City of Oxnard

Coastal Apartment Homes Project and Coastal Senior / Assisted Living Project

Final
Initial Study/ Mitigated Negative Declaration

August 2015

rincon

E n v i r o n m e n t a l   S c i e n t i s t s   P l a n n e r s   E n g i n e e r s

Coastal Apartment Homes Project and Coastal Senior/Assisted Living Project

Final
Initial Study/Mitigated Negative Declaration

Prepared for:

City of Oxnard
Development Services Department
Planning Division
214 South C Street
Oxnard, CA 93030

Prepared by:

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Ventura, California 93003

August 2015

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TABLE OF CONTENTS

Page

List of Figures

List of Tables

Attachments/Appendices

INITIAL STUDY
MITIGATED NEGATIVE DECLARATION NO. 2015-01

COASTAL APARTMENT HOMES PROJECT

and

COASTAL SENIOR/ASSISTED LIVING PROJECT

June 2015

Introduction

This *Initial Study* has been prepared in accordance with relevant provisions of the *California Environmental Quality Act (CEQA) of 1970*, as amended, and the CEQA *Guidelines* as revised. *Section 15063(c)* of the CEQA *Guidelines* indicates that the purposes of an Initial Study are to:

1. Provide the Lead Agency (i.e., the City of Oxnard) with information to use as the basis for deciding whether to prepare an Environmental Impact Report (EIR) or Negative Declaration;

2. Enable an applicant or Lead Agency to modify a project, mitigating adverse impacts before an EIR is prepared, thereby enabling the project to quality for a Negative Declaration;

3. Assist the preparation of an EIR, if one is required, by:
   - Focusing the EIR on the effects determined to be significant;
   - Identifying the effects determined not to be significant;
   - Explaining the reasons why potentially significant effects would not be significant; and
   - Identifying whether a program EIR, tiering, or another appropriate process can be used for analysis of the project's environmental effects.

4. Facilitate environmental assessment early in the design of a project;

5. Provide documentation of the factual basis for the finding in a Negative Declaration that a project will not have a significant effect on the environment;

6. Eliminate unnecessary CEQA documentation; and

7. Determine whether a previously prepared CEQA documentation(s) could be used with the project.

The City of Oxnard *Threshold Guidelines - Initial Study Assessment* (February 1995) was used along with other pertinent information for preparing the *Initial Study* for the two projects.

The purpose of the Threshold Guidelines is to inform the public, project applicants, consultants and City staff of the threshold criteria and standard methodology used in determining whether or not a project (individually or cumulatively) could have a significant effect on the environment. A project could have impacts but if they are below the significance threshold, the impacts are not considered significant and do not require mitigation. Furthermore, the Threshold Guidelines provide instructions for completing the Initial Study and determining the type of environmental document required for individual projects.

Determining the significance of impacts is often controversial because the decision requires staff to use their judgment regarding a subject that is not clearly defined by the law. The State CEQA G*uidelines* define the term "significant impact on the environment" as a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project. However, there is no iron-clad definition of what constitutes a substantial change because the significance of an activity may vary according to location. When other agencies have jurisdiction over a given site, the project proponent will have to meet the design, mitigation, and monitoring requirements.

This MND incorporates by reference the City of Oxnard 2030 General Plan Program EIR which is available on the City's website (http://developmentservices.cityofoxnard .org/7/76/961/) and incorporated by reference for cumulative impacts defined as the buildout of the City of Oxnard consistent with the 2030 General Plan with implementation of mitigations and application of applicable Codes and uniformly applied development standards.

The Draft MND was circulated for a 20-day public review period that began on June 4, 2015 and concluded on June 20, 2015. Responses to comments recieved are included as Appendix K of this document. Where a comment resulted in a change to the Draft MND text, a notation is made in the response indicating that the text is revised. Changes in text are signified by strikethrough where text is removed and by underlined font where text is added.

CITY OF OXNARD

INITIAL STUDY ENVIRONMENTAL CHECKLIST FORM

1. Project titles:	Coastal Apartments Homes Project and Coastal Senior/Assisted Living Project
2. Lead agency name and address:	City of Oxnard Development Services Department Planning Division 214 South C Street Oxnard, CA 93030
3. Contact person and phone number:	Kathleen Mallory, AICP, Project Planner (805) 512-9800
4. Project locations:	2295 Etting Road (APNs 225-0-014-160 and 225-0-014-190) in the Southeast Community of the City of Oxnard. The projects are located in the Mar Vista Neighborhood. Figure 1 provides the regional location and Figure 2 provides an aerial view of the two properties before the structures and vegetation onsite were removed.
5. Project applicant's/sponsor's name and address:	Dansk Investments Vince Daly 6591 Collins, Ste E11 Moorpark, CA 93021 Phone: (805) 407-3400
6. 2030 General Plan designation:	Low Medium Density Residential [7-12 units per acre - RLM]
7. Zoning:	C-R (Community Reserve)

8. Project Descriptions:

Because the two adjacent projects are proposed by the same developer located on a 7.28 acre site, and CEQA does not allow segmenting a project, the MND covers both projects which are described individually below:

1) The Coastal Apartment Homes (Apartment Homes) are an 83,121 square foot multi-family mixed-income apartment community containing 23 one-bedroom units, 70 two-bedroom units, and 8 three-bedroom units on a 6.23 acre site. The proposed density for this 101-unit apartment building project is 17 dwelling units per acre (du/acre). The proposed project includes a General Plan consistency zone change from the current

zoning of C-R to R-2-PD (Multiple Family Zone), which allows a maximum of 12 du/acre or a total of 75 units on the 6.23 acre site. The proposed project would have a Planned Development overlay, and is eligible for a 35% Density Bonus, which would allow an additional 26 units, for a total of 101 dwelling units. The proposed maximum building height with architectural tower elements would be 42'4". The project also includes a two-story community recreation building, encompassing a conference room, gym, TV room, and lounge as well as a manager's apartment. The private courtyards include exterior kitchen/ BBQ areas, outdoor seating/flagpole area, an exterior fireplace, various game courts, and craft rooms.

The Apartments would include fifteen of the 101 units (15%) designated for low income households (80% AMI); the remaining 86 units will be rented at market rate and the project will include one manager unit. The affordable units would be distributed throughout the project. The price and unit number would be guaranteed by a recorded document for the time period required by applicable state density bonus law.

The Apartments would be designed to LEED standards, incorporating the latest energy saving building technologies, water saving plumbing fixtures, and ENERGY STAR appliances. The site landscape design meets and exceeds the 25% water reduction requirements over current city standards by incorporating innovative water saving design features.

A total of 229 off-street parking spaces would be provided for residents and visitors, including 10 ADA-accessible spaces. There would be 194 spaces for residents, 35 spaces for visitors (22 shared with Senior Living Project), 4 motorcycling parking spaces and 3 loading zone spaces. Bicycle parking, including a bike rack and bike locker, would be provided per City of Oxnard municipal code. An electric vehicle (EV) combined parking space and charging station will also be provided.

2) The Coastal Senior/Assisted Living Project (Senior Project) would consist of a 51,589 square foot facility, including approximately 70 suites comprised of 17 memory care units, 44 studio units and 9 one-bedroom units. The proposed maximum building height with architectural tower elements would be 36 feet. Site and building amenities would include two resident dining rooms, commercial kitchen/food service, lounges, craft rooms, TV rooms, card rooms, movie theater, gym, laundry amenities, computer lounges, library, salon, visiting doctor's office, multipurpose rooms, and exterior with patios, shared gardens, gazebo, fruit grove, and shared lawn area with the adjacent Apartment property. Residents will be served meals three times a day in the restaurant-style dining rooms. There would also be employee focused areas such as a work area, an office, and a general manager's office. The building will be designed to LEED standards with water savings plumbing and site landscape design requirements.

The Senior Living Project would provide a total of 16 parking spaces, including 7 standard parking spaces, 1 accessible space, and 8 visitor spaces, and would be supplemented with 22 visitor parking spaces located on the Apartment property and shared with the Apartments. Additionally, 1 loading zone parking space would be provided.

A site plan that illustrates both projects is provided in Figure 3. Elevations of the proposed Apartments are provided in Figure 4a and elevations of the Senior Living Project are provided in Figure 4b.

9. Surrounding land uses and setting:

The project site is within Southeast Community of the City of Oxnard in the Mar Vista Neighborhood. The site is bordered by the following uses:

North: East Pleasant Valley Road and the Ocean-Aire Mobile Home mobile home park

East: The Colony mobile home park and single-family residences

South: Etting Road, single-family residential, Oceanview School District Offices and Ocean View Junior High School and Mar Vista Elementary School

West: The Masonic Cemetery

The project site previously contained a mid-20th century farm complex composed of a residence, four farm buildings, an avocado orchard, and Blue Gum Tree windrows on Pleasant Valley Road and Etting Road frontages. In the summer of 2014, the then owner removed all structures and the avocado orchard and the site which remains vacant and fallow, with a chain link fencing restricting access. The northwest portion of the site contains multiple stockpiles of clean fill material. The Blue Gum Tree windrows remain along the Pleasant Valley Road and Etting Road frontages.

10. Required Entitlements:

Approval of a Lot Line Adjustment was granted in May 2015 to adjust development lines to facilitate development.

The proposed projects involve the following entitlement permits:

Apartment Homes:

1. Zone Change (PZ 14-570-02) from C-R to R-2-PD. The Zone Change will be initiated by the City to bring the property into compliance with the 2030 General Plan designation of Residential Low Medium (RLM).
2. Density Bonus(PZ 14-535-01) to allow a 35% increase in density, parking accommodation, and the following concessions:
   a. Increase in building height and
   b. Increase in unit count per building.
3. Planned Development Permit (PZ 14-540-01)
   a. Site of patio and patio dimensions, 25% reduction, minimum 75 square feet and one dimension minimum 7.5′ (min. 10′ x 7.5′)
   b. Size of dwelling unit, 5% to 20% reduction in the per bedroom unit sq. ftg.
   c. Storage space, 25% reduction

Senior/Assisted Living Project:

1. Zone change from C-R to R-2-PD. The Zone Change will be initiated by the City to bring the property into compliance with the 2030 General Plan designation of Residential Low Medium (RLM).
2. Zone Text Amendment (PZ 14-580-01) to add "Senior and/or Assisted Living Residential Facility" to the Oxnard City Code. The Zone Text Amendment will be initiated by the City to accommodate construction of senior and/or assisted living residential facilities.
3. Special Use Permit (PZ 14-500-04) for a Planned Residential Group (PRG) to accommodate the "Senior and/or Assisted Living Residential Facility" use, as amended with the proposed ZTA in the R-2 zone. Administrative variations from the basic zone R-2-PD zone under the PRG are:
   a. Increase building height
   b. Increase density
   c. Decrease dwelling unit size
   d. Decrease parking requirement
   e. Waive storage area requirement
   f. Waive patio/balcony requirement

11. Cumulative Projects:

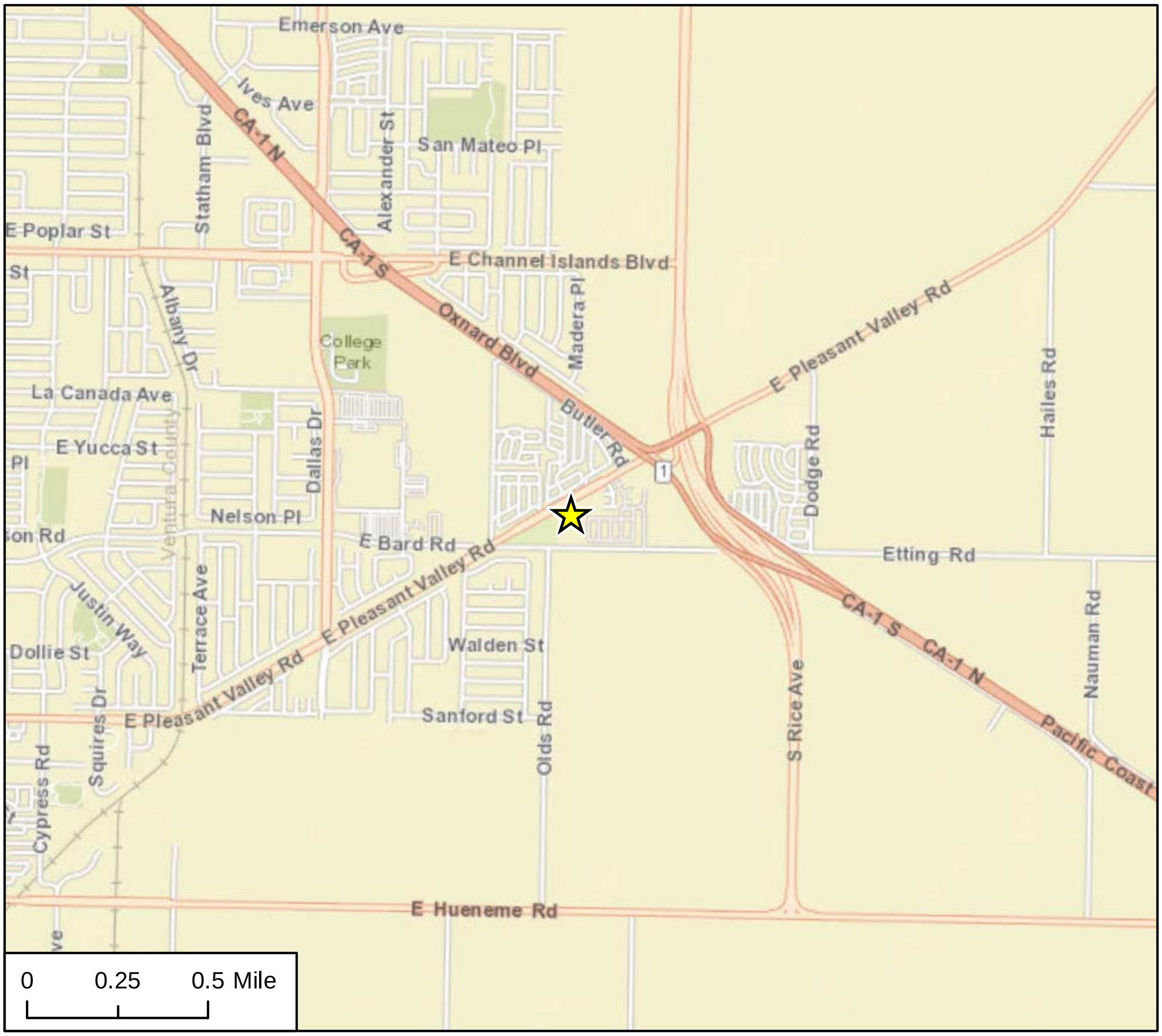
The "General Plan buildout" approach is used as the cumulative project description for the two projects as the projects are adjacent to and functionally integrated with surrounding residential uses in the Mar Vista neighborhood in the Southeast Community of Oxnard and represents the City's 2030 General Plan anticipated growth in this area.

12. City of Oxnard 2030 General Plan:

The proposed projects are consistent with the 2030 General Plan adopted in October 2011. The project site was designated for Low Medium Density Residential in the 2030 General Plan. However, the project site is currently zoned for C-R (Community Reserve) and the City is initiating a zone change to R-2-PD to bring the site in compliance with the 2030 General Plan. The certified 2030 General Plan PEIR found that buildout of the 2030 General Plan would result in five significant unavoidable adverse impacts at citywide buildout in 2030 after implementation feasible mitigations: 1) air quality, 2) greenhouse gas emissions, 3) agricultural land conversion, 4) noise (train and along certain roadway segments), and 5) five intersections would operate at below Level of Service 'C.' The 2030 General Plan Final Program Environmental Impact Report (PEIR) was certified for the 2030 General Plan buildout and is incorporated by reference.

13. Other public agencies whose approval is required:

None.



