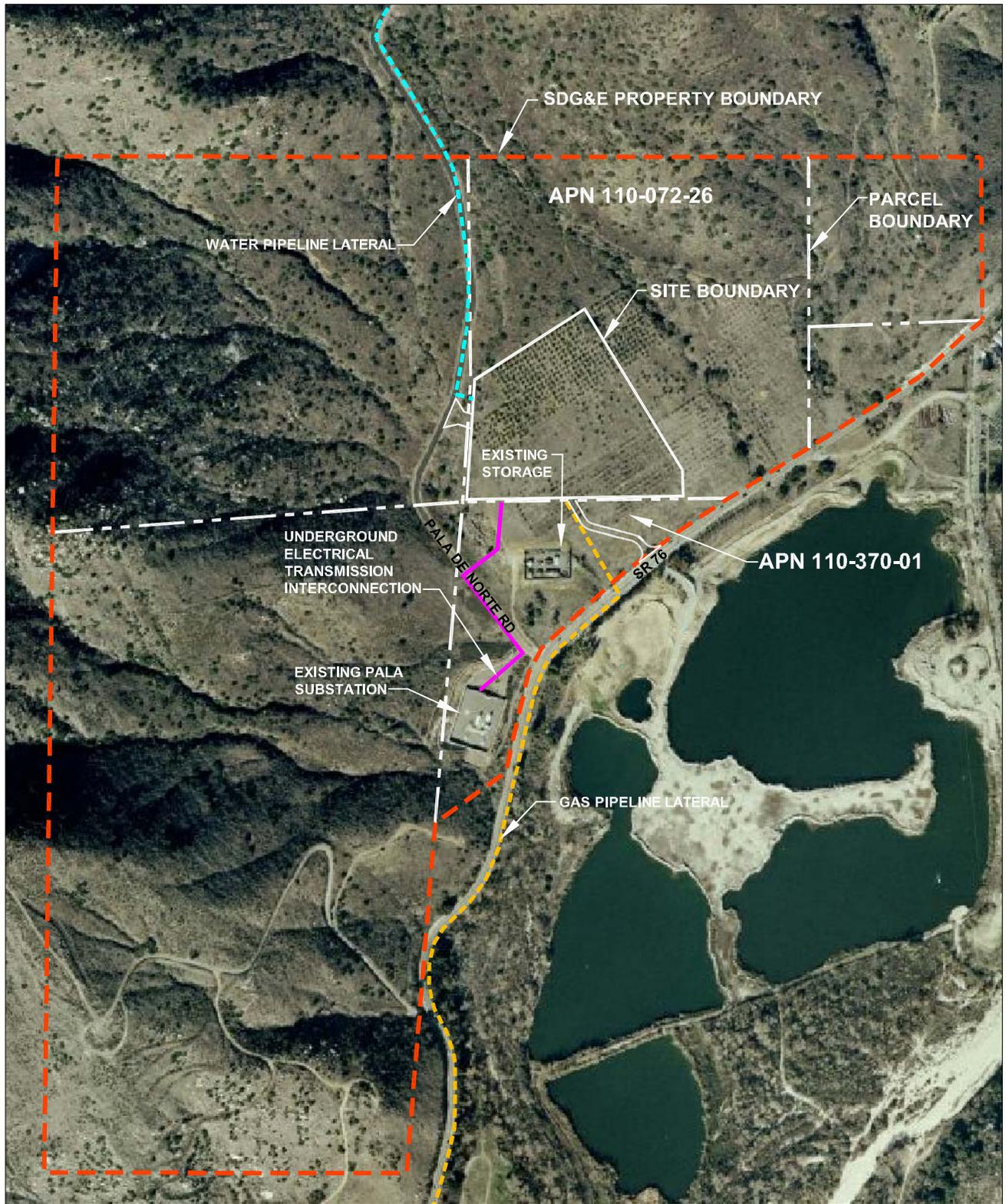
PROJECT: 29031902

FACILITY:

ORANGE GROVE PROJECT  
SAN DIEGO COUNTY, CALIFORNIA

PROJECT VICINITY MAP

FIGURE 1.1-2



SOURCE:

Virtual Earth, 2006.

APPROXIMATE SCALE (FEET)



P:\S=1:1 L:\Graphics\Projects\Number\29-xxxx\29-0319\290319 Aerial 2.dwg Jul 16, 2007 - 10:46am RCollins



PROJECT: 125158

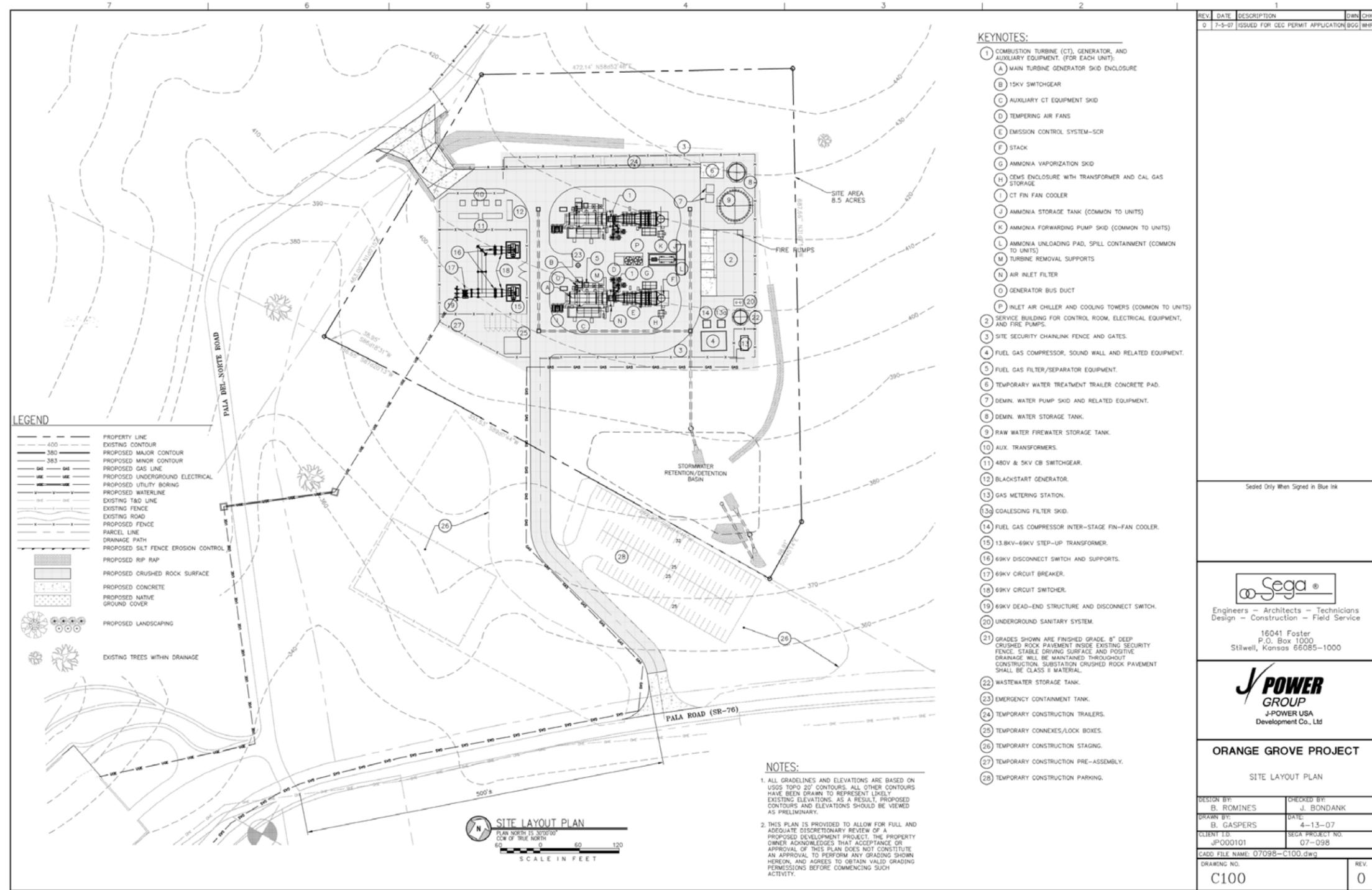
FACILITY:

ORANGE GROVE PROJECT  
SAN DIEGO COUNTY, CALIFORNIA

PROJECT SITE AERIAL PHOTO

**FIGURE 1.1-3**

Figure 1.1-4 – Facility Plot Plan



Project: Orange Grove Project - SPPE Application

Source: Segal, Inc.



## 1.2 PROJECT OBJECTIVE AND NEED

The Orange Grove Energy Project objective is to respond to the SDG&E RFO for new local generating capacity in an environmentally responsible and economically feasible manner.

The RFO was initiated as a result of the power supply disruptions experienced by SDG&E customers in the past. Specifically, SDG&E initiated this project on a fast track schedule in order to address reliability concerns raised by the summer 2006 “heat storm”. With normal load growth in the SDG&E service area, a repeat heat storm in summer 2008 could pose serious reliability issues for the SDG&E system. Delay or cancellation of the project would leave the system vulnerable to heat events.

## 1.3 PROJECT SCHEDULE

Construction is expected to start in January 2008 and take approximately 6 months. The Project is scheduled to be operational by June 2008. The Project schedule is as follows:

PROJECT MILESTONE	PROJECTED SCHEDULE
Site preparation and mobilization	December 2007
Issuance of all discretionary permits (within 30 days after CEC approval)	January 2008
Grading and Foundation	January 2008
Turbines Delivered	January 2008
Transformers Delivered	April 2008
Plant Commissioning	May 2008
Commercial Operation	June 2008

The interconnection request for the Project was submitted to the CAISO on April 19, 2007. The feasibility study has been completed and the impact study is in progress. CAISO expects to complete the impact study in October 2007. The facility study is expected to be completed in March, 2008. Following the facility study and the completion of the interconnection agreement between the project and SDG&E, the interconnection facilities will be constructed by SDG&E.

## 1.4 PROJECT OWNERSHIP

The Site and Property are owned by SDG&E. The power plant will be constructed, owned and operated by Orange Grove Energy. Operations will occur in accordance with a 25-year tolling agreement with SDG&E in which SDG&E would have the right to deliver gas and receive power for 100% of the capacity from the Project.

The gas pipeline lateral will be constructed, owned and operated by SDG&E. The water pipeline will be constructed, owned and operated by the Rainbow Municipal Water District. The electric transmission line will be entirely within the SDG&E Property and will be constructed and owned by Orange Grove Energy between the Site and the substation boundary. Orange Grove Energy

will obtain a 20-foot wide easement from SDG&E for the transmission line between the Site and the substation.

## 1.5 SITE LOCATION AND DESCRIPTION

The Site is located off of SR 76 approximately 3.5 (air) miles northeast of Interstate 15 (I-15). SR 76 locally is also known as Pala Road. The Site occurs on portions of the southwest  $\frac{1}{4}$  of the southeast  $\frac{1}{4}$  of Section 29 and the northwest  $\frac{1}{4}$  of the northeast  $\frac{1}{4}$  of Section 32, in Township 9 South, Range 2 West, San Bernardino Base and Meridian. The SDG&E Property that the Site occurs on is Assessor's parcel numbers 110-072-26. A list of current Assessor's parcel numbers and owner's names and addresses for parcels within 1,000 feet of the Site and 500 feet of project linear facilities is included in Appendix 1-A.

The Site is located in rural north San Diego County about five miles east of the City of Fallbrook and approximately two miles west of the community of Pala. The Site occurs at an elevation of approximately 360 to 440 feet above mean sea level on a gently sloping (approximately 10 %) old alluvial fan surface. The Site does not have any undisturbed natural habitat. The majority of the site has been used for agriculture and is occupied by a former citrus grove. A fenced SDG&E storage area occurs just south of the Site on the adjacent parcel, and is an area that will be temporary used for construction laydown.

North of the Site, the ground slopes uphill to a ridgeline that surrounds the site to the northeast, north and west, at elevations of up to 1,700 feet. The ridgeline and other local terrain prevent views of the Site from any substantial distance. The area is not visible from any regional population center or major transportation corridor such as I-15.

South of the site, on the opposite side of SR 76, is a former aggregate mine within the San Luis Rey River bed (Figure 1.1-3), where ground water intercepts the mine pits forming ponds. The mine property has recently been acquired by the Pala Band of Mission Indians, and the Tribe has no plans for further development.

## 1.6 PROJECT ALTERNATIVES

A wide range of alternatives to the Project were considered to determine if they could meet the basic project objective while reducing overall environmental impacts, or reducing or eliminating any significant environmental impact. None of the alternatives considered would eliminate or reduce a significant environmental impact, because the proposed Project includes design and mitigation measures that will result in environmental impacts that are less than significant.

Alternatives considered including: no project, alternative sites, water supply and cooling technology alternatives, electrical transmission alternatives, and generation technology alternatives. The proposed Project was selected and designed to comply with all applicable LORS and to respond to the RFO.

The No Project alternative was rejected because it would leave the local electric transmission system vulnerable during times of high demand.

Two sites were evaluated for the Project: the proposed Orange Grove Project Site, and the “Rainbow” site, located about 4 miles to the north. Both Sites are in the local area since the RFO is for local power generation to reinforce the local grid, and both sites are owned by SDG&E and were identified as alternatives in the RFO. The selected Site was determined to be favorable based on the need for lesser infrastructure improvements and more favorable access. Access issues at the alternative site would pose challenges beyond the selected Site and ultimately could prove to make the alternative site not feasible. In addition, the alternative site would result in a need for additional infrastructure improvements compared to the proposed project, including construction of a new substation, whereas the proposed project requires only relatively minor upgrades to an existing substation. In addition, the alternative site does not have a favorable gas pipeline route. For these reasons, the alternative site was rejected.

Water supply and cooling technology alternatives were evaluated to determine if: (1) use of fresh water could be avoided; and (2) an alternative cooling technology could be implemented that would reduce the Project’s fresh water consumption. Based on an evaluation of alternatives, it was determined that there were no feasible alternatives to the use of fresh water. During operations, Orange Grove Energy will continue to evaluate potential non-fresh alternative water source opportunities and will implement an alternative water supply if an appropriate supply becomes available.