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☆ Project Location

Regional Location

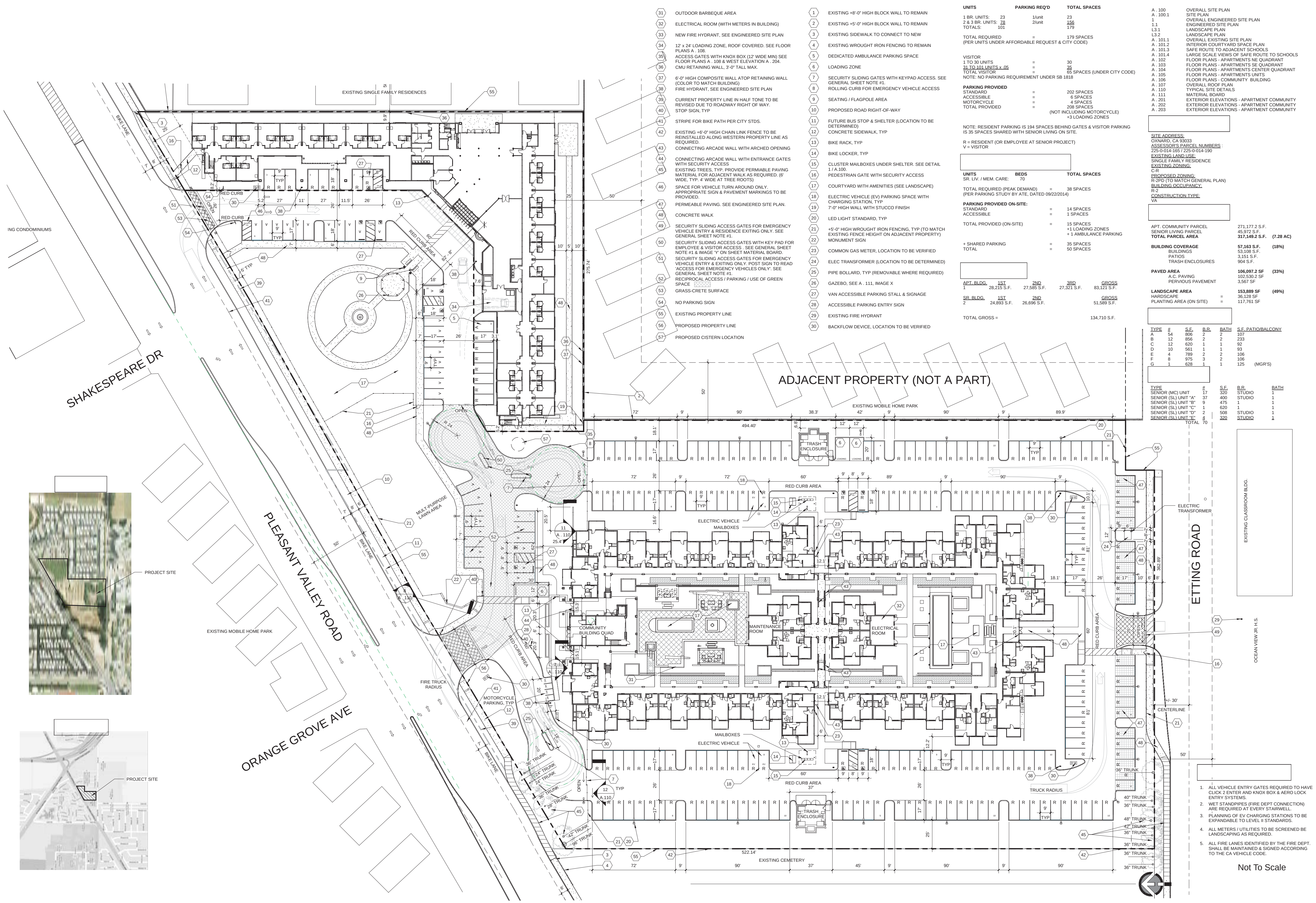
Figure 1

City of Oxnard

Imagery provided by Google and its licensors © 2015.

Project Site and Vicinity

Figure 2



Source: Lauterbach & Associates Architects Inc, 2015.
This figure was created from 42' x 32' project plans which can be viewed at the City of Oxnard Development Services Department.

Pleasant Valley Apartments and Senior Living Site Plan

Figure 3

2 NORTH ELEVATION - PLEASANT VALLEY ROAD
NOT TO SCALE

1 SOUTH ELEVATION - PLEASANT VALLEY ROAD
NOT TO SCALE

SHEET KEYNOTES

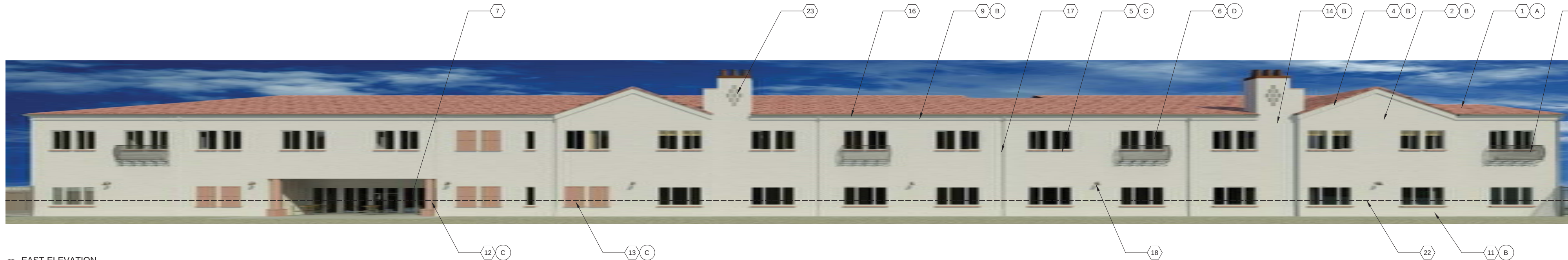
1. ROOF TILE: CONCRETE 'S'
2. WALL FINISH: PLASTER WITH LIGHT SAND FINISH
3. WALL ACCENT: GFRC WITH PLASTER FINISH
4. SCALLOPS: FOAM TRIM WITH PLASTER FINISH
5. WINDOW SILL: FOAM WITH PLASTER FINISH
6. WINDOWS: DUAL GLAZED VINYL FRAME - LOW E CLEAR GLASS
7. EXTERIOR DOOR:
8. CORBEL: FOAM WITH WOOD LIKE FINISH
9. CORNICE: FOAM WITH PLASTER FINISH
10. NOT USED
11. ANGLED WALL BASE: PLASTER WITH LIGHT SAND FINISH
12. COLUMN: PLASTER WITH LIGHT SAND FINISH
13. FIBERGLASS RAIL SYSTEM (TRIM COLOR)
14. FAUX CHIMNEY WITH RECESS FEATURE: PLASTER WITH LIGHT SAND FINISH
15. NOT USED
16. ALUMINUM GUTTER, PREFINISHED (WHITE)
17. ALUMINUM DOWNSPOUT, PREFINISHED COLOR TO MATCH ADJACENT SURFACE
18. WALL MOUNTED LIGHT
19. WALL CAPS: CONCRETE
20. RASIED PLANTER WITH PLASTER FINISH
21. STOREFRONT SYSTEM WITH DOUBLE DOOR
22. EXTERIOR WALL WITH ARCHED OPENING
23. RECESSED PLASTER ACCENT
24. 6'-0" HIGH METAL GATE
25. COMPOSITE WOOD FENCE
26. TERRA COTTA POT CHMINEY ACCENTS

MATERIALS / COLORS

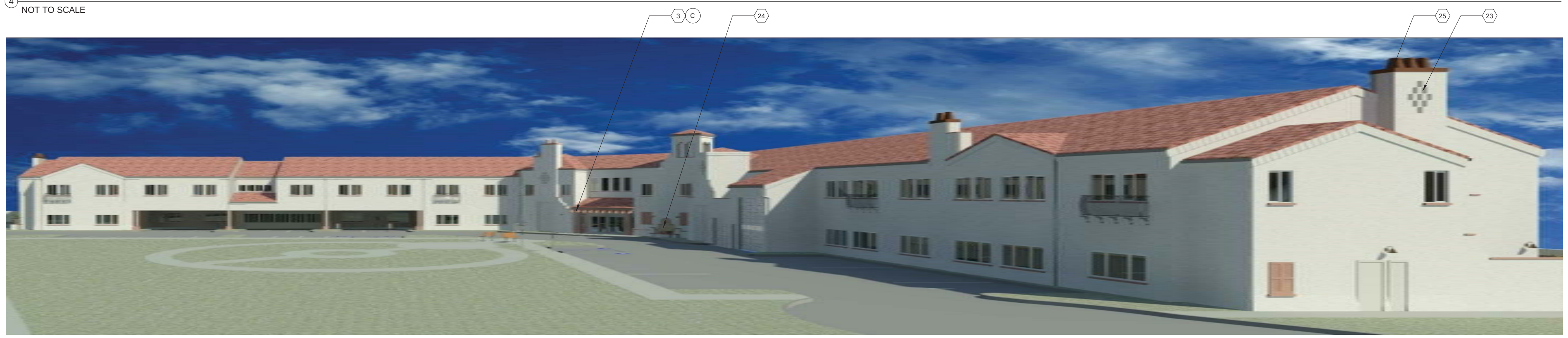
A	CONCRETE 'S' TILE ROOF:	'MORNING ROSE' BARCELONA BY BORAL
B	LIGHT SAND STUCCO FIELD WALL FINISH:	DEW380 'WHITE' BY DUNN-EDWARDS PAINTS
C	ACCENT TRIM FINISH:	DEA159 'RICH MOCHA' BY DUNN-EDWARDS PAINTS
D	WINDOWS:	DUAL GLAZED LOW 'E' CLEAR GLASS IN WHITE VINYL FRAMES
E	FOAM BAND WITH PLASTER FINISH	DE6179 'OAK HARBOR' BY DUNN-EDWARDS PAINTS

Elevations of Apartments

Source: Lauterbach & Associates Architects Inc, 2015.
This figure was created from 42' x 32' project plans which can be viewed at the City of Oxnard Development Services Department.

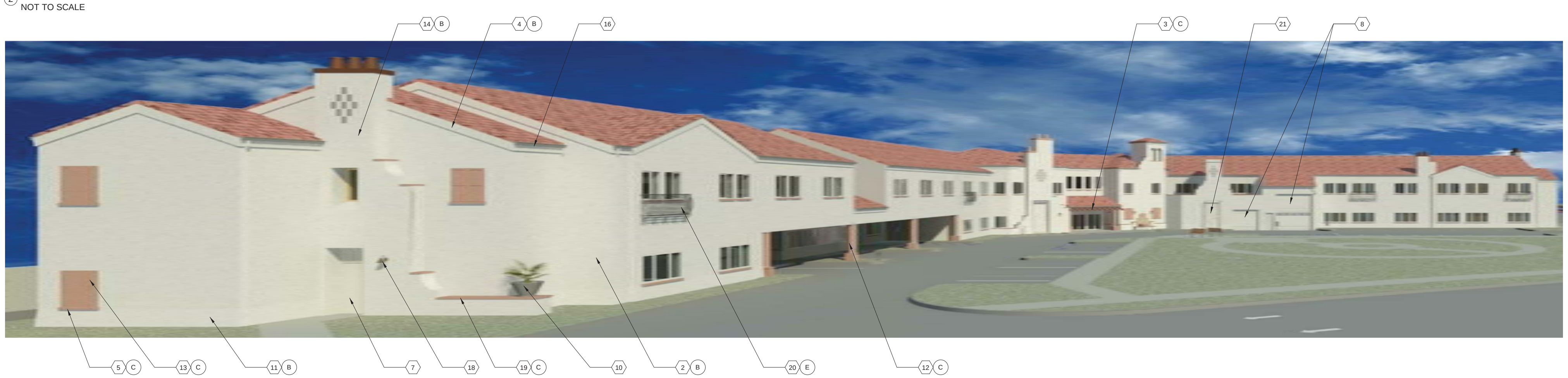


4 EAST ELEVATION
NOT TO SCALE



3 WEST ELEVATION
NOT TO SCALE

2 SOUTH ELEVATION
NOT TO SCALE



1 NORTH ELEVATION
NOT TO SCALE

SHEET KEYNOTES

1. ROOF TILE: CONCRETE 'S'
2. WALL FINISH: PLASTER WITH LIGHT SAND FINISH
3. RAFTER TAIL
4. SCALLOPS: FOAM TRIM WITH PLASTER FINISH
5. WINDOW SILL: FOAM WITH PLASTER FINISH
6. WINDOWS: DUAL GLAZED VINYL FRAME - LOW E CLEAR GLASS
7. EXTERIOR DOOR:
8. ROLL-UP DOOR
9. CORNICE: FOAM WITH PLASTER FINISH
10. PLANTER POT
11. ANGLED WALL BASE: PLASTER WITH LIGHT SAND FINISH
12. COLUMN: PLASTER WITH LIGHT SAND FINISH
13. DECORATIVE SHUTTERS, FIBERGLASS, PAINT
14. FAUX CHIMNEY WITH RECESS FEATURE: PLASTER WITH LIGHT SAND FINISH
15. NOT USED
16. ALUMINUM GUTTER, PREFINISHED (WHITE)
17. ALUMINUM DOWNSPOUT, PREFINISHED (WHITE)
18. WALL MOUNTED LIGHT
19. WALL CAPS: CONCRETE
20. FAUX METAL BALCONY TYPICAL
21. ESPALIER WITH VINE TYPE PLANTS
22. TOP OF NEW PROPERTY LINE FENCE SHOWN DASHED
23. RECESSED PLASTER ACCENT
24. WATER FOUNTAIN
25. TERRA COTTA POT CHIMNEY ACCENTS
26. TOP OF EXISTING PROPERTY LINE WALL SHOWN DASHED

MATERIALS / COLORS

A	CONCRETE 'S' TILE ROOF:	'CASA GRANDE BLEND' BARCELONA BY BORAL
B	LIGHT SAND STUCCO FIELD WALL FINISH:	DEW380 'WHITE' BY DUNN-EDWARDS PAINTS
C	ACCENT TRIM FINISH:	DE5152 'CEDAR GROVE' BY DUNN-EDWARDS PAINTS
D	WINDOWS:	DUAL GLAZED LOW 'E' CLEAR GLASS IN WHITE VINYL FRAMES
E	ACCENT FINISH:	DEA 187 'BLACK' BY DUNN-EDWARDS PAINTS

Elevations of Senior Living Center

Source: Lauterbach & Associates Architects Inc, 2015.
This figure was created from 42' x 32' project plans which can be viewed at the City of Oxnard Development Services Department.

Figure 4b

ENVIRONMENTAL FACTORS AFFECTED

The environmental factors checked below would be potentially affected by the Projects, involving at least one impact that is "Potentially Significant" or "Potentially Significant Unless Mitigation Incorporated" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture and Forest Resources	☒ Air Quality
☐ Biological Resources	☒ Cultural Resources	☒ Geology/Soils
☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials	☒ Hydrology/Water Quality
☐ Land Use/Planning	☐ Mineral Resources	☒ Noise
☐ Population/Housing	☐ Public Services	☐ Recreation
☐ Transportation/Traffic	☐ Utilities/Service Systems	☒ Mandatory Findings of Significance

DETERMINATION:

On the basis of this initial evaluation:

☐ I find that the proposed Projects COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed Projects could have a significant effect on the environment, there will not be a significant effect in this case because new construction is subject to uniformly applied development and design review standards and revisions (mitigations) in the Projects have been made by or agreed to by the Project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed Projects MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed Projects MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed Projects could have a significant effect on the environment, because all potential significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed Projects, nothing further is required.

Kathleen M. Mallory
Signature

6/15/2015
Date

ENVIRONMENTAL CHECKLIST

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
I. AESTHETICS – Would the Projects:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

a-c) The proposed project site is located in the Southeast Community of the City of Oxnard in the Mar Vista Neighborhood. The project site previously contained a mid-20th century farm complex composed of a single-family residence, four farm buildings, an avocado orchard, and Blue Gum Tree windrows on Pleasant Valley Road and Etting Road frontages. A Historic Resources Report dated June 23, 104 was prepared by Post/Hazeltine Associates for the project site and found that the structures did not meet the criteria as defined by Title 14, Chapter 3, Section 15064.5 of the California Code of Regulations and therefore, were not identified as historic resources for the purposes of CEQA. All structures have been removed and the site is vacant and flat, surrounded by a chain-link fence intermittently lined with bushes. The northwest portion of the site contains multiple stockpiles of clean fill material. Figures 5a and 5b provide photos of the project site and its surroundings. The Blue Gum Tree windrows, which has been identified as a County of Ventura Historical Landmark, remain along the Pleasant Valley Road and Etting Road frontages and would not impacted by the proposed projects. Impacts to historic resources are discussed in more detail in Section V, *Cultural Resources*.

The proposed projects would involve the development of an 83,121 square foot Apartment Homes, a 51,589 square foot Senior Project, and associated parking, open space, public improvements, and amenities. The proposed maximum building height of the Apartment Homes would be 42′4″ while the proposed maximum height of the Senior Project would be 36′. These proposed heights would comply with Oxnard Municipal Code with approval of a density bonus concession for building height above the zones maximum height of 25′.

Introduction of the Apartment Homes and Senior Living Project would alter the visual character of the project site from primarily orchard to urban development. The proposed projects would be visible from Etting Road (Photos 1 and 2; Figure 5a) and East Pleasant Valley Road (Photos 5, 6 and 8; Figure 5b) and Etting Road. Additionally, the proposed projects would be visible from surrounding properties which are previously developed including mobile home parks to the north and to east (Photos 5 and 7; Figure 5b), single family residential and Mar Vista Elementary School and Ocean View Junior High to the south, and the Masonic Cemetery (Photo 4; Figure 5a) to the west. The proposed Apartment Homes and Senior Project uses are consistent with the visual character of neighboring properties. The site is surrounded by other residential uses of varying scale and densities including the mobile home parks located to the north and east, a townhouse community to the northeast across Pleasant Valley Road, and single family residential located to the east and southwest. Additionally, Ocean View School District offices are located south of the project site across Etting Road. The District offices include two-story building of similar scale to the proposed Apartment Homes and Senior Living Project. The proposed projects would be set back from the street and neighboring properties consistent with Oxnard Municipal Code.