Alternatives cooling technologies evaluated include air cooling and hybrid wet/dry cooling. The proposed Project will utilize a packaged wet cooling tower for only the air inlet chiller system. In order to minimize water consumption, the Project already incorporates air cooling for the fuel gas compressors and generator lube oil systems. While dry cooling could reduce plant water consumption by about one-quarter, air cooling for the inlet chiller would reduce net plant output during hot weather when it is needed most. Hybrid cooling would have water consumption and plant performance intermediate to the Project and the dry cooling alternative. Dry or hybrid cooling would decrease the plant’s efficiency and would increase the project’s disturbance footprint and visual impacts. Orange Grove Energy has evaluated alternative technologies carefully, along with Project objectives, and CEC and State Water Resources Control Board (SWRCB) policies for fresh water use in cooling for power plants. Considering measures integrated in the Project design to reduce water use to that minimally essential for the citizens of the State, and considering there are no feasible non-fresh water sources, the project will be consistent with CEC and SWRCB policies.

Electric transmission alternatives were evaluated and it was determined that the proposed configuration of interconnecting at the 69 kV Pala substation would require the least amount of infrastructure improvement. The proposed interconnection route is short and will be underground on SDG&E property. The Pala substation is a relatively new substation and has an open position for the new generating capacity. Alternative transmission options would involve above ground lines and/or new substations. A 230 kV circuit occurs near the Site, but does not enter the Pala substation. Connection with the 230 kV circuit would require above ground lines and a new substation.

Generation technologies considered were those that could provide rapidly available peak or mid-merit power to meet, as closely as practical, the stated needs of the SDG&E RFO. The alternatives considered included other fuels, ranging from coal and biomass to oil and waste

fuels. These fuels, however, do not provide the project with the environmental benefits of natural gas, and were rejected. Alternative technologies for power generation were also considered. These included solar, wind, hydroelectric, nuclear, and fuel cell generation, all of which were determined to be cost prohibitive and infeasible for this project. In addition, bio- diesel was determined to be infeasible as its use would not comply with air quality limits, and fuel supply is limited. Combined-cycle technology was eliminated because it would increase the plant's water consumption, disturbance footprint, and visual impact. Other technologies involving steam were rejected due to increased water consumption and ramp rates that were not suited to needs identified in the RFO. Alternative gas turbine technologies were found less favorable from the perspective of design outputs poorly matched with the RFO, increased water consumption, or technology risks.

The proposed CTG will use water injection to the turbine in order to reduce NO<sub>x</sub> formation, and a SCR system to further control NO<sub>x</sub> emissions. CO and VOC emissions will be controlled by an oxidation catalyst system. This control strategy for NO<sub>x</sub>, CO and VOC emissions is widely used in CTG projects and has a demonstrated track record of success in the industry. For this reason, both the regulatory community and gas turbine manufacturers recognize this combination of technologies as the BACT standard. Two emerging technologies received consideration in the Project. XONON is a flameless catalytic system for NO<sub>x</sub> emissions control. This technology was rejected because it is not proven on a large scale commercial turbine, and the technology is not offered for the LM6000 series. SCONOX is another new technology for NO<sub>x</sub> emissions control that was rejected because it is not compatible with the expected exhaust temperature for the LM6000 turbine technology selected for the Project.

## 1.7 ENVIRONMENTAL CONSIDERATIONS

Baseline environmental conditions and potential environmental impacts of the Project were investigated and evaluated for each of the environmental resource areas identified by California Environmental Quality Act guidelines and CEC regulations. Project design measures and Project features for compliance with applicable Laws, Ordinances Regulations and Standards (LORS) were evaluated and additional mitigation was identified where needed to assure that Project impacts will be less than significant. Cumulative impacts also were evaluated and based on significance criteria developed from CEQA and responsible agency guidance, cumulative impacts in each environmental resource area were determined to be less than significant. A summary of project impacts to each resource area is provided in the following subsections.

### 1.7.1 Air Quality

The air quality modeling results using EPA approved method and local meteorological data have shown that the Project will conform to the federal and state ambient air quality standards, and the San Diego Regional Air Quality Strategy. Emission estimates for various phases of the project were also below the significance thresholds established by EPA, the San Diego Air Pollution Control District (SDAPCD) and the San Diego County Department of Planning and Land Use (DPLU). The project is therefore expected to have less than significant impact.

The Project will comply with all requirements established by the SDAPCD including BACT, offsets and continuous emission monitoring systems. The Project will have no impact on any sensitive source and will not cause any objectionable odor.

### **1.7.2 Geologic Resources and Hazards**

The Project will not impact any important geologic resource. Furthermore, the Site is not particularly prone to any geologic hazard. Ground shaking from regional earthquakes could occur during the life of the Project, but the facility will be constructed to withstand anticipated ground motions. The closest active fault is the Elsinore Fault, located approximately 5 miles to the northeast. The Site is located on very old (500,000 to 2 million year old) alluvium that is well-indurated, and there is no shallow ground water or other condition that would make the soils at the Site susceptible to liquefaction, lateral spreading or other ground failure. Impacts of the Project in the area of geologic hazards will be less than significant.

### **1.7.3 Agriculture and Soils**

The Project will not impact any important agricultural land. The Site is located on lands zoned for agricultural use and within an agricultural preserve, but the lands are not under Williamson Act contract. The Site and portions of the surrounding lands where disturbance will occur is occupied by a former citrus orchard that has not been maintained in at least 5 years. As part of evaluations conducted for the Project, the Site lands were evaluated for their agricultural importance according to the San Diego County DPLU Local Agricultural Resource Assessment (LARA) model and results show that the Site lands lack two of three required factors (soil and water) for important farmland. The Site lands currently are mapped by the California Department of Conservation (CDC) as Unique Farmland due to the presence of the former orchard, but the CDC is planning to remove this designation in its 2006 update since the orchards have not produced for three CDC biennial mapping cycles. Furthermore, the power plant will not conflict with other agricultural uses in the area. The Project includes design measures, and LORS are in place, to minimize soil loss from erosion. Overall, the analysis in this Application demonstrates that the impacts of the Project to agriculture and soils resources will be less than significant.

### **1.7.4 Water Resources**

Plant operations will use an average of 73 gpm (117 acre-feet per year) of water if the maximum permitted hours of operation occur each year. The water will be supplied by the Rainbow Municipal Water District. The Project will not use ground water, and project design measures and LORS are in place that will protect surface and ground water quality. The Project is designed for zero discharge of process wastewater. Water from wash-down, water treatment reject, and other industrial sources will be stored in a tank and trucked offsite to a licensed facility for treatment and recycling. Sanitary wastewater will be managed using an onsite sanitary leach field designed in accordance with County requirements. Alternatively, if adequate percolation rates are not confirmed by geotechnical testing, sanitary wastewater will be stored in a sanitary holding tank and trucked offsite to a licensed facility for treatment and recycling. Storm water discharges during construction will comply with the State General Permit for storm water discharges from construction sites. During operations, storm water from the Site will be

discharged under the County's MS4 permit and will be in compliance with County requirements. The Site storm water management system includes a retention/detention basin to capture runoff from most storms. Storm water will evaporate and infiltrate at the retention/detention basin and will have a minor beneficial effect on water resources by decreasing peak storm flows and increasing ground water recharge. The drainage system will be designed to comply with County requirements to manage the 100-year storm runoff to maintain or reduce pre-development downstream erosion. DPLU will require a Storm Water Management Plan and a final grading plan as part of the Major Use Permit process, and will confirm that the Project meets County performance requirements. Overall, the analysis in this Application demonstrates that the impacts of the Project to water resources will be less than significant.