The 2030 General Plan Update Background Report (2006) did not identify the project site as having scenic resources. State Route 1 is approximately 0.15 miles from the project site and is an eligible state scenic highway but is not officially designated (Caltrans, 2013). The proposed projects would be visible from State Route 1, but would be a continuation of and visually compatible with surrounding land uses. Therefore, the two projects would not have a substantial adverse effect on a scenic vista, damage scenic resources, or substantially degrade the existing visual character or quality of the site or its surroundings. **These impacts would be less than significant.**

d) Development of the two projects on the vacant project site would create the potential for glare from on-site lighting and other light sources that would be required to comply with the City's outside lighting regulations. Section 16-320 of the Oxnard Municipal Code specifies on-site lighting requirements applicable to all zones which states the physical limits of the area required to be lighted shall not exceed seven footcandles, nor be less than one footcandle at any point. Additionally, a light source shall not shine upon, or illuminate directly any surface other than the area required to be lighted. As a standard condition of project approval, the Planning Division would require review and approval of a photometric plan prepared by an electrical engineer certifying the exterior illumination intensities provided by light standards and/or any other exterior lighting devices, such as wall mounted light fixtures, are designed to provide lighting within the property limits. **With application of uniformly applied developments standards, proposed project impacts due to lighting are expected to be less than significant.**

Mitigation: Based on the discussion provided above and the imposition of standard conditions of project approval, no significant impacts would occur as a result of the two projects; therefore, no mitigation measures are required or proposed.

Cumulative Impact: The cumulative project area is defined as the entire City of Oxnard at its planned 2030 buildout, which includes the project site. Aesthetic and light and glare impacts were analyzed by the 2030 General Plan PEIR and found not to be significant after implementation of uniformly applied development policies and regulations. The 2030 General Plan PEIR is incorporated by reference, specifically Chapter 5.3, Draft PEIR, February 2009, page 5-13.

Photo 1: View of project site looking north from Etting Rd.

Photo 2: View looking east from project side along Etting Rd.

Photo 3: View looking west from project site along Etting Road.

Photo 4: Masonic Cemetary located east of the project site.

Photos of the Site and Surroundings

Figure 5a

Photo 5: Views looking east along Pleasant Valley Road from project site.

Photo 6: View looking across project site from Pleasant Valley Road.

Photo 7: View looking north across Pleasant Valley Road from project site.

Photo 8: View looking east along Pleasant Valley Road.

Photos of the Site and Surroundings

Figure 5b

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
II. <u>AGRICULTURE AND FOREST RESOURCES</u> -- In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. -- Would the Projects:				
a) Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	☐	☒

a, b, e) The project site was previously used for agricultural operations and most recently contained a residence, four farm buildings and an avocado orchard. As discussed in *Surrounding Land Uses and Setting*, all structures and the avocado orchard have been removed. The site is currently vacant, surrounding by a chain-link fence, with stockpiled fill on the northeast corner. The project site is not zoned for agricultural use. Additionally, the project site is designated as "*Urban and Built-Up Land*" on the Ventura County Important Farmland map (California Department of Conservation, Division of Land Resource Protection, 2012) and is not under a Willamson Act Contract (California Department of Conservation, 2013). **Development of the project site would have no impact on agriculture.**

c, d) The project site is vacant and does not contain any forest or timber resources, nor are any such resources nearby. **No impact would occur.**

Mitigation: Based on the discussion provided above, no significant impacts would occur as a result of the two projects; therefore, no mitigation measures are required or proposed.

Cumulative Impact: The cumulative project area is defined as the entire City of Oxnard at its planned 2030 buildout which includes the proposed projects. Agricultural impacts were analyzed by the 2030 General Plan PEIR and found to be significant for which an overriding consideration was adopted, but the proposed projects would not contribute to this impact. The 2030 General Plan PEIR is incorporated by reference, specifically Chapter 5.5, Draft PEIR, February 2009, page 5-25.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
III. AIR QUALITY -- Would the Projects:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☒	☐	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☒	☐	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

a) The Ventura County Air basin is currently a non-attainment area for both the Federal and State standards for ozone, and the State standards for PM_{10}. Exceeding the air quality standards is the result of past and ongoing urban and rural development that has caused emissions to exceed the air basin's capacity for dispersal and removal of air pollutants. However, the goal of the Ventura County Air Quality Management Plan (AQMP) is to reduce ambient ozone concentrations below the National Ambient Air Quality Standards (NAAQS) through implementation of air pollutant emissions controls. The plan predicts attainment of the Federal 8-hour ozone standard by the year 2013. Air quality in Ventura County has improved dramatically since 1990, the 1994 AQMP base year. In 1990, ozone levels exceeded the now revoked federal 1-hour ozone standard 18 times. In 1990 there were 117 violations countywide of the federal 8-hour ozone standard, but only 25 in 2009, 13 in 2010, and 8 in 2011. These improvements have occurred despite a 29 percent increase in Ventura County's population since 1990. Ventura County attained both the federal 1-hour and the 1997 8-hour ozone standards in 2003 and 2012, respectively. Consequently, on May 27, 2009 the U. S. Environmental Protection Agency issued an attainment finding officially recognizing that Ventura County had attained the federal 1-hour ozone standard, and has proposed a similar attainment finding for the 1997 federal 8-hour ozone standard. That finding was finalized on November 19, 2012.

According to the Air Pollution Control District (APCD) Guidelines, the consistency of a project with the current Ventura County Air Quality Management Plan is assessed based on whether the two projects are consistent with the local land use designation and current population projections. The proposed projects are consistent with the site's 2030 General Plan land use designation for Low Medium Density Residential. In addition, as discussed in Section XIII, *Population and Housing*, the proposed projects would add an estimated 459 residents[1] to the City which constitutes 1.2% of the predicted growth for the City from 203,645 in 2010 to the Southern California Council of Governments forecast of 244,500 residents in 2035. **As the proposed projects are consistent with the 2030 General Plan land use designation and growth is accounted for in the Southern California Council of Governments regional forecast, impacts are considered to be less than significant.**

b-c) **Short-term impacts:** Project construction would generate temporary air pollutant emissions. These emissions are associated with fugitive dust (PM_{10} and $PM_{2.5}$) and exhaust emissions from heavy construction vehicles, in addition to Reactive Organic Compound (ROC) that would be released during the drying phase upon application of architectural coatings. Construction would generally consist of grading, erection of the proposed buildings, paving, and architectural coating.

[1] *Calculated based on an average household size of 3.85 people for the 101 dwelling units in the Apartment Homes and 70 people (based on the number of beds) in the Senior Living Project ((3.85 x 101) + 70 = 459)*

Table 1
Estimated Daily Construction Emissions

Construction Year and Phase	Maximum Emissions (lbs/day)			
	ROG	NO_x	PM_{10}	$PM_{2.5}$
2015 (Site Preparation, Grading, Building Construction)	6.82	73.16	22.57	13.36
2016 (Building Construction, Paving, Architectural Coating)	91.39	32.71	3.62	2.34
Total	**98.21**	**105.87**	**26.20**	**15.69**

Notes: All calculations were made using CalEEMod v.2013.2.2. See Appendix A for calculations. Grading, Paving, Building Construction and Architectural Coating totals include worker trips, construction vehicle emissions and fugitive dust.

Table 1 summarizes the estimated worst-case daily emissions of ROG, Nitrogen Oxide (NOx), PM_{10}, and $PM_{2.5}$ during each of the major phases of construction. As discussed in Section VIII. Hazards and Hazardous Materials, up to 12,000 cubic yards (cy) of soil have been removed from the project site. Emissions associated with truck trips for this removal are included in emissions estimates in Table 1.

Ventura County does not have construction related significance thresholds as they are deemed to be temporary emission sources. However, the Ventura County Air Pollution Control District (VCAPCD) Air Quality Assessment Guidelines (2003) recommends various techniques to reduce construction-related emissions. Recommendations include: dust control measures such as watering graded areas, covering trucks haul excavated soil, soil stabilization methods and street sweeping, and construction equipment controls such as minimizing idle time, maintaining equipment engines, using alternatively fueled equipment and minimizing the number of pieces of equipment that are operated simultaneously. Construction emissions could potentially expose construction workers to pollutants and excessive amounts of particulate matter. **With inclusion of the mitigation measures provided below, short-term air quality impacts would be reduced to less than significant.**

Long-term operational impacts: Operational emissions would consist primarily from passenger vehicles traveling to and from the project site. The project's related ROC and NOx emissions were evaluated using the California Emissions Estimator Model 2013.2.2 (CalEEMod) software. Results for both the Apartment Homes and Senior Living Project are presented in Table 2.

Table 2
Project Daily Operation Emissions

	ROC (lbs/day)	NOx (lbs/day)
Total Emissions	10.9	10.5
Threshold	25	25
Exceed Threshold?	No	No

Source: CalEEMod software; results in Appendix A

Long-term emissions include 10.9 lbs/day of ROC and 10.5 (lbs/day) NOx emissions (calculations are provided in Appendix A). The VCAPCD's adopted threshold for ROC and NOx emissions is 25 lbs/day (VCAPCD, 2003). **Long-term air quality impacts would therefore be less than significant**.

d) The sensitive receptors closest to the project site that could potentially be affected by project emissions are residential developments located adjacent to the Senior Living Project on the north, east, and south and adjacent to the Apartments to the north and east. Additionally, there are two schools located just south of the site. Mar Vista Elementary School is located approximately 150 feet from the site and Ocean View Junior High is approximately 600 feet from the site. **As described above, emissions associated with the proposed projects would be less than significant with mitigation measures; therefore, the projects would not expose sensitive receptors to substantial pollutant concentrations.**

e) The project site is surrounded by residential uses, two schools, and a cemetery. As discussed above, the nearest sensitive receptors are residents located adjacent to the project site and two schools located south of the site. The Apartment Homes and Senior Living Project would not create or emit objectionable odors. **Therefore, this impact would be less than significant**.

<u>Mitigation</u>: The following mitigation measures shall apply to both the Apartment Homes and Senior Living Project proposed for development:

AQ-1 All construction equipment shall be maintained and tuned to meet applicable California Environmental Protection Agency (Cal/EPA) and the California Air Resources Board (CARB) emissions requirements. At such time as new emission control devices or operational modifications are found to be effective, such devices or operational modifications shall be required on all construction equipment operating pursuant to City permits.

AQ-2 The following dust suppression measures shall be incorporated into each project:

a. Watering all excavated material to prevent wind erosion while it is on-site or being moved;
b. Periodic watering of construction sites or use of APCD approved dust suppression compounds that bind with the surface layers of soil and prevent soil particles from being eroded;
c. Controlling the number and activity of vehicles on site at any given time;
d. Seeding areas to be left inactive for a long enough period to secure the soil, limiting the area excavated at any given time;
e. Limiting on-site vehicle traffic to 15 miles per hour; and
f. Sweeping streets adjacent to the construction site to remove dust caused by the construction activities.

AQ-3 All clearing, grading, earth moving, or excavation activities shall cease during periods of high winds (i.e., greater than 15 miles per hour averaged over one hour) to prevent excessive amounts of fugitive dust.

AQ-4 All trucks hauling excavated or graded material off-site shall comply with State Vehicle Code Section 23114, with special attention to Sections 23114(b)(F), (e)(2) and (e)(4) as amended, regarding the prevention of such material spilling onto public streets and roads.

AQ-5 Prior to issuance of a grading permit, the applicant and/or contractors shall contact the VCAPCD for more specific guidelines as applicable to the project construction activities, and provide the Planning Manager, or designee, with a memorandum as to the date, contact person, and applicable provisions of Rule 55, which may include (but are not limited to) the following provisions: 1) visible dust from an applicable source is prohibited or limited, 2) Measures must be taken to reduce or prevent track-out onto paved public roadways, 3) track-out must be removed from roadways, 4) visible dust exceeding 100 feet in length from earth-moving equipment is prohibited, 5) outbound trucks with soil must either be tarped or a 6-inch freeboard below the truck rim, or be wetted to minimize loss of material due to wind or spillage.

AQ-6 Signs displaying the APCD Complaint Line Telephone number for public complaints shall be posted in a prominent location visible off-site.

<u>Monitoring:</u> Planning staff will verify that all dust control measures (AQ-1 through AQ-6) are included on the grading plans for each project. Development Services staff will provide on-site monitoring during grading activities. Planning staff will verify that the Rule 74.2 architectural coating notes are included with the building permit plan submittals.

<u>Result After Mitigation:</u> Upon implementation of the above mitigation measures, the projects will not result in any residual significant effects on the environment related to air quality issues.

<u>Cumulative Impact:</u> The cumulative project area is defined as the entire City of Oxnard at its planned 2030 buildout, which includes the development of the project site. Air quality impacts were analyzed by the 2030 General Plan PEIR and found to be significant. An overriding consideration was adopted for this impact. The proposed projects would incrementally contribute to this cumulative impact, but because long-term emissions would be below APCD thresholds this contribution would not be cumulatively considerable. The 2030 General Plan PEIR is incorporated by reference, specifically Chapter 5.7, Draft PEIR, February 2009, page 5-35.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES -- Would the Projects:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

~~a–f)~~ Rincon Consultants, Inc. completed a Biological Resources Assessment (Assessment) for the project site in March of 2014 (Appendix B). The Assessment described the site as disturbed with an avocado orchard, three barns, a residential structure, and ornamental trees. Wildlife activity during the Assessment was described to be "moderate," and including common birds within the trees, and urban adapted terrestrial species (e.g., side-blotched lizard, western fence lizard).

a) **Special Status Species Direct Impacts**. The Assessment found that no sensitive plant species, sensitive plant communities, suitable habitat for any sensitive wildlife, or jurisdictional drainages or wetlands were located on the project site. At the time the Assessment was completed, the project site also contains an avocado orchard and ornamental trees, which are protected and preserved by the City of Oxnard Park and Recreation Department by Section 1.A.4 Preservation of Existing Trees of the Landscape Standards. LA Johnny and Jordan Gilbert and Bain Landscape Architects, Inc. prepared a Tree Report, dated March 31, 2014, for the project site. The Tree Report concluded that none of the trees located onsite would be feasible to preserve as it would not be possible to successfully relocated 69 of the trees and would be more costly to relocate the 3 onsite yucca trees than their value. Of the 24 off-site trees, 4 were recommended for removal, based on health and stability, and the others were recommended for preservation. Three addenda to the Tree Report were prepared to address issues related to the Blue Gum Eucalyptus grove (Ventura County Historical Landmark #15) which is located on the south, west, and north perimeters of the project site and is proposed to remain undisturbed onsite as discussed in Section V., *Cultural Resources.* The Tree Report and Addenda are found in Appendix D.

During the summer of 2014, all structures, ornamental landscaping, and the avocado orchard were removed from the site by the previous owner. None of the trees removed included the off-site trees eligible for preservation. The site is currently vacant with intermittent shrubs lining the chain link fence around the perimeter. The only trees remaining at the project site are those in the Blue Gum Eucalyptus grove located outside the chain link fence along the south, west, and north perimeters of the project site along Pleasant Valley Road and Etting Road. The Blue Gum Eucalyptus grove would remain in place and would be managed through implementation of the Tree Risk Mitigation Pruning Plan discussed in Section V., *Cultural Resources,* which also contains a discussion of the trees' value as a historical resource. Figure 6 provides illustrated the location of the onsite Blue Gum trees. Due to the disturbed nature of the project site, there would be no direct impacts to special status species.

Nesting Birds and Raptors. The Assessment identifies a raptor nest approximately 180 feet west of the proposed project. Nests of most native birds and raptors are protected by international treaty under the Federal Migratory Bird Treaty Act (MBTA) of 1918 (50 C.F.R. Section10.13). Sections 3503, 3503.5, and 3513 of the California Fish and Game Code prohibit take of all birds and their active nests including raptors and other migratory nongame birds (as listed under the Federal MBTA). No suitable habitat occurs within the development envelope for protected nesting bird and raptors, and they are not anticipated to be present or nesting within the project site during construction of the project. Therefore, no direct or permanent (operational) impacts are anticipated to special status raptor individuals or habitat. The existing vacant lot likely provides limited low-quality foraging habitat for raptors. However, raptors are known to nest within the project vicinity and construction of the proposed project is expected to create increased traffic, noise, vibrations, and other temporary impacts during construction. As detailed below under Section XI, Noise, operation of the proposed projects would not generate high levels of noise, and on-site noise would be comparable to the existing residential uses and roadways in the project vicinity. Indirect temporary impacts to protected nesting birds and raptors outside the development envelope could result from construction of the proposed project.