### **1.7.5 Biological Resources**

Biological surveys have not identified any threatened or endangered species in areas that will be disturbed by the Project. The only sensitive species known to be impacted is one established Engelmann Oak (*Quercus engelmannii*) tree and several seedlings. These trees are scattered throughout the former orchard and are not part of any oak woodland, and landscaping associated with the Project will result in a net increase for this species. The Project disturbance footprint is entirely within previously disturbed ground that is currently urbanized or occupied by non-native vegetation except for approximately 0.6 acres of disturbed Diegan coastal sage scrub. The approximately 0.6 acres of disturbed coastal sage scrub is the only natural habitat that will be directly impacted and the disturbance will be de minimus under DPLU guidance. Project planting will result in a net increase of native plants and habitat that will provide higher habitat value than the disturbed lands, such that there will be no impact of habitat loss. Indirect effects including migration path, noise and light impacts to wildlife were also evaluated and found to be less than significant. The Project will be consistent with applicable policies and ordinances and other applicable LORS for biological resources. Overall, the analysis in this Application demonstrates that the impacts of the Project to biological resources will be less than significant.

### **1.7.6 Cultural Resources**

Based on records searches and a survey of the Site and linear facility corridors, no cultural resources are known to occur within the Project disturbance footprint. There are recorded sensitive cultural sites near the Site, and the Project has been designed to avoid impacts to these resources as they are known. Testing of previously documented sensitive sites near construction disturbance areas will occur to determine if there are potentially unavoidable impacts. A cultural resource research design plan will be developed prior to testing. Implementation of the mitigation measures outlined in the research design will assure that impacts to cultural resources are less than significant.

Native American consultation has been initiated with the Native American Heritage Commission and Native American Tribes. The Pala Band of Mission Indians has indicated that the Site is within territory that the Tribe considers its Traditional Use Area, and has requested updates as the project progresses. The Tribe has recommended that Approved Cultural Monitors be present on site during project archaeological surveys and ground disturbing activities. Orange Grove Energy has incorporated this recommendation as a project design feature.

### **1.7.7 Paleontological Resources**

Based on records searches and field survey, no paleontological resources are known to occur within the Project disturbance footprint. Monitoring will be conducted by a qualified person to observe a minimum of 50 percent of the excavation that occurs in the very old alluvial unit (500,000 to 1 million years old) that underlies the Site. No impacts are anticipated. If monitoring results in important paleontological resources being discovered, then work will be halted in the area until a Paleontological Resource Impact Monitoring and Mitigation Program (PRIMMP) is developed in accordance with DPLU requirements and implemented. Considering these factors, the impact to paleontological resources will be less than significant.

### **1.7.8 Land Use**

The Site is located in a rural area on lands zoned for general agriculture and designated as agriculture preserve. The Site is not under Williamson Act contract and the proposed use will be consistent with the Williamson Act. The proposed Project is a Civil Use type under the County zoning ordinance and is allowed with a Major Use Permit. The Applicant is working with DPLU as the Major Use Permit is being prepared. Based on review of County requirements and discussions with DPLU staff, the proposed use will be consistent with applicable LORS and will be consistent with zoning ordinance. The Project will not create land use conflicts nor have other significant land use impacts.

### **1.7.9 Socioeconomics**

The estimated \$85 million capital investment for the Project will provide socioeconomic benefits from construction through goods and services purchased, payroll, and taxes. An average workforce estimated at 70 people will occur over a 6-month construction period. Additional indirect benefits will occur from generated secondary demands for materials, goods and services. Construction payroll is estimated at \$5 million. An additional estimated \$5 million in non-payroll costs would be spent in San Diego County. Operations will generate additional socioeconomic benefits including approximately 6 full-time job positions and annual property taxes estimated to be approximately \$0.9 million based on the plant's initial value. An additional estimated \$0.2 million in taxes will be generated annually through estimated average annual spending of \$2.4 million for operations and maintenance materials and supplies.

The construction workforce will be short-term, and neither construction nor operations are expected to induce growth or require services beyond the existing infrastructure. The Site is within the Sphere of Influence of the North County Fire District and will be annexed into that District. The Project will be required to pay its full and fair share for of any facility of equipment need that it generates, which will mitigate the impact on fire services to a level that is less than significant. The Site is in an Urban-Wildland Interface Zone, and Orange Grove Energy is preparing a Fire Protection Plan for the Project to submit as part of the Major Use Permit Application.

An Environmental Justice Screening Analysis also was performed as part of socioeconomic impact analysis and demonstrates that the project will not significantly impact any minority or low impact population.

Overall, with mitigation for fire protection as described above, the Project will not have a significant adverse socioeconomic impact.

### **1.7.10 Traffic and Transportation**

For the 6-month period of Project construction, the estimated average construction vehicle volume is 71 vehicles per day. The peak month of construction will generate an estimated 84 trips per day. These vehicles will primarily access the site via SR 76 from Interstate 15 northbound and southbound from nearby and regional population centers. Traffic impact modeling shows that this level of traffic will not reduce existing levels of service. Furthermore, these impacts will be short term. For Project operations and maintenance, traffic generated by the project will be small, consisting of shift changes for the approximately 6 full time staff, and up to five deliveries per day. Long term cumulative traffic impacts will be mitigated to a level that is less than significant through Traffic Impact Fees. The Project will comply with applicable traffic and transportation LORS and impacts will be less than significant. There will be no impact to rail transportation, airports or air transportation, public transit, waterways, trails or bike routes.

### **1.7.11 Noise**

The Site is located just north of SR-76 in a rural area with few receptors. Three residential structures occur near a ridge line above the site approximately 0.4 to 0.6 miles northeast of the site that are considered the most sensitive receptor locations due to their proximity and local topography. The design basis for noise control is the most stringent noise level required by LORS. This design philosophy will ensure that the noise from this project will comply with the County of San Diego Noise Regulations, as well as the California Energy Commission (CEC) guideline for the late-night noise increase increment. Noise LORS will be met with a combination of project design features that optimize noise reduction and control from the expected major noise sources. Ambient noise monitoring was conducted for the Project, and modeling was performed to estimate anticipated noise levels from the Plant. Project construction noise levels will be below significance thresholds defined by County and CEC noise standards.