Overwintering Monarch Butterflies. A 1985 California Natural Diversity Database (CNDDB) record identifies an overwintering roost of 15 butterflies in eucalyptus windrows, approximately 140 feet west of the project site.[2] Monarch butterfly overwintering roosts typically occur within the protection of a grove. However formation of clusters and aggregations on a south facing wall of a narrow windrow has regional precedent (Meade, 2015).

The United States Fish and Wildlife Service (USFWS) received a petition to list the monarch butterfly and is in the process of soliciting information consistent with the requirements of the Endangered Species Act. The species is not on the most recently published 2014 USFWS Candidate List (USFWS, 2014). California monarch butterfly overwintering colonies are designated as sensitive resource by California Department of Fish and Wildlife (CDFW, 2015). Protected overwintering roosts are defined as an aggregation of 10 or more butterflies in the same location or same tree, present for one week or more (Meade, 1999).

Suitable windrow eucalyptus tree habitat begins on the southwest corner of the project site and extends off-site to the west. However, if overwintering roosts were present onsite they would not be directly impacted since these trees are outside the development envelope and are not proposed for removal or alternation. As discussed below, operational indirect impacts (e.g., lighting, noise) are not anticipated. As discussed in under XII (below), noise generated by the operation of the proposed project would not exceed existing ambient noise levels. As discussed under Section 1.d (above) the City's standard lighting condition of approval would be placed on the project permit; the Planning Division would require review and approval of a photometric plan consistent with Section 16-320 of the Oxnard Municipal Code pertaining to lighting.

Possible indirect impacts (e.g., noise, lighting, dust) from construction could result, if construction occurs during the overwintering season and a CDFW protected monarch butterfly active overwintering roost is present. Indirect construction noise impacts would addressed through implementation of Mitigation Measure N-2, which requires shielding of construction equipment, and Mitigation Measure N-3 which would limit construction hours. Indirect construction dust impacts would be addressed through adherence to Ventura County APCD requirements. Nighttime lighting impacts to roosting monarch butterflies have not been studied (Meade, 2015). Additionally, mitigation N-2 would prohibit construction during hours that would require night lighting. A minimum setback of 50 feet is recommended from the edge of any grove containing an active monarch butterfly overwintering roost. In some locations, a setback of 100 feet or more should be required in order to preserve the environmental conditions of the grove including light, temperature, humidity, and wind (Meade, 1999). Given the urbanized setting and atypical windrow habitat, a buffer of 50 feet is recommended from a active protected overwintering roost.

The City of Oxnard's 2030 General Plan, Chapter 6: Environmental Resources, contains policies intended to ensure new development avoids impacts to environmental resources, including special status species (Policy ER 3.2) and sensitive habitats (Policy ER 4.1). Implementation of Biological Condition 1 and 2, applied to the project permit conditions of approval for

[2] Location based on the GPS location from the 1985 CNNDB record (34.16194 / -119.14872); however, this location is approximate. Citizen science reports indicate that overwinter roosts beginning approximately 1,500 feet west of the project site may have been present in 1999, 20018, 2010, 2011, and 2014 at Oxnard College (Site ID 3146). However, no citizen science reports present at the CNNDB identified Blue Gum Gove Site (Site ID 3152) directly to the west of the site (Monroe et. al., 2015).

consistency with the City of Oxnard's 2030 General Plan, would ensure no impacts would occurs to special status species, including nesting birds and raptors and protected butterfly winter roots. **With adherence to recommended Biological Resource Conditions 1 and 2 consistent with the City of Oxnard's 2030 General Plan policies 3.2 and 4.1, there would be no direct or indirect, or temporary or operational impacts to special status species.**

Recommended Biological Resources Condition of Approval 1: Nesting Bird and Raptor Survey. To avoid indirect construction impacts to nesting birds and raptors, consistent with Oxnard General Plan (Environmental Resource Policies 3.2 and ER 4.1) and the CFG Code and MTBA, vegetation removal and initial ground disturbance must occur outside the bird and raptor breeding season, which is typically February 1 through August 31 (as early as January 1 for some raptors). If construction and ground disturbance must begin within this breeding season, then not more than one week before ground disturbance and/or vegetation removal commences, a nesting bird and raptor pre-construction survey must be conducted by a City-approved biologist (biologist) within the disturbance footprint plus a 300-foot buffer, as feasible. If the project is phased, a subsequent pre-construction nesting bird and raptor survey is required before each phase of construction within the project site and suitable habitat within 300 feet. If no raptor or other bird nests are observed no further mitigation is required.

Pre-construction nesting bird and raptor surveys must be conducted during the time of day when bird species are active and be of sufficient duration to reliably conclude presence/absence of nesting birds and raptors within the 300 foot buffer. A report of the nesting bird and raptor survey results, if applicable, be submitted to the Planning Division for review and approval before issuance of grading or building permits (whichever occurs first).

If active raptor or Migratory Bird Treaty Act protected bird nests are found within 300 feet of the project site, their locations must be flagged and mapped. A nesting raptor buffer must be 500 feet, consistent with CDFW guidance. If the 500-foot buffer is infeasible, the biologist may reduce the buffer distance and/or monitor construction as appropriate, dependent upon the species and the proposed work activities. If any active *non-raptor* bird nests are found, a suitable buffer area (varying from 25-300 feet), depending on the particular species found, shall be established by the biologist. No ground disturbance can occur within the buffer until the biologist confirms that the breeding/nesting is completed and all the young have fledged. Alternately, the biologist may monitor the active nest full-time during construction activities within the buffer to ensure project activities are not indirectly impacting protected nesting birds and raptors.

Plan Requirements and Timing: Before the City issues a grading or building permit(s), the Planning Division must verify that construction and grading is occurring outside the nesting season, or that nesting bird and raptor surveys have been conducted, and buffer requirements specified above are in place (if applicable).

Monitoring: The Planning Division must verify compliance before issuance any grading or building permit(s) (whichever is first) and conduct periodic site inspections to ensure compliance throughout the construction period.

Recommended Biological Resources Condition of Approval 2: Conduct Overwintering Monarch Butterfly Surveys and Avoidance. To avoid impacts to protected overwintering butterfly roost consistent with the Oxnard General Plan (Environmental Resource Policies ER 3.2 and ER 4.1), if an active overwintering roost (defined as an aggregation of 10 or more butterflies, present in the same tree or area for one week or more) is present within 100 feet of the project site, all construction, grading, or noise-generating work associated with this project must be seasonally timed to avoid noise- and human activity-related impacts to active overwintering roosts. If work must occur during the overwintering season (generally between October and March), before work, a City-approved biologist (biologist) must survey all habitat trees (e.g., eucalyptus) within 100 feet of the development envelope to determine use by monarchs. If eucalyptus trees within 100 feet of the development envelope are found to serve as monarch butterfly overwintering roost, indirect impacts must be minimized to the extent practicable. Construction and grading within 100 feet of an aggregation may be monitored by a biologist, and construction within 50 feet of an active overwintering roost must be delayed until the butterflies abandon the aggregation. With Planning Division approval, construction and grading may occur within 50 feet of aggregations under the direction of a biological monitor ensure project activities are not indirectly impacting protected aggregations. Surveys must be conducted in favorable conditions to identify any active overwintering roosts within 100 feet of the development envelope, at least seven days before construction activities commence. If active overwintering roosts are not observed, no further mitigation is required. If active overwintering roosts are detected, a temporary fence must be installed along the outer boundary of the buffer zone prior to and during any grading and construction activities on the site.

Plan Requirements and Timing: Prior to issuance of a grading or building permit(s) (whichever occurs first), the Planning Division must verify that construction and grading is occurring outside the winter roosting season, or that monarch surveys have been conducted, and buffer requirements specified above are in place (if applicable). The biologist must prepare and submit a written report of the findings of the pre-construction survey to the Planning Division.

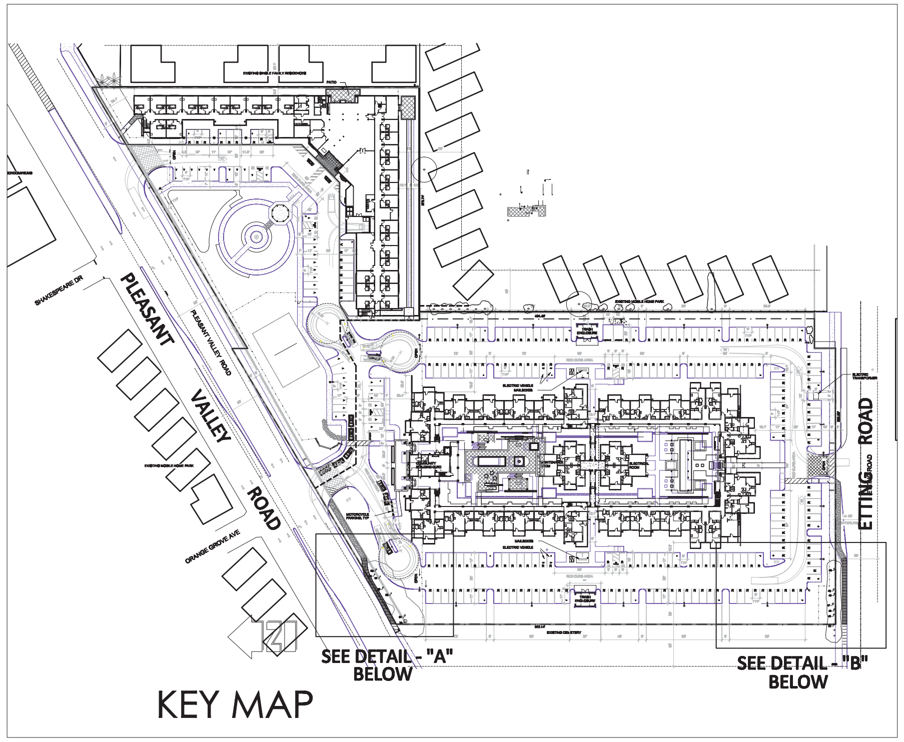
Monitoring: The Planning Division must verify compliance prior to issuance of any grading or building permit(s) (whichever comes first) and conduct periodic site inspections to ensure compliance throughout the construction period.

b-d) ~~Additionally, in consultation of City of Oxnard's 2030 General Plan,~~ No sensitive or riparian communities, jurisdictional features (waters and wetlands), or wildlife movement corridors are present on the existing developed site, or adjacent parcels. ~~the project site is not located within an area that has a habitat conservation plan.~~ **Due to the disturbed nature of the project site and adjacent urban areas, there would be no indirect or direct permanent or temporary impacts to sensitive and riparian communities, waters and wetlands, or wildlife movement ~~biological resources3~~**

e-f) With adherence to the Biological Resource Conditions of Approval 1 and 2, the proposed project would be consistent with the biological resource policies of the City of Oxnard's 2030 General Plan. The project site is not located within a Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan (CDFW, 2014). **There would be no impact from a conflict with local, state, or federal biological policies or conservation plans would result from implementation of the proposed project, as conditioned.**

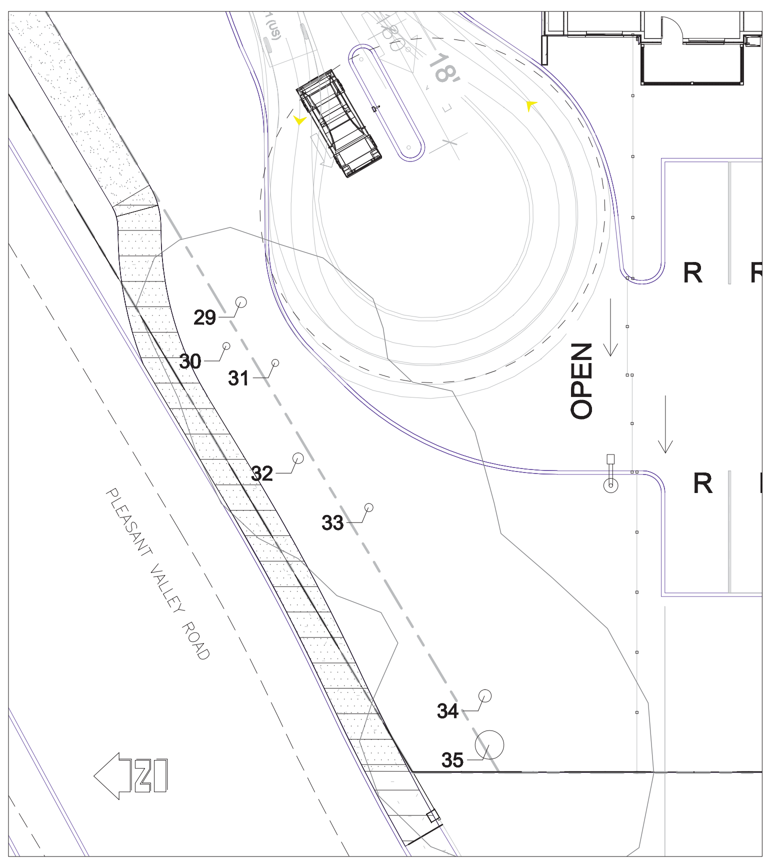
Mitigation: No mitigation measures are required.

Cumulative Impact: The cumulative project area is defined as the entire City of Oxnard at its planned 2030 buildout, which includes the development of the project site. Biological resource impacts were analyzed by the 2030 General Plan PEIR and found not to be significant after implementation of uniformly applied development policies and regulations. The proposed projects would have no impact with respect to biological resources so would not contribute to cumulative impacts. The 2030 General Plan PEIR is incorporated by reference, specifically Chapter 5.2, Draft PEIR, February 2009, page 5-3.

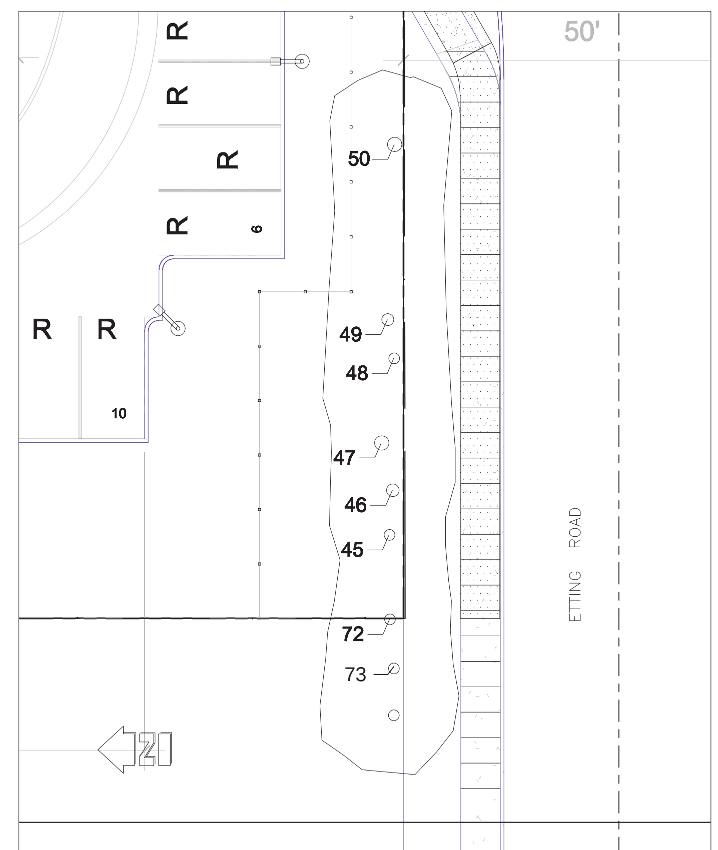


TREE RISK MANAGEMENT PRUNING SCHEDULE

TREE NO.	BOTANICAL NAME	REQUIRED RISK MITIGATION PRUNING THE REQUIRED TREE MITIGATION PRUNING IS LISTED IN THE ADDENDUM II BLUE GUM RISK ASSESSMENT & MANAGEMENT REPORT DATED OCTOBER 18, 2014	RISK RATING AS PER REPORT
29.	EUCALYPTUS GLOBULUS	SEE PAGE 38	HIGH
30.	EUCALYPTUS GLOBULUS	SEE PAGE 41	MODERATE
31.	EUCALYPTUS GLOBULUS	SEE PAGE 44	MODERATE
32.	EUCALYPTUS GLOBULUS	SEE PAGE 47	LOW
33.	EUCALYPTUS GLOBULUS	SEE PAGE 50	MODERATE / HIGH
34.	EUCALYPTUS GLOBULUS	SEE PAGE 53	HIGH
35.	EUCALYPTUS GLOBULUS	SEE PAGE 56	HIGH
45.	EUCALYPTUS GLOBULUS	SEE PAGE 59	HIGH
46.	EUCALYPTUS GLOBULUS	SEE PAGE 62	HIGH
47.	EUCALYPTUS GLOBULUS	SEE PAGE 65	MODERATE
48.	EUCALYPTUS GLOBULUS	SEE PAGE 69	MODERATE
49.	EUCALYPTUS GLOBULUS	SEE PAGE 72	HIGH
50.	EUCALYPTUS GLOBULUS	SEE PAGE 75	MODERATE
72.	EUCALYPTUS GLOBULUS	SEE PAGE 78	MODERATE
73.	EUCALYTUS GLOBULUS	SEE PAGE 80	HIGH



A EXISTING BLUE GUM TREES AT PLEASANT VALLEY ROAD
SCALE: 1"=10'



B EXISTING BLUE GUM TREES AT ETTING ROAD
SCALE: 1"=10'

0 50 100 Feet
N

Location of Blue Gum Eucalyptus

Source: Jordan, Gilbert & Bain, November 2014

Figure 6

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
V. CULTURAL RESOURCES -- Would the Projects:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	☐	☐	☒	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

a) This analysis is based on the Historic Resources Report prepared for the project site by Post/Hazeltine Associates on June 23, 2014 and the Primary Record for Ventura County Landmark #15. These can be found in Appendix C.

The project site was previously occupied by a mid-20th Century farm complex composed of a residence and four farm buildings, collectively the Naumann Farm Complex. All structures associated with the Complex were demolished and removed from the site in the summer of 2014. The Historic Resources Report found that the while Naumann Farm Complex retained its integrity, it did not represent an important example of its type or exemplify important architectural types or traditions. The June, 2014 study determined that the property and its structures were not eligible for listing as a Ventura County Landmark or Point of Interest. Further, the Historic Resources Report found that the property and structures located at the project site were ineligible for listing in the National Register of Historic Places or the California Register of Historical Resources because the study did not reveal additional data that would change the conclusions about the historic eligibility of the site as outlined in two previous studies: 1) CALTRANS Historic Architectural Survey Report for the Pleasant Valley Road/State Route 1 Interchange project, April 1996 and 2) CH2MHILL, Groundwater Recovery Enhancement and Treatment (GREAT) Program Cultural Resources Inventory Report, February 2004.

A Blue Gum Eucalyptus tree grove, which is designated Ventura County Historical Landmark No. 15, is located along the south, west and north perimeter of the project site. According to the State of California Resources Agency Department of Parks and Recreation's Building, Structure, and Object Record, the Blue Gum Eucalyptus tree grove, or "Naumann Grove", was designated Ventura County Historical Landmark No. 15 in 1971 (1996). The grove was planted as a windbreak associated with the adjacent Naumann farm and the Hueneme Masonic Cemetery. Once common throughout the Oxnard Plain, tree rows planted as windbreaks are declining in number but remain important visual elements of the Oxnard agricultural landscape. According to the State's Building, Structure, and Object Record (1996), the "grove does not appear intact enough to be eligible under Criterion C[3] as a good example of such tree rows, nor does it appear to possess significance under any of the other criteria. The property does not appear eligible for either the California Register of Historical Resources or the National Register of Historic Places under any of the criteria, nor does there appear to be the potential for a historic district or historic landscape which might include this property." Nevertheless, the Blue Gum Eucalyptus grove is designated as Ventura County Historical Landmark No. 15. Since designation, the City has taken steps to preserve and manage the tree resource.

LA Johnny and Jordan Gilbert and Bain Landscape Architects, Inc. prepared the following reports related to the Blue Gum Eucalyptus grove:

1) Tree Report for Senior Living and Apartment Community, March 31, 2014
2) Addendum 1: Reply to Planners Comments, September 21, 2014
3) Addendum II: Blue Gum Risk Assessment and Management Report, October 18, 2014
4) Addendum III: Decision to Preserve Blue Gum Trees, January 26, 2015

Additionally, the City had a review of the Tree Report completed by Brian D. Broderson, Landscape Architect, dated September 11, 2014.

The reports and review is found in Appendix D.

There are 19 blue gum trees present on or near the Apartment Homes project site that make up the Blue Gum Eucalyptus tree grove and are studied in the above listed reports. Of these 19 trees, 14 are located wholly or partially within the Apartment Homes project site. The remaining 5 tree are located on the neighboring Masonic Cemetery property.

According to March 31, 2014 Tree Report, the trees comprising the Blue Gum Eucalyptus tree grove were found to be in poor health. According to Addendum II, the trees were planted around 1900 and have reached the end of their natural life cycle. Addendum III describes the preservation suitability of the 19 blue gum trees present on the project site. While none of the 19 trees are rated "Extreme Risk" which would mean failure is imminent, ten of the 19 trees on the project site have a "High Risk" failure rating. The remaining trees are rated with "Moderate Risk" or "Low Risk". Tree #73, which is located off-site, is recommended for removal.

The project applicant is proposing to preserve the 14 tree of Blue Gum Eucalyptus tree grove located wholly or partially on the project site and monitor Tree #73 located offsite. Figure 6 illustrates the location of the trees proposed to be preserved and monitored. In order for the proposed projects to preserve the Blue Gum Eucalyptus tree grove, mitigation is required to reduce risks associate with safety concerns given that the 14 trees are in poor health. **Impacts would be less than significant with mitigation CR – 1, CR – 2, and CR - 3 incorporated.**

b-d) This analysis of potential impacts to archaeological and paleontological resources is based upon the following documents included in Appendix E:

[3] *Criterion C - Embodies the distinctive characteristics of a type, period or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction.*

- Cultural Resources Constraints Analysis prepared by Rincon Consultants (March, 2014)
- Geophysical Survey Report prepared by Rincon Consultants (April, 2014)
- Results of the Extended Phase I Archaeological Survey (XPI Survey) prepared by Rincon Consultants (March, 2015)

Based on the Cultural Resources Constraints and Extended Phase I Archaeological Survey the project site does not contain any evidence of archaeological or paleontological resources. Records searches indicated there were eight previously recorded cultural resources within 0.5 miles of the project site. Two of these resources, the Naumann Farm and Ventura County Historical Landmark #15, are discussed above in subsection "a". Another resource, Hueneme Masonic Cemetery, was identified adjacent to the project site. Due to the proximity to the Cemetery a geophysical survey was completed at the project site to assess the site for the presence of buried features that may prove to be potential unknown anomalies associated with the Masonic Cemetery. The survey found no evidence of buried caskets, headstones or other buried remains. Following the demolition of all structures onsite in the summer of 2014, Rincon Consultants also completed an XPI Survey of the project site to survey for potential subsurface archaeological and paleontological resources associated with historic use of the site. The XPI Survey included investigations at eight trench locations throughout the project site. The trenches were placed near the border of the project site adjacent to the current boundary of the Masonic Cemetery and near the former locations of onsite structures. The survey found no subsurface archaeological deposits within the project site.

Project implementation is not expected to uncover any archaeological resources as no subsurface resources have been identified at the project site. Nevertheless, the possibility of such a resource still exists. City standard practice is to include a condition of project approval ~~will be imposed~~ requiring the Developer to contract with a Native American monitor and for this Monitor to be present during all subsurface grading, trenching or construction activities on the project site. However, based on the potential for other archaeological resources to be present mitigation measures CR-3 and CR-4 are recommended in additional to City's uniformly applied development conditions. ~~The monitor shall provide a report to the Planning Division summarizing the activities during the reporting period. A copy of the contract for these services shall be submitted to the Planning Division Manager for review and approval prior to issuance of any grading permits. The monitoring report(s) shall be provided to the Planning Division weekly during the duration of the grading activities. In the event that an archeological site is identified during grading or construction, all construction activities in the vicinity of the site shall be halted and a qualified archaeologist shall be contacted at the expense of the applicant to document and evaluate the significance of the resource and shall determine when construction may resume, in consultation with the Planning Manager. Such evaluation may require site subsurface excavation and evaluation program. If remains prove to be significant, further investigations in the form of a data recovery program would be implemented to mitigate impacts to the identified resources.~~ **~~With application of uniformly applied development conditions and standards,~~ Nevertheless, based on the results of the surveys outlined above the projects would have less than significant impacts on cultural resources.**

Mitigation: The mitigation measures C-1, C-2 and C-3 shall apply to the Apartment Homes proposed for development. Mitigation measures C-4 and C-4 apply to both the Apartment Homes and Senior Living Project:

CR-1 Prior to the issuance of a grading or building permit, the applicant shall develop a Tree Protection Plan prepared by a certified arborist for review and approval by the Planning Division and the Oxnard Cultural Heritage Board (OCHB). The Tree Protection Plan shall incorporate the recommendations from Addendums II and III, prepared by LA Johnny and Jordan Gilbert and Bain Landscape Architects, Inc. and dated October 18, 2014 and January 26, 2015, respectively, except where the arborist's recommendations are in conflict with adopted mitigation measures or conditions of approval. The Tree Protection Plan shall also incorporate the OCHB recommendations which address the protection of all 14 onsite protected trees.

The Tree Protection Plan shall require protection of the protected trees (Landmark 15) during project grading and construction and shall incorporate off-sets or mitigation values for replacement of protected trees that are damaged or felled during and after construction. Pruning specifications for each tree as well as ongoing monitoring of the tree health for a period of no less than five years after final construction shall occur unless a certified arborist recommends additional monitoring beyond the five years ~~until a certified arborist deems the pruning and/or monitoring infeasible~~. Monitoring shall include the 14 onsite trees as well as offsite Blue Gum Eucalyptus, including tree #73 or any other trees determined by the arborist to need preservation within immediate proximity of the site, which are identified to be a safety risk by a certified arborist. The applicant shall submit a final arborist report for review and approval by City staff and OCHB prior to issuance of grading permit.

If protected trees are felled/damaged and require offsets/mitigation, the applicant shall plant new trees onsite as the offset/mitigation measure at a ratio of 4:1 and the applicant shall:

a. post a financial assurance to cover the costs of planting and maintaining the offset trees; and
b. reimburse the City for OCHB and City staff and/or consultant costs to monitor compliance. City staff time and consultant costs to monitor compliance will be billed to the applicant.

CR-2 **Tree Health Monitoring and Reporting**. The applicant shall submit to the City, annual monitoring reports to be prepared by a certified arborist which address the success of the tree protection measures and the overall condition of encroached-upon trees relative to their condition prior to project construction. If any trees are found to be in serious decline ("D" or "F" status), the arborist's report must include a Damaged Tree Report Addendum to the TPP which recommends offsets and any associated additional monitoring. The applicant shall implement any recommendations made by the arborist's Damaged Tree Report Addendum to the satisfaction of the Planning Director. The applicant shall submit annual monitoring reports for a period of no less than five years to start after all buildings have been issued a Certificate of Occupancy.

CR-3 **Temporary Fencing**. Prior to issuance of a building permit, the applicant shall ensure that temporary fencing is installed to maintain a minimum protective buffer around the critical root area of all 19 protected trees (referred to herein as the tree protection zone) from construction and grading activities prior to the start of construction activities around work and staging areas, where necessary, to prevent inadvertent encroachment into Landmark No. 15. The tree protection zone shall be identified and the location marked onsite by a qualified arborist. The temporary fence should be at least three feet high, clearly visible and supported by steel T-bar or similar stakes and warning signs shall be prominently displayed. The fencing shall remain in place until all proposed buildings have been issued a Certificate of Occupancy.

CR-4 **Unanticipated Discovery Plan**. To address the potential that unmarked burials and funerary objects associated with the Hueneme Masonic Cemetery may extend into the subject property (identified as Assessor Parcel Nos. 225-0-014-160 and -190), the applicant shall prepare an Unanticipated Discovery Plan prior to issuance of a building or grading permit. The Unanticipated Discovery Plan would describe the procedures to be followed in the event that previously unidentified unmarked burials and/or funerary objects are discovered during construction of the proposed project. If previously unidentified burials and/or objects are discovered during construction, all construction and grading activities would be suspended in the vicinity of the find. The resource would then be evaluated for listing in the California Register of Historical; Resources (CRHR) by a qualified archaeologist, and, if the resource is determined to be eligible for listing in the CRHR, either the resource would be avoided or mitigated. If human skeletal remains are uncovered during construction of the proposed project, the applicant and/or its contractors shall immediately halt all work in the immediate area, contact the applicable County Coroner to evaluate the remains, and follow the procedures and protocols set forth in Section 15064.5 (e)(1) of the CEQA Guidelines. Per California Health and Safety Code Section 7050.5, upon the discovery of human remains, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains.

CR-5 **Cultural Resources Monitoring**. To address the potential that unmarked burials and funerary objects associated with the Hueneme Masonic Cemetery may extend into the subject property (identified as Assessor Parcel Nos. 225-0-014-160 and -190), Prior to issuance of a building or grading permit, the applicant will retain the services of a qualified professional cultural resources consultant who meets or exceeds the U.S. Secretary of the Interior's Qualification standards and has knowledge of the cultural history of the proposed project area to monitor all grading activities on the subject property.

The consultant shall monitor for purposes of inspecting all grading activities within five feet of the surface associated with project construction. If the monitor suspects that potentially significant cultural resources have been encountered, the piece of equipment that encounters the suspected deposit will be stopped and the excavation will be inspected by the monitoring cultural resource consultant. If the suspected remains prove to be not significant or not cultural in origin, work may recommence immediately.

Monitoring: The Planning Division, in consultation with the City's Landscape Architect will review and approve the Tree Protection Plan (CR-1) prior to issuance of grading permits. The Tree Protection Plan recommendations shall be included on grading and construction plans. CR-2 shall be verified by the Planning Division on an annual basis. Measure CR-3, CR-4, and CR-4 shall be including on grading and construction plans.

Result After Mitigation: Implementing mitigation measures CR-1 to CR-5 would reduce impacts ~~the Tree Protection Plan would reduce impacts related to the loss or risk of loss of Ventura County Historical Landmark No. 15~~ to a less than significant level.

Cumulative Impact: The cumulative project area is defined as the entire City of Oxnard at its planned 2030 buildout, which includes development of the project site. Cultural resources were analyzed by the 2030 General Plan PEIR and found not to be significant after implementation of uniformly applied development policies and regulations. The project's impacts can be mitigated to below a level of significance so the projects would not substantially contribute to any cumulative impacts. The 2030 General Plan PEIR is incorporated by reference, specifically Chapter 5.4, Draft PEIR, February 2009, page 5-19.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
VI. GEOLOGY AND SOILS – Would the Projects:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
VI. GEOLOGY AND SOILS – Would the Projects:				
iii) Seismic-related ground failure, including liquefaction?	☐	☒	☐	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable as a result of the Projects, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☒	☐	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial risks to life or property?	☐	☒	☐	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

Environmental Setting: The City of Oxnard is located in an area that has a high potential for seismic ground shaking (City of Oxnard, *2030 General Plan*). The *City of Oxnard 2030 General Plan, Background Report,* lists fault systems that are located within the vicinity of the City of Oxnard. Active and potentially active faults are present in the surrounding region and may extend into the subsurface beneath the City. Advanced Geotechnical Services, Inc. conducted a Geotechnical Engineering Study (April 2014) to identify on-site soil conditions that may affect the proposed project and to provide geotechnical recommendations for site preparation, temporary excavations, foundation design, slabs-on-grade, pavement design and drainage. This study is included as Appendix F.

a.i) The LA Times recently published an article with new findings indicating that the Ventura Fault is connected to a network of other faults that stretch from the Santa Barbara Coast and into eastern Ventura County. The Ventura Fault could be more dangerous than previously thought and produce an earthquake as large as magnitude 8 (LA Times, 2015). Although the project site is located in seismically active Southern California, the site is not located in an Alquist-Priolo Earthquake Fault Zone. There are no known active or potentially active faults passing through the site, therefore the potential of on-site ground rupture due to movement on an underlying fault is not considered a significant hazard. **No impact would occur.**

a.ii) The project site is subject to strong seismic ground shaking, as are all projects located within Southern California. Construction of the proposed Apartment Homes and Senior Living

Project would be subject to the seismic design criteria of the 2013 California Building Code (CBC). **Compliance with the CBC and the City's regulatory standards would reduce impacts due to seismic ground shaking to a less than significant level.**

a.iii) Liquefaction is a phenomenon in which soils below the groundwater level lose strength as a result of groundshaking due to earthquakes. The site is located in an area designated as potentially liquefiable on the *Seismic Hazard Zones Map* of the Oxnard Quadrangle. The site is therefore potentially susceptible to liquefaction and was further evaluated for the potential and extent of possible liquefaction. The results of the analysis indicate that the sandy earth materials underlying the site are potentially liquefiable between the depths of 7 feet and 20 and 25 feet below existing ground surface. **Impacts related to liquefaction-induced settlement would be reduced to a less than significant level with implementation of GEO-1**.

a.iv) Structures built below or on slopes subject to failure or landslides may expose people and structures to harm. The site is relatively flat and an on-site earthquake-induced landslide would not affect the two projects. **Impacts would be less than significant**.

b) Topsoil is used to cover surface areas for the establishment and maintenance of vegetation due to its high concentrations of organic matter and microorganisms. Excavation and grading onsite could result in erosion of onsite soils and sedimentation during storms or high wind events. Development would also involve the removal of soil from the site for the laying of structural foundations and/or the importation of soil as fill material. This would likely necessitate temporary on-site stockpiling of soils, which is already present on the site. During excavation, grading and soil stockpiling, there is potential for soil migration via wind entrainment and/or water erosion. In addition, structural and concrete residue/dust from demolition of surface parking lots and buildings could potentially migrate and adversely impact water quality. General construction activities would loosen and expose soils, potentially resulting in erosion.