Operations noise levels will be below significance thresholds defined by County and CEC noise standards, with provisional conformance to the CEC significance threshold range of +5 dB to +10 dB for night time conditions at one sensitive receptor (the closest residence). For a peaking plant of this type, there would only be very rare instances wherein the CAISO would call for operations past 10 p.m. and are estimated to be on the order of 40 hours per year over a 20- to 40-day period in the hottest months. The operation of this plant beyond midnight would connote that there is a serious problem on the power grid, and such late-night operations could be categorized as “exceedingly rare.” For these occasions, there will be an estimated +9 dB increase in noise at the closest residence, and an estimated +5 dB or less noise increase at all other receptors. The +9 dB noise increase at the closest residence is near the top end of the range at which the impact must be considered on a project-specific basis to determine whether or not the impact is significant. The Project will utilize noise control technologies to minimize noise generation to the extent practical. In addition, the Project includes a proposal to offer and, if accepted, install noise reduction features at the closest residence to reduce the intrusion of noise to interior spaces. In addition, the Project will establish a telephone number for use by the public

to report any significant undesirable noise conditions associated with Project construction or operation, and will document, investigate, evaluate, and attempt to resolve all legitimate, project-related noise complaints. With these measures, noise impacts will be less than significant.

### **1.7.12 Visual Resources Analysis**

The Site is surrounded by topography that will block views of the Project except from within the immediate area, which has few receptors. The primary sensitive receptors will be three single-family rural houses that occur on a ridgeline approximately 0.4 to 0.6 miles to the northeast of the Site, and travelers on SR 76. Travelers on SR 76 will have a view of the Site for less than 0.5 minutes as they pass the Site. The Site is already disturbed land, and there are various prominent anthropogenic visual features in the nearby landscape, including an abandoned orchard, an electric substation, storage, debris scatters, greenhouses, and a large former aggregate mine. The Project includes planting native vegetation for visual screening and for stabilizing construction disturbances, so the Project will have a benefit of partially repairing existing visual impacts. The Site is not visible from any designated scenic route or recreation area. Detailed analysis of visual impacts is provided in this Application, including computer-generated simulations of the proposed power plant. Overall, the analysis demonstrates that the impacts of the Project to visual resources will be less than significant.

### **1.7.13 Waste Management**

Project construction, and operations and maintenance, will generate various waste streams typical for the industry. Orange Grove Energy will implement a waste minimization plan to reduce waste and maximize recycling. Project waste streams will be managed in accordance with applicable LORS. No significant impact is anticipated.

### **1.7.14 Hazardous Materials Handling**

Orange Grove Energy will implement accident prevention and response planning measures to reduce the risk associated with use and storage of hazardous materials. A Hazardous Materials Business Plan/Contingency Plan, developed in accordance with the California Code of Regulations (CCR), Titles 19 and 22, will be submitted to the County Health Department. A Spill Prevention, Control and Countermeasures (SPCC) Plan will be maintained onsite as required by Code of Federal Regulations Title 40, Part 112. Each of these plans includes measures designed to prevent or respond to discharges, spills, leaks or other incidents involving hazardous materials. Bulk hazardous material storage will be provided with secondary containment. Safety showers and eyewashes will be provided in appropriate chemical storage and use areas. Personnel who may potentially handle hazardous materials will be trained to perform their duties safely and to respond to emergency situations that may occur in the event of an accidental spill or release. A comprehensive hazard communication program will be implemented in accordance with OSHA requirements. There will be no hazardous materials used onsite in any quantity that would trigger the federal requirement for a Risk Management Plan (RMP). Aqueous ammonia is the only hazardous material that will be used onsite in a quantity that will require a RMP under CCR Title 19. Accidental release modeling included in this Application for aqueous ammonia demonstrates that the project will be eligible for a

Program 1 RMP. The Project will comply with applicable LORS for hazardous materials handling. No impact is expected.

### **1.7.15 Public Health**

The use of clean-burning natural gas fuel and emission control systems will keep potential health impacts below a level of significance. Potential health risks are comprehensively addressed in Section 6.16 of this Application and will be below significance thresholds. Because future public health risks will be below significance criteria, no impact is expected.

### **1.7.16 Worker Safety**

Worker safety is a priority for Orange Grove Energy. A comprehensive illness and injury prevention program will be implemented in accordance with Cal-OSHA requirements and other LORS. With implementation of these programs, worker safety impacts will be less than significant.

## **1.8 SUMMARY**

The Project will comply with all applicable LORS, and will help to meet the local energy capacity and reliability needs of the area and will result in environmental impacts that are less than significant. Where needed to assure that environmental impacts remain below significance thresholds, mitigation has been built in to the Project design as described in detail in subsequent sections of this Application.

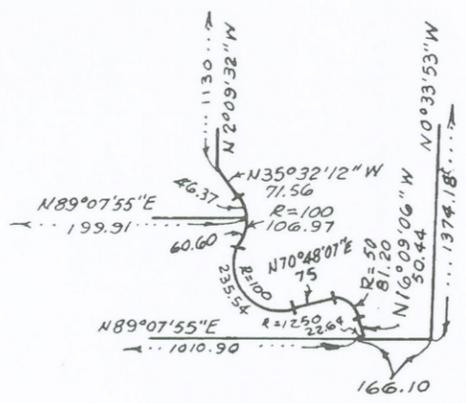
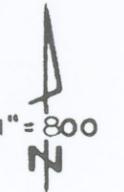
1-A. B

**APPENDIX 1A – ADJACENT PARCEL OWNERS NAMES AND ADDRESSES**

<u>Parcel Number</u> <b>1000</b> <u>Feet From the Site</u>	<u>OWNER NAME</u>	<u>OWNER CURRENT ADDRESS</u>
110-072-05	Prominence Partners	PO BOX 538 Fallbrook CA 92088
110-072-06	San Diego Gas & Electric	California State Assessed
110-072-18	Chung Kyung Hee & Jae Jin	209 Surfrider Way #G Oceanside CA 92054
110-072-19	W M Specialty Mortgage LLC C/O Countrywide Home Loans	400 Countrywide Way Simi Valley CA 93065
110-072-20	Chung Jae Yul & Choon Ho	10692 Pala Rd Pala CA 92059
110-072-22	Zaleschuk Victor S Trust 10-29-02	10693 Highway 76 Pala CA 92059
110-072-26	San Diego Gas & Electric	California State Assessed
110-072-27	Pala Band of Mission Indians C/O Giles & Co	1920 Felice Dr Escondido CA 92026
110-072-28	San Diego Gas & Electric	California State Assessed
110-072-29	Pala Band of Mission Indians C/O Giles & Co	1920 Felice Dr Escondido CA 92026
110-072-30	San Diego Gas & Electric	California State Assessed
110-072-31	Pala Band of Mission Indians C/O Giles & Co	1920 Felice Dr Escondido CA 92026
110-370-01	San Diego Gas & Electric	California State Assessed
110-370-02	Pala Band of Mission Indians	35008 Pala Temecula Rd # PMB50 Pala CA 92059
110-370-03	Pala Band of Mission Indians C/O Giles & Co	1920 Felice Dr Escondido CA 92026
110-370-04	Pala Band of Mission Indians C/O Giles & Co	1920 Felice Dr Escondido CA 92026
110-370-05	Pala Band of Mission Indians C/O Giles & Co	1920 Felice Dr Escondido CA 92026
110-370-06	Pala Band of Mission Indians C/O Giles & Co	1920 Felice Dr Escondido CA 92026
110-370-07	Pala Band of Mission Indians C/O Giles & Co	1920 Felice Dr Escondido CA 92026
110-370-13	Pala Band of Mission Indians C/O Giles & Co	1920 Felice Dr Escondido CA 92026
110-370-14	Pala Band of Mission Indians C/O Giles & Co	1920 Felice Dr Escondido CA 92026
110-150-02	San Diego Gas & Electric	California State Assessed
<u>Parcel Number</u> <b>500 Feet From</b> <u>Transmission</u> <u>Lines / Linear</u> <u>Facilities To</u> <u>Rice Canyon</u> <u>Road</u>	<u>OWNER NAME</u>	<u>OWNER CURRENT ADDRESS</u>
110-150-01	Gregory Canyon LTD	3 Emcarcadero Ctr #2360 San Francisco CA 94111
110-150-02	San Diego Gas & Electric	California State Assessed
110-150-43	Gregory Canyon LTD	3 Emcarcadero Ctr #2360 San Francisco CA 94111
110-150-44	Gregory Canyon LTD	3 Emcarcadero Ctr #2360 San Francisco CA 94111
110-150-45	Gregory Canyon LTD	3 Emcarcadero Ctr #2360 San Francisco CA 94111
110-150-46	Gregory Canyon LTD	3 Emcarcadero Ctr #2360 San Francisco CA 94111
110-150-24	Gregory Canyon LTD	3 Emcarcadero Ctr #2360 San Francisco CA 94111
110-150-25	Gregory Canyon LTD	3 Emcarcadero Ctr #2360 San Francisco CA 94111
110-362-08	Gregory Canyon LTD	3 Emcarcadero Ctr #2360 San Francisco CA 94111
110-362-10	Fritz Family Trust 1-20-1977	1253 Urania Ave Leucadia CA 92024
110-362-11	Fritz Family Trust 1-20-1977	1253 Urania Ave Leucadia CA 92024