Pursuant to City of Oxnard Municipal Code Chapter 22, Article XII, *Stormwater Quality Management*, the City of Oxnard requires any development over one acre in size comply with a Storm Water Pollution Prevention Plan (SWPPP) in accordance with the municipal storm water permit and state general permit. The SWPPP would include specific best management practices (BMPs) to implement onsite and would be approved by the City prior to the issuance of grading or building permits. Compliance with applicable BMPs, such as silt fences, sediment traps, applying soil binders to disturbed areas, and designated areas for parking and fueling, would reduce the potential for pollutants to enter groundwater at the site or to leave the site through wind or erosion and contaminate surface water. Mitigation measures required to reduce air quality impacts from construction of the proposed projects would also reduce erosion. **Impacts would be less than significant**.

c-d) Impacts related to liquefaction and landslides are discussed in Section VI (a) of this document. Lateral spreading is the downslope movement of surface sediment due to liquefaction in a subsurface layer. The downslope movement is due to gravity and earthquake shaking combined. Such movement can occur on slope gradients of as little as one degree. Lateral spreading typically damages pipelines, utilities, bridges, and structures. Lateral spreading of the ground surface during a seismic event usually occurs along the weak shear zones within a liquefiable soil layer and has been observed to generally take place toward a free face (i.e. retaining wall, slope, or channel) and to lesser extent on ground surfaces with a very gentle slope. Due to the absence of any channel within or near the subject site, the potential for lateral spread occurring within the site is considered to be negligible. Expansive soils are those that expand when exposed to water and contract when water is not present. The risk of soil expansion was found to be very low. The projects would be required to comply with the CBC with regard to construction; the proposed commercial and residential buildings would require building permits and would be constructed to current building code standards. **Impacts arising from liquefaction, landslides, lateral spreading, and unstable soils would be less than significant with mitigation measure GEO-1 and compliance with existing CBC regulations.**

e) The proposed projects would connect to existing sewer infrastructure in the area. **No septic tanks would be required; therefore, no impact would occur.**

Mitigation: The following mitigation measure would apply to the Apartment Homes and Senior Living Project. With incorporation and monitoring of the mitigation measures, geology and soil impacts would be less than significant.

GEO-1 **Geotechnical Engineering Study Recommendations.** The project design, site preparation, and construction shall incorporate and implement all of the recommendations, as outlined in Section 5 of the Geotechnical Engineering Study prepared by Advanced Geotechnical Services, Inc., dated April 25, 2014. These include but are not limited to:

a. Upper site soils shall be removed and recompacted for support of the proposed structures as listed in Section 5.2 Geotechnical Engineering Study, Site Preparation, of the geotechnical report.
b. Based on the potential for liquefaction affecting the site, and the resulting potential for liquefaction-induced settlement, it is recommended that a mat foundation be utilized for support of the proposed structures. The mat foundation should be underlain by a minimum of three feet of newly placed compacted fill.
c. All surface runoff must be carefully controlled, and surface runoff control must remain a crucial element of site maintenance. Final grading should provide positive drainage away from footings. All underground plumbing fixtures shall be leak-free and maintained. Trees and large shrubbery shall not be planted so that roots grow under foundations and flatwork when they reach maturity. Irrigation should be carefully planned to ensure that watering is adequate but not excessive.

All other recommendations made in the geotechnical study shall be incorporated into the project as conditions of approval. The report shall be submitted concurrently with plans submitted for review by the Building Official.

Monitoring: The Development Services Department staff shall review plans and reports as part of the grading and building permit process to ensure that the recommendations are implemented through project design and construction.

Result after mitigation: Upon implementation of the above mitigation measures, the project would not result in any residual significant adverse effects on the environment related to geology.

Cumulative Impact: The cumulative project area is defined as the entire City of Oxnard at its planned 2030 buildout, which includes development of the project site. Geology and soils were analyzed by the 2030 General Plan PEIR and found not to be significant after implementation of uniformly applied development policies and regulations. With the above mitigation measures, the proposed projects would not substantially contribute to any cumulative geologic impacts. The 2030 General Plan PEIR is incorporated by reference, specifically Chapter 6.2, Draft PEIR, February 2009, page 6-2.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
VII. GREENHOUSE GAS EMISSIONS - Would the Projects:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

a-b) Pursuant to the requirements of Senate Bill 97, the Resources Agency adopted amendments to the *CEQA Guidelines* in 2009 for the feasible mitigation of greenhouse gas (GHG) emissions and analysis of the effects of GHG emissions. The adopted *CEQA Guidelines* provide regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents, while giving lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts.

In April 2015 Governor Brown issued Executive Order B-30-15, calling for a new statewide GHG reduction target of 40% below 1990 levels by 2030. EO B-30-15 does not establish any new requirements for GHG emissions analysis and reduction in the CEQA process beyond what was adopted in SB 97.

Neither the VCAPCD nor the City has established quantified project-level significance thresholds for GHG emissions for projects. The City will formally adopt a GHG emission threshold when the Oxnard 1995 Threshold Guidelines are updated by 2016. In the interim, projects are evaluated for their consistency with the SCAG Sustainable Communities Strategy (SCS) that has quantified GHG emission reductions for the SCAG region which are a component of the State's overall GHG reduction program. The proposed projects are consistent with the 2030 General Plan and are accommodating population growth that is within the projections made for the City of Oxnard 2030 General Plan, and therefore would not conflict with achieving the SCAG SCS GHG reduction target. **Impacts would be less than significant.**

Mitigation: None required

Cumulative Impact: The cumulative project area is defined as the entire City of Oxnard at its planned 2030 buildout, which includes development of the project site. GHG impacts were analyzed by the 2030 General Plan PEIR and found to be significant and unavoidable. An overriding consideration was adopted for this impact. The project's GHG emissions would be within those considered in the 2030 General Plan PEIR and would be under the project-level threshold of significance; therefore, the project's contribution to cumulative GHG-related impacts would not be considerable. The 2030 General Plan PEIR is incorporated by reference, specifically Chapter 5.7, Draft PEIR, February 2009, page 5-35.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
VIII. HAZARDS AND HAZARDOUS MATERIALS - Would the Projects:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school?	☐	☐	☒	☐
d) Be located on a site which is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard for people residing or working in the Project area?	☐	☐	☒	☐
f) For a project within the vicinity of a private airstrip, would the Project result in a safety hazard for people residing or working in the Project area?	☐	☐	☒	☐
g) Impair implementation of or physically	☐	☐	☒	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
VIII. HAZARDS AND HAZARDOUS MATERIALS - Would the Projects:				
interfere with an adopted emergency response plan or emergency evacuation plan?				
h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

a-b) The proposed projects would involve the construction and operation Apartment Homes and the Senior Living Project, as described in the *Project Description*, above. Potentially hazardous materials such as fuels, lubricants, and solvents would be used during construction on the proposed project site. The transport, use, and storage of hazardous materials during the construction of the projects would be conducted in accordance with all applicable state and federal laws, such as the Hazardous Materials Transportation Act, Resource Conservation and Recovery Act, the California Hazardous Material Management Act, and the California Code of Regulations, Title 22.

Operation of the Apartment Homes would not involve the routine transport, use or disposal of hazardous substances, other than minor amounts typically used for routine residential maintenance and housekeeping. **Therefore, impacts from the proposed Apartment Homes would be less than significant.**

The Senior Living Project would store cleaning supplies needed to maintain the facility. No quantities chemicals exceeding regulatory reporting thresholds would be stored on-site. The proposed Senior Living Project does not include medical services such as on-site medical procedures that would involve medical waste or dispensing of pharmaceuticals. **Therefore, impacts from the proposed Senior Living Project would be less than significant.**

c) The proposed Apartment Homes would be located within 150 feet of Mar Vista Elementary School and 600 feet of Oceanview Junior High School, both of which are located across Etting Road south of the project site. There would be no hazardous materials, substances, or waste associated with project development other than those typically used for routine residential maintenance and housekeeping. The proposed Senior Living Project would be required to dispose of all medical waste according to the MWMA. People, including students at the nearby schools would not be exposed to these materials in quantities that would be hazardous. **Therefore, impacts would be less than significant.**

d) The following discussion is based on the following documents included in Appendix G:

- Phase I Environmental Site Assessment prepared by Rincon Consultants, March 2014
- Phase II Environmental Site Assessment prepared by Rincon Consultants, November 2014
- Approval for Workplan for Soil Excavation and Sequestration of Pesticide-Impacted Soil prepared by ES Engineering, March 2015
- Summary of Lead and TPH Excavation Sample Results prepared by ES Engineering, January 2015
- Excavation Summary Pesticide Impacted Soil prepared by ES Engineering, March 2015
- Technical Memorandum: Statistical Analysis of Sampling Data and Human Health Screening Evaluation prepared by Rincon Consultants, April 2015.
- Completion of Ventura County Cleanup Program Requirements: Pleasant Valley Senior Apartments, 2295 Etting Road & 2250 Pleasant Valley Road, Oxnard, CA

The Phase I Environmental Site Assessment identified potential areas of concern associated with the sites use for agriculture and a known underground storage tank that was previously removed. Phase II Environmental Site Assessment (Phase II ESA) further investigated these concerns and identified four areas of concern in the soil on the project site associated with the sites previous agricultural operations. Contaminants of concern identified include lead, total petroleum hydrocarbons (TPH), dichlorodiphenyldichloroethylene (DDE), dichlorodiphenyl-trichloroethane (DDT), dieldrin and chlordane.

Soil sample results from the Phase II ESA analyzed for pesticides and metals were compared to the California Human Health Screening Levels (CHHSLs) established for residential sites and United States Environmental Protection Agency (USEPA) Regional Screening Levels (RSLs). The CHHSLs are concentrations of hazardous chemicals in soil that the California Environmental Protection Agency (Cal/EPA) considers to be below thresholds of concern for risks to human health. Given that there are no established CHHSLs for TPH, concentrations of TPH in soil samples were compared to the Regional Water Quality Control Board - San Francisco Bay Region (SFBRWQCB) Environmental Screening Levels (ESLs). Similar to CHHSLs, ESLs have been established for chemicals commonly found in soil and groundwater at sites where releases of hazardous chemicals have occurred.

Each of the four areas of concern is discussed below. Sample locations and excavation locations are identified in the documents included in Appendix G.

Lead Located Near Former Barn Area (Apartment Homes Project Site). The Phase II ESA identified elevated concentrations of lead in sample locations RS-7, RS-8 and RS-9, above the CHHSL of 80 mg/kg, in the surface soil near the location of the former barn that was demolished in the summer of 2014. The Phase II ESA recommended that remediation of the soils with elevated concentration of lead occur prior to residential development at the site. In January of 2015, ES Engineering completed excavation of the lead impacted soil though excavation of three 10 foot by 10 foot areas to the depth of 2 feet (soil excavation areas SE-1, SE-2 and SE-3). Sidewall and bottom confirmation samples were taken that confirmed no constituents of concern, included lead, were located onsite which exceed the CHHSLs or the RSLs for residential settings. The soil excavated from the SE-1, SE-2 and SE-3 excavation areas was placed in four roll-off bins and transported to the Simi Valley Landfill for disposal.

TPH at Northern Property Line (Apartment Homes Project Site). The Phase II ESA identified TPH above the established ESL of 100 mg/kg near the northern property line at sample location RS-3. In January of 2015, ES Engineering completed excavation of the TPH impacted soil though excavation of a 10 foot by 10 foot area to the depth of 1 foot (soil excavation area SE-4). TPH was not detected in sidewall and bottom confirmation samples taken. The soil excavated from the SE-4 was stored onsite in thirteen 55-gallon Department of Transportation approved drums and transported to Crosby & Overton in Long Beach for disposal.

DDT, DDE, and Dieldrin – Southern Portion of Site (Apartment Homes Project Site). Elevated concentrations of DDT, DDE, and dieldrin were detected at or above the respective CHHSLs and RSLs for residential settings at sample location RS-14. This location also contained elevated levels of chlordane. The Phase II ESA recommended that the areas with elevated DDE, DDT, and dieldrin in the surface soil be remediated prior to residential development of the site. In March of 2015, with the approval of the County of Ventura Hazardous Material Program, Voluntary Cleanup Program, ES Engineering completed excavated RS-14 through one 20 foot by 20 foot excavation to a depth of 1.5 feet bgs (Excavation SE-5). Confirmation samples were collected the bottom and sidewalls. Results showed that none of the constituents of concern to exceed the RSL for residential setting. Approximately 22 cy of DDT, DDE, chlordane and dieldrin impacted soil was removed from excavation SE-5 and transported to the Simi Valley Landfill for disposal.

Chlordane – Various Locations (Apartment Homes and Senior Living Project Sites). Chlordane was detected above the established CHHSL in various locations throughout the project site, including RS-14 as described above. Chlordane was also present at RS-17, RS-18, and RS-26. With the approval of the County of Ventura Hazardous Material Program, Voluntary Cleanup Program. In March of 2015, excavations SE-6, SE-7, and SE-8 were completed and removed approximately 10 foot by 10 foot areas, and to a depth of 1.5 feet bgs. Confirmation soil samples from the sidewalls and bottom of each excavation. Level of chlordane in the confirmation samples results were below the residential RSL. Approximately 17 cy of chlordane impacted soil was removed from excavations SE-6, SE-7, and SE-8 and transported to the Simi Valley Landfill for disposal.

Following excavation of contaminants on the project site described above, Rincon Consultants completed a Health Risk Screening Evaluation (April 2015) to evaluate the risk associated with the residual chlordane in the soils. Chlordan is an organochlorine compound used as a pesticide sold in the U.S. until 1983. The 95% Upper Confidence Level (UCL) was calculated on the mean as 0.285 milligrams per kilogram (mg/kg) chlorane. The cancer and non-cancer risk posed to humans under a residential scenario at the project site was calculated using the 95% UCL as representative of site conditions. Health risk was calculated to be:

Cancer Risk – 2.84×10^{-7}
Hazard Index – 1.26×10^{-2}

These health risk values are below the Department of Toxic Substances Control values of 1×10^{-6} for carcinogenic health risk and a hazard index of less than 1.0.

The County of Ventura Environmental Health Division issued a letter confirming the completion of the site investigation and remediation activities and finds that the residual concentrations of pesticides are at or below USEPA recommended regional screening levels for residential soils.

Air pollutant emissions from the truck trips associated with the export of soil were discussed in Section III, *Air Quality,* and based on the conservative estimate of 12,000 cy of soil being exported. Impacts from construction emissions, including these truck trips, were identified to be less than significant with mitigation.

Based on the investigations, excavations, and analyses discussed above related to contaminants known to have been present on the project site, **impacts related to a hazard to the public or the environmental would be less than significant.**

e-f) The project site is located approximately four miles southwest of the Camarillo Municipal Airport and three miles north of Naval Air Station Point Mugu, which has an airstrip. According to the Airport Comprehensive Land Use Plan for Ventura County, the project site is not located within flight paths of the Camarillo Airport or the airstrip at Point Mugu. **Impacts would be less than significant.**

g) The proposed development is within a developed area already designed with roadways to accommodate access for emergency and other service vehicles. The proposed projects would not substantially change existing conditions with regard to transportation routes or evacuation plans. Construction activities may temporarily restrict vehicular traffic along Pleasant Valley Road and Etting Road; thus, the contractor would be required to implement traffic control measures to facilitate the passage of people and vehicles through/around any required lane closures, in accordance with City policy and permitting requirements.

As shown on the site plan (Figure 3), the Apartments would have two access points, one on Etting Road and one on Pleasant Valley Road. The Senior Project would have direct access off of Pleasant Valley Road. The projects would be required to comply with City's development standards related to site access. **Therefore, the projects potential to impact emergency response and evacuation routes would be less than significant**.

h) According to the 2030 General Plan Background Report (City of Oxnard 2006), the project site is located in an urbanized area of Oxnard and is not near any wildland fire hazard zones. Thus, the proposed projects would not expose persons or structures to wildfire hazard risks. **There would be no impact.**

Mitigation: None required.

Cumulative Impact: The cumulative project area is defined as the entire City of Oxnard at its planned 2030 buildout, which includes development of the project site. Hazards and hazardous materials were analyzed by the 2030 General Plan PEIR and found not to be significant after implementation of uniformly applied development policies and regulations. As discussed above, the proposed project's impacts would be less than significant; therefore, the projects would not make a considerable contribution to cumulative impacts. The 2030 General Plan PEIR is incorporated by reference, specifically Chapter 6.5, Draft PEIR, February 2009, page 6-25.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
IX. HYDROLOGY AND WATER QUALITY – Would the Projects:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering or the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☒	☐	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
d) Substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☒	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☐	☒	☐
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☒	☐
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☒	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
IX. HYDROLOGY AND WATER QUALITY – Would the Projects:				
i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☒	☐
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

a) The City of Oxnard lies within the Oxnard Plain Basin and Oxnard Forebay Basin with small portions of the City in the Mound Basin. LC Engineering Group, Inc. conducted a *Conceptual Hydrology and Hydraulics Study in October of 2014* (Appendix H) for the proposed projects in order to size the drainage structures associated with the development and size the Storm Water Quality areas. There are two abandoned wells located onsite and the pumps have been removed; these well are to remain abandoned under the proposed projects. The proposed projects would be required through uniformly applied conditions to meet the City's water quality standards. All wastewater would be treated by the City Wastewater system to applicable standards. **Impacts would be less than significant and no mitigation is required.**

b) Water supply to the project site is provided by the City of Oxnard. The City's current water supply consists of four sources. Each of the City's water supply sources and the status of each source is provided below.

1) Imported surface water from the Calleguas Municipal Water District (CMWD). CMWD is a member agency of the Metropolitan Water District of Southern California (MWD), from which it purchases State Water Project (SWP) water. SWP water is provided to the City from CMWD's Springville Reservoir through the City's Oxnard and Del Norte Conduits that feed five of the City's six water blending stations. About 9,000 acre-feet (AF) are expected for the 2015/2016 year from CMWD/MWD. The City will likely have to purchase Tier 2 MWD water (at a higher rate) to provide suitable water quality.
2) Groundwater from the United Water Conservation District (UWCD). UWCD supplies will be reduced by about 25 percent, and used to the maximum extent practical, as the cost is lower.
3) Groundwater from City wells subject management of the Fox Canyon Groundwater Management Agency (FCGMA). The GMA will not allow the City to use pumping allocations transferred from agricultural users, until further notice.
4) Recycled water from the City's Advanced Water Purification Facility (AWPF). This water supply offsets potable water used for irrigation or is provided to agricultural users in exchange for groundwater allocation. The AWPF began operating at a small scale in April, 2015, and provides recycled water to the City's golf courses. AWPF initial capacity is 7,000 acre-feet per year (AFY) with potential to increase supply to over 28,000 AFY. The timing of future expansions is currently unknown.

The City blends water from all available groundwater and imported surface water sources to achieve an appropriate balance between water quality, quantity, and cost. The City also plans and manages water supplies in accordance with an Urban Water Management Plan (UWMP), which is updated every five years and currently in the process of being updated. Development of the project site was anticipated in the City's 2010 UWMP, which accounted for build out under the 2030 General Plan. The UWMP provides for reliable water supply, primarily through the Groundwater Recovery Enhancement and Treatment (GREAT) Program, a water resources project that combines wastewater recycling and reuse, groundwater injection, storage and recovery, and groundwater desalination to provide regional water supply solutions to water users in the Oxnard Plain (City of Oxnard 2004). An EIR has been prepared for the GREAT Program, and is incorporated by reference to this analysis, as well as available for review at the City of Oxnard's Planning Division office or on City Planning Division's webpage.

In July, 2014, and in response to recent drought conditions, the State Water Resources Control Board (SWRCB) adopted new water conservation regulations (Resolution 2014-0038), including select prohibitions for all water users and required actions for all water agencies. Local water agencies have responded with declarations that prohibit water users from filling pools and spas or restrict when or for how long users can irrigate landscaping. On April 1, 2015, Governor Brown issued Executive Order B-29-15, which ordered the SWRCB to impose restrictions to achieve a statewide 25 percent reduction in potable urban water usage through February 28, 2016. Executive Order B-29-15 states that "these restrictions will require water suppliers to California's cities and towns to reduce usage as compared to the amount used in 2013" (State of California, Executive Order B-29-15, April 2015).

The SWRCB has proposed a schedule for the development of emergency regulations to implement the new prohibitions and place restrictions on water use, as well as the 25 percent statewide reduction in potable urban water use contained in Executive Order B-29-15 (SWRCB, April 2015). This proposed schedule initiated with the Governor issuing the Drought Executive Order on April 1, 2015, followed by release of draft regulations and public comment in April 2015, and Board hearing and adoption of the emergency regulations in May 2015.

Currently, the City of Oxnard has asked its residents and businesses to reduce their water use by 20 percent. Oxnard has access to MWD programs that have been implemented to incentivize the use of water efficient fixtures and equipment for residences, businesses, industry, institutions, and large landscapes in southern California (MWD, website, accessed March 9, 2015). MWD's rebate programs include SoCalWater$mart, which assists customers with installing high-efficiency toilets, clothes washers, plumbing fixtures, HVAC, sprinkler controllers, soil moisture sensors and more (Additional information at www.socalwatersmart.com). MWD's Water Savings Incentive Program assists large water volume users in implementing large scale water saving projects, such as projects to overhaul industrial processes to increase water reuse or install valves and pumps to improve agricultural irrigation efficiency (Additional information at http://bewaterwise.com/Water_Saving_Incentive_Program_Brochure_WEB.pdf). More water conservation resources and tips from MWD and information on how MWD is responding to the drought are available at www.bewaterwise.com.

The City's water supplies continue to be affected by the ongoing drought and reductions are anticipated to continue into fiscal year 2015/2016. The City's Tier 1 supply from CMWD, the imported water supplier, is expected to be reduced 15 to 20 percent. The City will likely have to purchase Tier 2 water (at a higher rate) to blend with pumped groundwater to provide suitable water quality. Groundwater supplies will be used to the maximum extent practical, as the cost is lower. The Fox Canyon Groundwater Management Agency will not allow the City to use pumping allocations transferred from agricultural users, until further notice.

The City is embarking on an aggressive program to convert irrigation systems along the Recycled Water Backbone System from potable water to AWPF recycled water. Recent meetings with the Regional Water Quality Control Board to allow the temporary use of Calleguas' Salinity Management Pipeline to serve agricultural customers have also placed a high priority on connecting these customers and transferring their pumping allocation to the City.

Water conservation continues to play an important role in reducing water demands. Usage in April 2015 was 12 percent lower than April 2013. The residents and businesses of Oxnard have responded to the conservation messages and the City will continue to emphasize reducing water usage for the foreseeable future.

In addition, as described in the City's 2030 General Plan, the City includes a multifaceted Water Management Program that outlines how the City plans to provide an adequate water supply to meet forecast water demands well into the future. The City is currently updating its Water Master Plan and 2015 UWMP, as well as working cooperatively with local groundwater managers such as the FCGMA, UWCD, and CMWD (Las Posas) on local groundwater management programs as well as with the CMWD and Metropolitan on regional imported water supply issues. Together, these programs are intended to provide a high degree of flexibility to provide a reliable long-term water supply under a broad range of known (i.e., projected growth and planned water supply projects) and unknown scenarios (i.e., extended drought, global climate change). The availability of local groundwater as augmented by existing groundwater management programs (including groundwater recharge through the Freeman Diversion project and the Las Posas Aquifer Storage Project), imported SWP water, and the City's planned water recycling effort through its GREAT Program will help to ensure that the City will be able to meet long-term water demands. The 2030 General Plan includes policies and implementation measures that address a range of water supply and groundwater resource issues. (City of Oxnard 2015)

The estimated water demands for the proposed projects are shown in Table 3 by unit type.

Table 3
Project Water Demands per Unit

	Unit Type and Quantity	Gallons / Day / Unit	Gallons / Day	Acre-feet / Year
Pleasant Valley Road Apartments				
	23 one-bedroom units	144	3,312	3.7
	70 two-bedroom units	192	13,440	15.1
	8 three-bedroom units	240	1,920	2.2
Senior Project				
	70 beds	90	6,300	7.1
	Project Total	**666**	**24,972**	**28.0**

Notes:
1. Sewage generation factors identified in the L.A. CEQA Thresholds Guide (City of Los Angeles 2006) were used to estimate the average daily sewage flow per unit type. A generation factor of 1.2 (120%) was then applied to these rates to estimate the average daily water demand per unit type, in gallons per day per unit. These quantities were then converted into acre-feet per year to identify the totals shown above.

As shown, the two projects would have an estimated total daily water demand of approximately 24,972 gallons, or approximately 28 AFY. In addition, the estimated applied water use (EAWU) associated with landscaping for the Pleasant Valley Road Apartments is approximately 1,370,636 gallons per year, or 4.2 AFY, while the EAWU associated with landscaping for the Senior Living Building is approximately 73,939 gallons per year, or approximately 0.23 AFY (Landscape Architects, Inc., 2015a; Landscape Architects, Inc., 2015b). In total EAWU for landscaping associated with the projects is approximately 4.43 AFY. The combined indoor and outdoor water use estimates for the two proposed projects is approximately 32.43 AFY.

As described in Section 8, *Project Description*, the proposed projects include a City-initiated zone change from C-R (Community Reserve) to R-2 (Multiple Family Zone), to make the site consistent with the City's 2030 General Plan. The Multiple Family Zone designation will allow for higher density than the Community Reserve designation; as a result, it may be presumed that higher water demand/use will be associated with the site. Wells on the project site have not historically been metered, and an exact record of groundwater pumping rates or water usage on the project site is not available. In order to assess potential impacts associated with water supply and demand, this analysis considers the reasonably estimated water demands associated with the proposed project against the reasonably foreseeable available water supply. Current planning documents, including the City of Oxnard 2030 General Plan and the City of Oxnard 2010 UWMP, do not provide water use estimates for specific land use designations or specific properties; therefore, rates of previous or current water use on the site have not been documented. Proposed project water demands are described above in Table 3. The site is currently vacant with intermittent shrubs lining a chain link fence around the perimeter. Introducing the proposed projects to the site would introduce new water demands that are not currently present on the site; however, as stated above the proposed re-zoning would make the site consistent with the City's 2030 General Plan, which is used in anticipating water demands and supplies in the projections and management strategies defined in the UWMP.

The 2010 UWMP lists the City's "Water Neutrality Policy" below:

> *First established in 2008 and recently reaffirmed in 2011, the Oxnard City Council has established a water demand "neutrality" policy. That is, all new development approved within the City must offset the water demand associated with the project with a supplemental water supply. As noted above, "new development" includes all planned (anticipated in the current General Plan) and any unplanned future development occurring in the City." Under the policy, a development can be water neutral by meeting its projected demand through: existing FCGMA groundwater allocations that are transferred to the City; contributing to increased efficiency by funding water conservation or recycled water retrofit projects; providing additional water supplies; or any combination of these options. While this City policy has not been codified, it has been applied to every development project approved since 2008. (Oxnard 2010 Urban Water Management Plan, May 2012, pg. 2-10).*

The policy was not developed to address the current four-year drought, per se. The policy has subsequently been interpreted and applied by the City Council as recently as May 19, 2015 to mean that a project that is consistent with the 2030 General Plan land uses that were included in the 2010 UWMP demand projections is eligible for City-provided water service unless the project's water demand is substantially greater than the 2010 UWMP's water demand factor for that land use. In the present case, the Project area was assigned a Medium Density residential land use in the 2030 General Plan, which corresponds to an annual water demand generated by an average of 10 residential units per acre, or 26.9 AFY (330 gpd/unit X 10 units/acre). The estimated water demand for the proposed projects is 32.43 AFY, 5.53 AFY greater than the 2010 UWMP projection, or 20.5 percent.

As reported in a FCGMA *Semi-Annual Groundwater Extraction Statement* dated August 2014, two groundwater wells located on the project site (Township 01N, Range 22W, Section 14) have an assigned Historical Extraction Allocation of 45.425 AFY (FCGMA, 2014). All original Historical Extraction Allocations are currently subject to a 25 percent reduction as a conservation measure, resulting in an Adjusted Historical Allocation of 34.070 AFY (FCGMA, 2014). The discussion above indicates that the combined estimated indoor and outdoor water demand is approximately 32.43 AFY, which is within the Adjusted Historical Allocation amount for the project sites, where the Adjusted Historical Allocation is 25 percent less than the Historical Extraction Allocation. In addition, a Temporary Extraction Allocation (TEA) from the FCGMA may be implemented; the project proponent will coordinate with the FCGMA to ensure the appropriate level of permitting. The project proponent will be conditioned to file an Application for Transfer of Historical Allocation to the FCGMA, to satisfy the City's Water Neutrality Policy described above, as applicable to the proposed project.

With existing and planned conservation efforts to reduce the City's municipal and industrial water demand by at least 12 percent to meet State emergency directives, the City has sufficient contracted water supply for the foreseeable future and, as the AWPF increases its capacity, additional capacity for increased demand consistent with the buildout of the 2030 General Plan.

However, because estimated water demand for the proposed projects is 20.5 percent greater than the 2010 UWMP the proposed projects impacts **would be less than significant with implementation of adaptive mitigation HYD-1.**

c–f) The proposed projects would not alter the surface drainage pattern of the surrounding area. They also would not require the relocation of existing storm drain lines or construction of any new storm drain lines. Storm water would continue to flow into the City's existing storm drain system. There are no surface water bodies or wetlands within the vicinity of the proposed project, however existing absorption rates, drainage patterns, and runoff rates of the subject site and surrounding areas would be affected by an increase in impervious surfaces on-site. In order to comply with the National Pollution Discharge Elimination System (NPDES) requirements for a permit to discharge storm water and NPDES requirements for a construction permit, a development project that disturbs five acres or more must follow a Storm Water Pollution Prevention Plan (SWPPP) that outlines both a plan to control storm water pollution during construction and after construction is complete by the use of best management practices (BMPs) that are appropriate and applicable to the projects. The project site for the Apartments and Senior Project totals 7.28 acres and a SWPPP would be required and would be subject to the review and approval of the City of Oxnard in order to verify compliance with NPDES requirements.

Currently, runoff generated onsite flows from the northern and eastern perimeter of the project site toward the southwest in the form of sheet flow and is intercepted in catch basins and conveyed to Etting Road. The City of Oxnard has a master plan of the storm water drainage in the City and the project site is programmed for post-development flow to be discharged into the Etting Road storm drain facilities. The projects would be subject to existing requirements, including compliance with the City's Municipal Separate Storm Sewer System (MS4) permit and discharge requirements.

As described above, LC Engineering Group, Inc. conducted a *Conceptual Hydrology and Hydraulics Study* (Appendix H) for the proposed projects in order to size the drainage structures associated with the development and size Storm Water Quality areas. In order to comply with the City's MS4 permit, runoff from the proposed apartment building and parking would be collected in roof drains and catch basins and conveyed to pipes, which would be connected to bioretention areas. The water would be cleaned as it moves through the bioretention areas and then collected in catch basins and conveyed to the existing Etting Road storm drain facility. The runoff from the remainder of project site would be collected in catch basins and conveyed to the existing Etting Road storm drain facility. The proposed catch basins and pipes would have adequate capacity to capture and convey the 50-year flow to the bioretention areas and the pervious pavement in the parking lots. According to the *Conceptual Hydrology and Hydraulics Study,* the proposed project's bioretention basins would limit the post-development outflow to 5% of the effective impervious area during the ¾-inch storm event. **Impacts related to drainage patterns, both temporary and operational, would be less than significant.**

g-h) In accordance with Federal Emergency Management Agency (FEMA) flood zone maps (#06111C0920E), the project site is located in Zone X, which is defined as an area outside the 500-year flood zone. **Therefore, impacts related to placing housing or structures within 100-year flood hazard area would be less than significant.**

i) Several dams are located at least 35 miles to the east and northeast of the project site. These include the Santa Felicia Dam at Lake Piru, the Castaic Lake Dam and the Pyramid Lake Dam. According to the *Multi-Jurisdictional Hazard Mitigation Plan for Ventura County* (2005), the entire City of Oxnard is located in a Dam Inundation Zone, or Dam Failure Hazard Zone, and 170,540 residents (approximately 98% of the population) are at risk from dam failure. Damage to the City could be in the form of a wall of fast-moving water, mud and debris. This could lead to injury or loss of life. However, according to the Oxnard 2030 General Plan, the potential for dam failure is considered low. According to the General Plan PEIR, this is because it is assumed that all dams have been constructed to the specifications set forth by State and federal agencies. Additionally, regular inspections are conducted to identify any weaknesses or problems with the dams that could cause structural damage or overtopping. **Impacts related to dam inundation would be less than significant.**

j) A tsunami is a tidal wave produced by off-shore seismic activity; seiches are seismically-induced waves that occur in large bodies of water, such as lakes. The project site is not located close to an inland body of water and is at an elevation sufficiently above sea level to be outside the zone of a tsunami runup; therefore, the risk of these hazards is not pertinent to this site (AGS, 2014). The site is also not located in an area considered a tsunami inundation area according to Tsunami Inundation Map for Emergency Planning Oxnard Quadrangle (CalEMA, February 2009). **Therefore, no impact related to these hazards would occur.**

<u>Mitigation:</u> The following mitigation measures shall apply to the Apartments and Senior Living Project. With incorporation and monitoring of the mitigation measures, hydrology and water quality impacts would be considered less than significant.