<u>Parcel Number</u> <u>500 Feet From</u> <u>Transmission</u> <u>Lines / Linear</u> <u>Facilities To</u> <u>Rice Canyon</u> <u>Road</u>	<u>OWNER NAME</u>	<u>OWNER CURRENT ADDRESS</u>
128-420-01	McCarthy Revocable Trust 4-07-95 ET AL C/O Kathleen L McCarthy	10449 Bainbridge Ave Los Angeles CA 90024
128-470-08	Gregory Canyon LTD	3 Emcarcadero Ctr #2360 San Francisco CA 94111
128-470-09	Gregory Canyon LTD	3 Emcarcadero Ctr #2360 San Francisco CA 94111
128-470-18	Gregory Canyon LTD	3 Emcarcadero Ctr #2360 San Francisco CA 94111
128-010-34	Pankey Ranch LP	5328 Highway 76 Fallbrook CA 92028
128-010-35	McCarthy Revocable Trust 4-07-95 ET AL C/O Kathleen L McCarthy	10449 Bainbridge Ave Los Angeles CA 90024
<u>Parcel Number</u> <u>500 Feet From</u> <u>Water</u> <u>Pipeline Lateral</u>		
110-021-26	Greg & Nanette A Baker	1816 30th Ave West Seattle WA 98199
110-021-29	Oumar B & Julie A Sissoko	29887 Yorkton Rd Murrieta CA 92563
110-072-02	Cook Family Trust	2014 Lake Morena Dr Campo CA 91906
110-072-12	Avacado 45	1628 Torrey Pines Rd La Jolla CA 92037
110-072-13	Prominence Partners	PO BOX 538 Fallbrook CA 92088
110-072-14	Prominence Partners	PO BOX 538 Fallbrook CA 92088
110-072-15	Randall V Jones	36313 Pala Del Norte Rd Pala CA 92059
110-072-16	Gray Tesla	PO BOX 538 Fallbrook CA 92088
110-072-17	Gray Tesla	PO BOX 538 Fallbrook CA 92088





DETAIL 'A' - NO SCALE

7  
SHT 1

35  
SHT 1

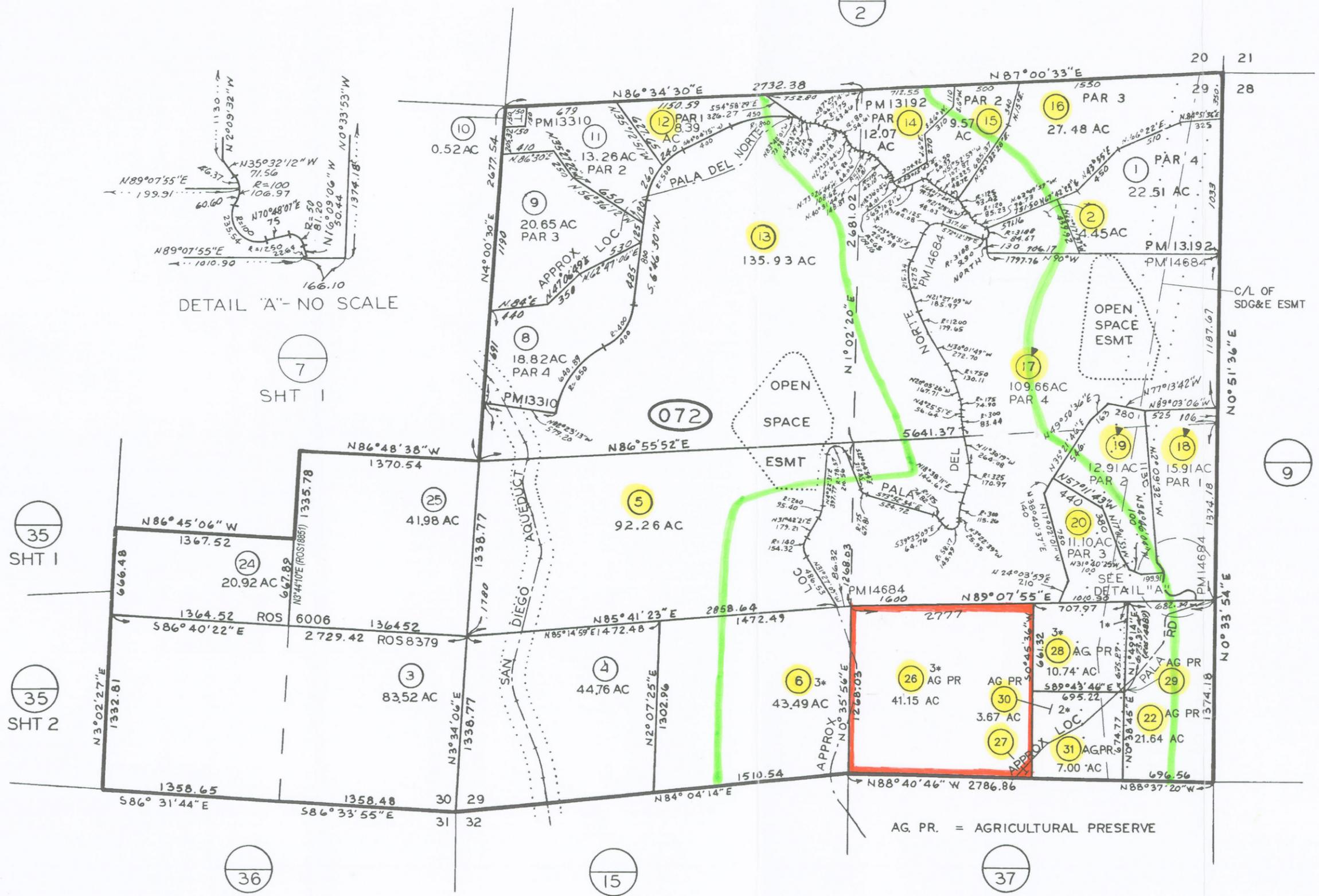
35  
SHT 2

36  
SHT 1

15

37

9



05/09/06 EBF ✓  
**CHANGES**

BLK	OLD	NEW	YR	CUT
070	VARIOUS	110-071-15	81	10006
070	6,22,43,45,48,50	DC FB/L CHG	81	5509
070	40,41	B/L CHANGE	81	5533
070	40	79,80	82	2257
	41,79	81-85	83	2121
	80	81,87,84	84	2557 CANC
070	82	88-91	84	3802
	86	92-95	85	1201
	81,84	96-99	87	1851
	48	SAME	96	5525
	91	072	96	1888 RC
072	VARIOUS	3-25	96	10041
	7,21,23	26-31	99	1077
	1,16-20,22,28-31	SAME & B/L CHG	99	5595

1\* PAR 5 SBE MAP 141-37-91A  
2\* PAR 6 SBE MAP 141-37-91A  
3\* POR PAR 8 SBE MAP 141-37-91A

AG. PR. = AGRICULTURAL PRESERVE

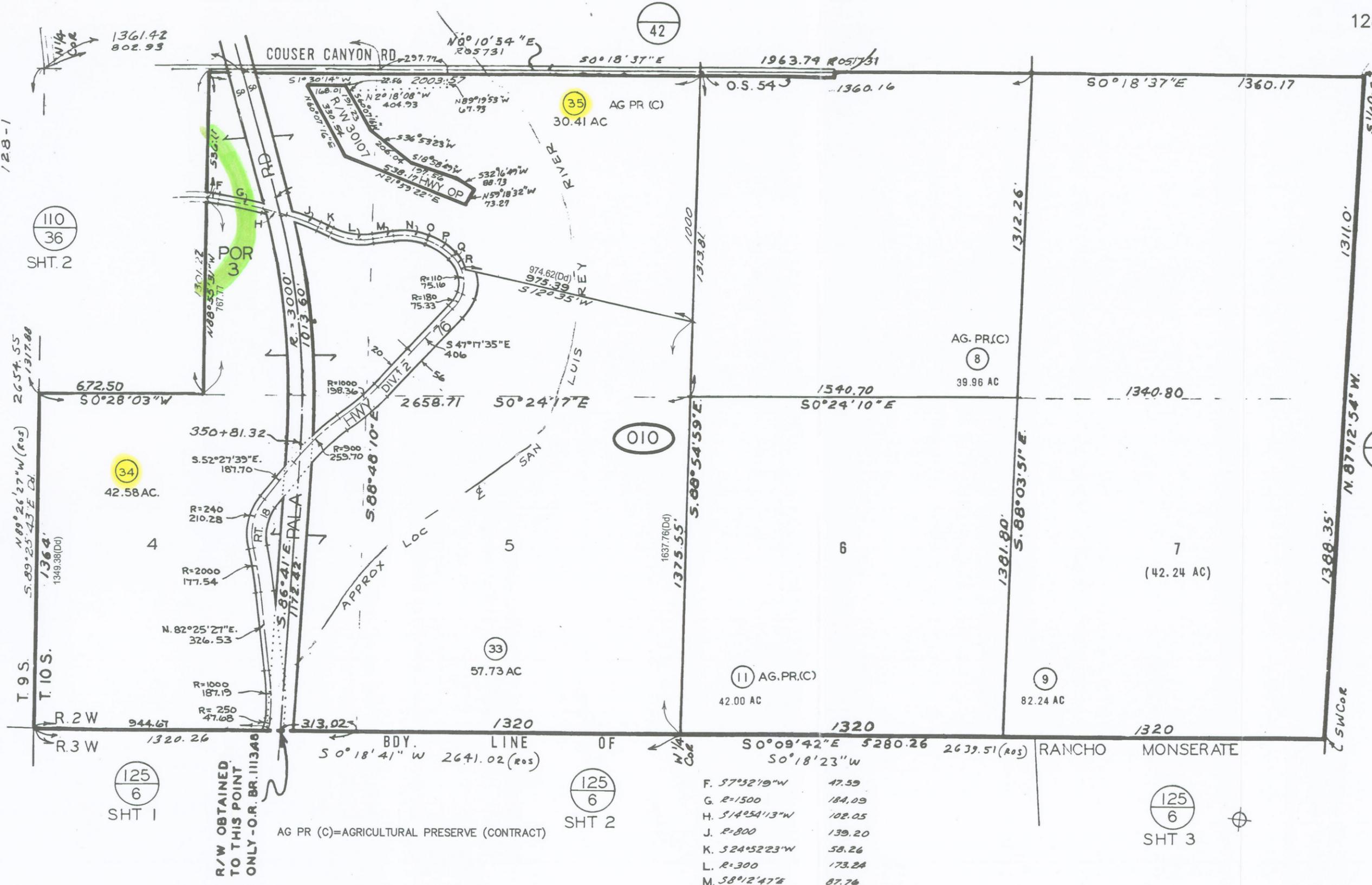
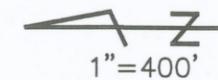
SEC 29 - T9S-R2W  
SEC 30 - T9S-R2W - SE 1/4 POR  
ROS 8351, 8379, 14889, 15058, 15610, 18851



THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSES ONLY. NO LIABILITY IS ASSUMED FOR THE ACCURACY OF THE DATA SHOWN. ASSESSOR'S PARCELS MAY NOT COMPLY WITH LOCAL SUBDIVISION OR BUILDING ORDINANCES.







5/5/2004 SM ✓

CHANGES				
BLK	OLD	NEW	YR	CUT
010	15	57-97	67	5417
		266-27		
		72-ONLY		
	19121	28-29	79	1292 CC
	14-16-21			
	24-27	29-32		
	32	R0510-342	87	1486
		-10811		
	30431	R0510-342	88	1319 CANC
		1811 CHG		
	29	PART OF	97	1452 CANC
		4-35		

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- F. S7°52'19"W 47.59
- G. R=1500 184.09
- H. S14°54'13"W 102.05
- J. R=800 139.20
- K. S24°52'23"W 58.26
- L. R=300 173.24
- M. S8°12'47"E 87.76
- N. R=275 140.18
- O. S20°59'33"W 4.20
- P. R=300 115.34
- Q. S43°01'13"W 1.97
- R. R=110 51

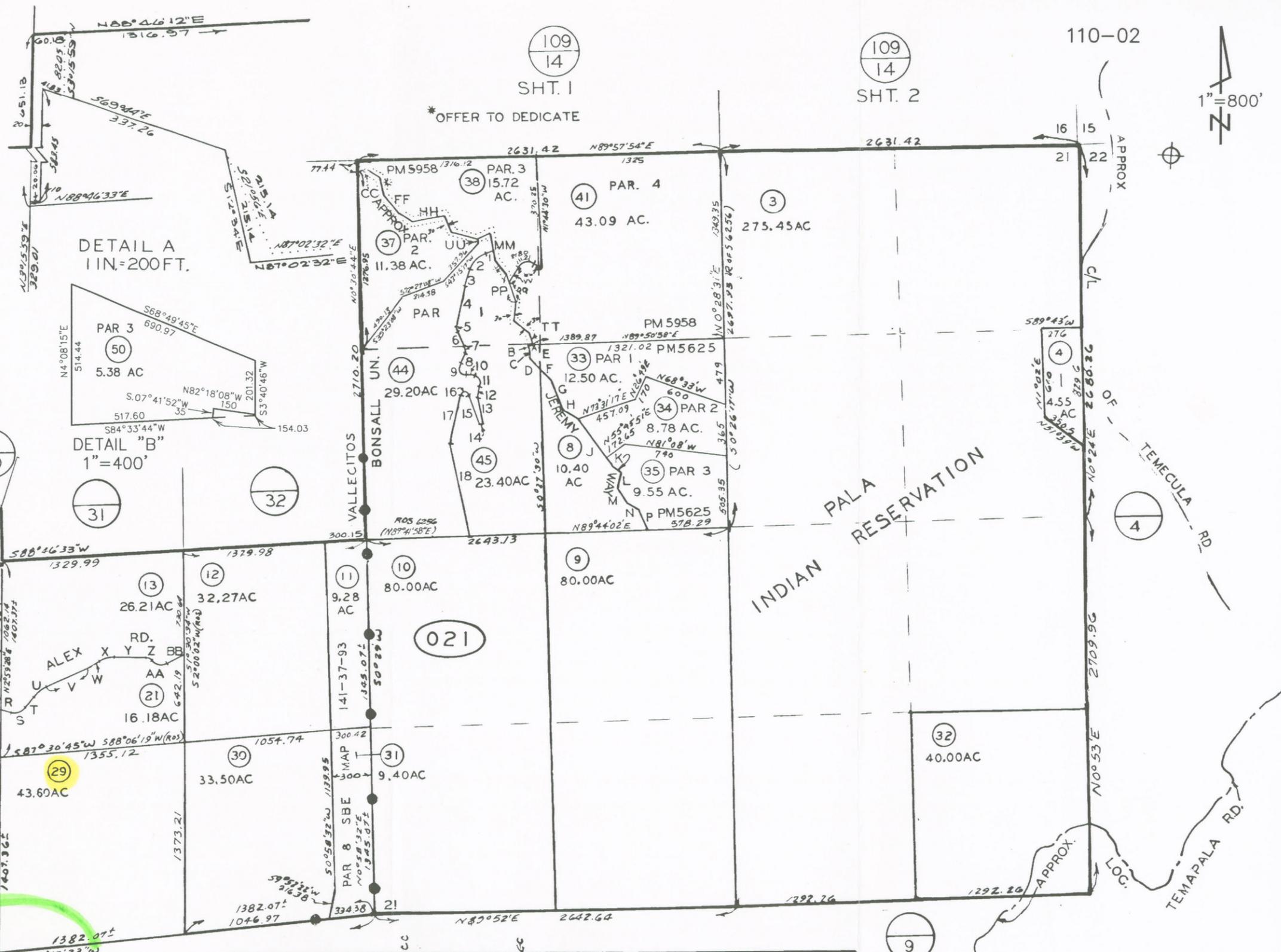




1. S 68°39'12"W 56.49  
 2. R=180 148.84  
 3. S 21°16'37"W 126.86  
 4. S 13°07'57"W 291.35  
 5. R=50 32.63  
 6. S 24°15'48"E 114.67  
 7. R=60 41.03  
 8. S 14°55'07"W 83.58  
 9. R=50 69.84  
 10. S 65°06'53"E 71.51  
 11. R=50 67.67  
 12. S 12°24'57"W 99.03  
 13. S 10°28'18"E 182.85  
 14. S 79°31'42"W 24.97  
 15. N 20°39'43"W 226.82  
 16. R=20 35.68  
 17. S 14°08'05"W 369.01  
 18. S 09°58'29"E 694.70

AA R=81.78 112.85 A 589°48'40"W 68.84  
 BB N64°11'55"E 156.43 B N16°12'30"W 36.05  
 CC N77°38'31"E 49.88 C N10°39'20"W 64.18  
 DD S56°45'12"E 118 D N38°21'30"W 111.42  
 EE S10°35'42"E 122.39 E S0°27'39"N 185.31  
 FF S38°49'42"E 166.89 F N38°21'30"W (CAL) 110.63  
 GG S55°37'12"E 123.58 G N19°44'40"W 215.36  
 HH N80°55'08"E 237.48 H N58°48'W 121.55  
 JJ S24°03'12"E 126.72 J N34°31'20"W 417.10  
 KK S72°10'12"E 188.15 K N54°00'10"W 96.91  
 LL N65°10'38"E 96.69 L N16°25'20"E 114.03  
 MM S10°45'42"E 178 M N30°26'40"W 119.37  
 NN S39°09'32"E 134.54 N N59°31'40"W 101.78  
 PP S18°53'42"E 215.87 P N21°31'40"W 157.20  
 QQ S18°53'42"E 157.87 R S71°20'35"E 86.97  
 RR S10°11'18"W 124.61 S R=100 120.59  
 SS S50°05'02"E 153.28 T N39°33'45"E 102.73  
 TT S16°10'12"E 83.29 U R=250 121.12  
 UU S3°34'43"E 32.22 V N67°19'15"E 290.46  
 VV N36°40'E 130 W N61°10'45"E 127.18  
 WW S63°41'E 104.32 X R=200 114.21  
 Y S86°06'25"E 235.71  
 Z R=50 42.91

110-243



DETAIL NO SCALE SHT 2

51  
1-4-73  
SAN DIEGO COUNTY  
ASSESSOR'S MAP  
BOOK 110 PAGE 02

THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSES ONLY. NO LIABILITY IS ASSUMED FOR THE ACCURACY OF THE DATA SHOWN. ASSESSOR'S PARCELS MAY NOT COMPLY WITH LOCAL SUBDIVISION OR BUILDING ORDINANCES.

09/25/2003 EK

CHANGES	BLK	OLD	NEW	YR	CUT
	PICK-UP	75	72	4240	
	PICK-UP	76	73	3554	
	VARIOUS	77-79	73	1093	
	418	300-7	73	4823	
	42	8081	74	507	
	39	82-83	74	508	
	5865	84-85	74		
	7178				
	306	7	86	87	75
	021	VARIOUS	1-32	76	10632
	536	33-35	77	3442	
	142	36-40	78	1109	
	24	AC. 1-1	80	5541	
	31140	41	81	3408	
	23	42843	91	2406	
	7	11445	97	1165	
	7&36	44&45	97	1165	
	17	46-49	02	1737	
	48	50&51	04	1754	
	47&51	52	04	1908	

SEC 20-T9S-R2W POR  
 SEC 21-T9S-R2W  
 ROS 6256, 8350, 8830, 8835