HYD-1 **Water Supply**. Additional water demand above the amount of potable water demand estimated within the 2010 UWMP for the project site, shall be provided by the applicant to offset the net additional water demand associated with the project. This shall be accomplished through a Water Neutrality Plan to be reviewed and approved by the City prior to issuance of any building permit. The Water Neutrality Plan shall contain any combination of the following measures, or other measures suggested by the Applicant, that are quantifiable, permanent offsets of existing potable water use elsewhere in the City, or bring new water supply to the City, that match or exceed 5.53 AFY:

a. Transfer of existing FCGMA groundwater allocations to the City.
b. Contribute to expansion of the City's water conservation program, such as but not limited to offsets available through programs such as toilet exchange and showerhead replacements.
c. Provide to the City financial contributions towards City programs which generate in-City water conservation or recycled water capacity or conveyance not otherwise required by another State or local water conservation program
d. Participate in other similar programs with cumulatively result in an adequate water supply contribution.
e. Provide to the City water supplies equal to the shortage amount.

Monitoring: Prior to issuance of a building permit, the Utilities Director in cooperation with the Development Services Director shall review and approve the water mitigation measures implemented. All required fee and programs shall be implemented prior to issuance of any building permit.

Result after mitigation: Upon implementation of the above mitigation measures, the project would not result in any residual significant adverse effects on the environment related to water

Cumulative Impact: The cumulative project area is defined as the entire City of Oxnard at its planned 2030 buildout which development of the project site. Hydrology and water quality were analyzed by the 2030 General Plan PEIR and found not to be significant after implementation of uniformly applied development policies and regulations. As discussed above, the proposed project's impacts would be less than significant; therefore, the projects would not make a considerable contribution to cumulative impacts. The 2030 General Plan PEIR is incorporated by reference, specifically Chapter 4.3, Draft PEIR, February 2009, page 4-25.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
X. LAND USE AND PLANNING -- Would the proposal:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐
c) Conflict with an applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

a) The proposed projects do not include any components, such as a new road, that would physically divide an established community. **No impact would occur.**

b) The proposed Apartment Homes and Senior Living Project would require a zone change from the current zoning of C-R (Community Reserve) to R-2 (Multiple Family Zone). This Zone Change is being initiated by the City. The proposed zoning is consistent with the 2030 General Plan land use designation of Low Medium Density Residential (7-12 units per acre) as the R-2 zone allows a maximum of 12 dwelling units per acre (du/acre).

The Senior Living Project would require a zone text amendment to create a "Senior and Assisted Living" definition and allow for that use in the R-2 Section of the Municipal Code. The zone text amendment is being processed concurrently and being initiated by the City in recognition that this type of hybrid seniors commercial-residential use will be proposed in other locations in response to changing living patterns and demographics.

The project site is identified as site B-8 in Figure F-1, AAHOP (All-Affordable Housing Opportunity Program) Affordable Residential Sites, in the 2006-2014 Housing Element. The site is classified as largely vacant which is defined to be "Minor structures and/or paving to be demolished, and homes and small business to be relocated." There are ample AAHOP sites in the City as identified in Figure F-1 of the 2006-2014 Housing Element where affordable housing can be provided. The removal of the AAHOP designation will be addressed in the 2013-2021 Housing Element which is anticipated to be adopted in Fall of 2015.

With approval of the zone change and the zone text amendment, being processed as a separate project, impacts would be less than significant.

c) The project site is not located within an area that is subject to an adopted habitat conservation plan or natural community plan. **No impact would occur.**
Mitigation: No mitigation measures are required or proposed.

Cumulative Impact: The cumulative project area is defined as the entire City of Oxnard at its planned 2030 buildout which included development of the project site. Land use and planning were analyzed by the 2030 General Plan PEIR and found not to be significant after implementation of uniformly applied development policies and regulations. As discussed above, the proposed project's impacts would be less than significant; therefore, the projects would not make a considerable contribution to cumulative impacts. The 2030 General Plan PEIR is incorporated by reference, specifically Chapter 3.2, Draft PEIR, February 2009, page 3-2.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XI. MINERAL RESOURCES -- Would the Projects:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

a-b) According to the 2030 General Plan, the City of Oxnard has mineral/sand/gravel deposits primarily along the Santa Clara River channel, along Highway 101 corridor and along the eastern edge of the City extending west to Oxnard Boulevard. The projects would not create a unique demand on available mineral resources in the City, since the project site is not located in an area of importance for mineral deposits. The project site lies within the MRZ-1 area (no significant aggregate deposits) and does not fall within any of the areas listed as having significant mineral deposits. **Therefore, the projects would have no impact on any known mineral resources.**

Mitigation: No mitigation is required.

Cumulative Impact: The cumulative project area is defined as the entire City of Oxnard at its planned 2030 buildout which included development of the project site. Mineral resources were analyzed by the 2030 General Plan PEIR and found not to be significant after implementation of uniformly applied development policies and regulations. As discussed above, the proposed project's impacts would be less than significant; therefore, the projects would not make a considerable contribution to cumulative impacts. The 2030 General Plan PEIR is incorporated by reference, specifically Chapter 5.6, Draft PEIR, February 2009, page 5-33.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XII. NOISE – Would the Projects result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☒	☐	☐
c) A substantial permanent increase in ambient noise levels above levels existing without the Projects?	☐	☒	☐	☐
d) A substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project?	☐	☒	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the Project expose people residing or working in the Project area to excessive noise?	☐	☐	☐	☒

Environmental Setting: Noise is defined as unwanted sound that disturbs human activity. Environmental noise levels typically fluctuate over time, and different types of noise descriptors are used to account for this variability. Noise level measurements include intensity, frequency, and duration, as well as time of occurrence. Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound power levels consistent with the human hearing response, which is most sensitive to frequencies around 4,000 Hertz (about the highest note on a piano) and less sensitive to low frequencies (below 100 Hertz).

Sound pressure level is measured on a logarithmic scale with the 0 dB level based on the lowest detectable sound pressure level that people can perceive (an audible sound that is not zero sound pressure level). Based on the logarithmic scale, a doubling of sound energy is equivalent to an increase of 3 dB, and a sound that is 10 dB less than the ambient sound level has no effect on ambient noise. Because of the nature of the human ear, a sound must be about 10 dB greater than the reference sound to be judged as twice as loud. In general, a 3 dB change in community noise levels is noticeable, while 1-2 dB changes generally are not perceived. Quiet suburban areas typically have noise levels in the range of 40-50 dBA, while those along arterial streets are in the 50-60+ dBA range. Normal conversational levels are in the 60-65 dBA range, and ambient noise levels greater than 65 dBA can interrupt conversations.

In addition to the instantaneous measurement of sound levels, the duration of sound is important since sounds that occur over a long period of time are more likely to be an annoyance or cause direct physical damage or environmental stress. One of the most frequently used noise metrics that considers both duration and sound power level is the equivalent noise level (L_{eq}). The L_{eq} is defined as the single steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time (essentially, the average noise level). Typically, L_{eq} is summed over a one-hour period.

The time period in which noise occurs is also important since noise that occurs at night tends to be more disturbing than that which occurs during the daytime. Two commonly used noise metrics – the Day-Night average level (L_{dn}) and the Community Noise Equivalent Level (CNEL) recognize this fact by weighting hourly L_{eqs} over a 24-hour period. The L_{dn} is a 24-hour average noise level that adds 10 dB to actual nighttime (10:00 PM to 7:00 AM) noise levels to account for the greater sensitivity to noise during that time period. The CNEL is identical to the L_{dn}, except it also adds a 5 dB penalty for noise occurring during the evening (7:00 PM to 10:00 PM).
Vibration is sound radiated through the ground. The rumbling sound caused by the vibration of room surfaces is called ground borne noise. Ground borne vibration is almost exclusively a concern inside buildings and is rarely perceived as a problem outdoors. Ground-borne vibration related to human annoyance is generally related to velocity levels expressed in vibration decibels (VdB). However, construction-related groundborne vibration in relation to its potential for building damage can also be measured in inches per second (in/sec) peak particle velocity (PPV) (Federal Transit Administration, May 2006). Based on the FTA's *Transit Noise and Vibration Impact Assessment* and the California Department of Transportation's 1992 *Transportation-Related Earthborne Vibration, Technical Advisory*, vibration levels decrease by 6 VdB with every doubling of distance.

The City's Noise Ordinance identifies noise standards for various sources and includes specific noise restrictions for sources of noise within the City. Section 7-184 of the Oxnard Municipal Code designates sound zones for properties within the City based on their corresponding land use. Residential uses are designated as Sound Zone I; Commercial properties are designated as Sound Zone II; Industrial areas are designated as Sound Zone III; and all property within the contours around a roadway, railroad track, or the Oxnard Airport (as identified in Figure IX-2 of the Noise Element of the 2030 General Plan) are designated as Sound Zone IV.

Table 4 shows the allowable noise levels and corresponding times of day for each of the identified sound zones.

Table 4
Exterior Noise Standards

		Allowable Exterior Sound Level	
Sound Zone	**Type of Land Use**	**7:00 AM to 10:00 PM**	**10:00 PM to 7:00 AM**
I	Residential	55 dBA	50 dBA
II	Commercial	65 dBA	60 dBA
III	Industrial	70 dBA	70 dBA
IV	As identified in Figure IX-2 of the 2020 General Plan		

Source: City of Oxnard Municipal Code § 7-185.

Section 7-185 of the Municipal Code specifies that no person at any location within the City shall create, maintain, cause or allow any sound on property which causes the sound level, when measured on any other property, to exceed:

(1) The allowable exterior sound level for a cumulative period of more than 30 minutes in any hour;
(2) The allowable exterior sound level plus five dBA for a cumulative period of more than 15 minutes in any hour;
(3) The allowable exterior sound level plus ten dBA for a cumulative period of more than five minutes in any hour;
(4) The allowable exterior sound level plus 15 dBA for a cumulative period of more than one minute in any hour; or
(5) The allowable exterior sound level plus 20 dBA for any period of time.

In addition, with respect to residential uses, the interior sound level may not exceed 45 dBA between the hours of 10 PM and 7 AM and 50 dBA between 7 AM and 10 PM for a period of five or more minutes in any hour, as shown in Table 5. Further, the allowable interior level plus 5 dBA cannot be exceeded for more than one minute in an hour and the allowable interior level plus 10 dBA cannot be exceed for any period of time (Municipal Code Section 7-186).

Table 5
Residential Interior Noise Standards

Sound Zone	Type of Land Use	Allowable Interior Sound Level	
		7:00 AM to 10:00 PM	**10:00 PM to 7:00 AM**
All	Residential	50 dBA	45 dBA

Source: City of Oxnard Municipal Code § 7-186

On October 23, 2014 Rincon Consultants staff performed one 15-minute weekday noise measurement using an ANSI Type II integrating sound level meter. Results are provided in Table 6.

Table 6
Noise Measurement Results

Location	Primary Noise Source	Leq
Etting Road	Traffic and Elementary School	55.9
Pleasant Valley Road at existing entrance	Traffic	75.2

Source: Rincon Consultants, Inc. Recorded during field visit using ANSI Type II Integrating sound level meter. See Appendix I for noise monitoring data sheets.

a, c) Noise associated with operation of the proposed projects may be periodically audible at adjacent uses. The closest sensitive receptor to the project site is a mobile home park and a single-family residential subdivision located immediately east of the project site. Another mobile home park and townhouse development are also located across Pleasant Valley Road, approximately 100 feet north of the project site. Mar Vista Elementary School and Oceanview Junior High School is located approximately 150 feet southeast of the project site. The school and residences are sensitive noise receptors.

Noise events that are typical of residential developments include music, conversations, doors slamming, and children playing. On-site operations are expected to also involve noise associated with rooftop ventilation, heating systems, and trash hauling. However, activities associated with operation of the proposed projects would not generate high levels of noise, and on-site noise would be comparable to those of existing residential uses near the project site.

The proposed projects would also generate traffic that could increase the exposure of existing and future sensitive receptors to roadway noise.

According to the October 2014 Traffic and Circulation Study prepared by Associated Transportation Engineers (ATE), Pleasant Valley Road currently has 2,532 vehicles traveling on the road during the busiest evening traffic hour (P.M. peak-hour (4:00 PM to 6:00 PM) trips). The Traffic and Circulation Study estimates that the proposed projects would generate 50 P.M. peak hour trips, resulting in a total of 2,582 P.M. peak-hour trips on Pleasant Valley Road. To evaluate the project's effect on the exposure of existing sensitive receptors to noise, traffic noise was modeled at the nearest sensitive receptor to the project site, the mobile home park located adjacent to the project site. Traffic noise was modeled using the Federal Highway Administration's Traffic Noise Model (TNM), version 2.5 Look-Up Tables, which calculate the average noise level at specific locations based on traffic volumes, average speeds, roadway geometry, and site environmental conditions. Traffic noise from Pleasant Valley Road was modeled under two scenarios: existing traffic volumes and with-project traffic volumes. The modal distribution was assumed to be 95% passenger vehicles, 2.5% medium trucks, and 2.5% heavy trucks. Vehicle speeds were based on the speed limits for the modeled roadway (45 mph).

The accuracy of the model was confirmed based on the measured existing noise level at Pleasant Valley Road at the existing entrance to the project site during peak-hour traffic. Traffic noise was modeled at 70.8 dBA Leq at 75 feet from the roadway centerline, which is within 4.4 dBA of the measured noise level of 75.2 dBA Leq at 50 feet from the roadway centerline. The difference between modeled and measured noise at this location can be explain by two variables. Noise from lightly traveled roads typically attenuates at a rate of about 4.5 dBA per doubling of distance. Using the attenuation rate, the measured noise is assumed to be 73 dBA 75 feet from the roadway centerline. Additionally, the modeling does not account for background noise or slight variations in observed traffic, which cause the 2 dBA difference between the measurement and the model.

Project-generated traffic would increase noise levels by an estimated 0.1 dBA from 70.8 dBA under existing traffic volumes and 70.9 dBA under with-project conditions at 75 feet from the roadway centerline (the nearest sensitive receptor is approximately 75 feet from the centerline). This increase in noise volume is incremental, would not be discernable and not considered significant. Therefore, the projects would not substantially increase the exposure of nearby sensitive receptors to traffic noise.

Proposed residences on-site would also be exposed to the vehicle noise described above. The exterior-to-interior noise attenuation of standard building materials used for residential development can be up to 30 dBA (FTA, May 2006). As described above, Pleasant Valley Road is expected to have a P.M. peak-hour noise volume of 70.9 with the proposed projects. Assuming a maximum attenuation of 30 dBA with the use of standard building materials, receptors would be exposed to interior noise levels of approximately 40 dBA, which is below the 45 dBA allowable Interior Sound Level for residential development. **However, the actual attenuation is dependent on building materials use and therefore, impacts would be potentially significant and implementation of Measure N-1 would be required.**

b, d) Vibration energy is carried through buildings, structures, and the ground, whereas ambient noise is carried through the air. Thus, vibration is generally felt rather than heard. Some vibration effects can be caused by noise, such as the rattling of windows from truck pass-bys. This phenomenon is caused by the coupling of the acoustic energy at frequencies that are close to the resonant frequency of the material being vibrated. Typically, groundborne vibration generated by manmade activities attenuates rapidly as distance from the source of the vibration increases and vibration rapidly diminishes in amplitude with distance from the source. The ground motion caused by vibration is measured as particle velocity in inches per second and is referenced as vibration decibels (VdB) in the U.S.

The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. Most perceptible indoor vibration is caused by sources within buildings such as operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel wheeled trains, and traffic on rough roads. If a roadway is smooth, the groundborne vibration from traffic is barely perceptible. The range of interest is from approximately 50 VdB, which is the typical background vibration velocity, to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings.

Significant impacts occur when vibration or groundborne noise levels exceed the Federal Railroad Administration (FRA) maximum acceptable level threshold of 65 VdB for buildings where low ambient vibration is essential for interior operations (such as hospitals and recording studios), 72 VdB for residences and buildings where people normally sleep, including hotels, and 75 VdB for institutional land uses with primary daytime use (such as churches and schools).

Construction activities that would occur on the project site have the potential to generate groundborne vibration. Table 7 identifies vibration velocity levels for the types of construction equipment likely to operate at the project site during construction, as received by receptors within 25 and 50 feet of the project site.

Table 7
Vibration Source Levels for Construction Equipment

Equipment	Approximate VdB	
	25 Feet	50 Feet
Large Bulldozer	87	81
Loaded Trucks	86	80
Jackhammer	79	73
Small Bulldozer	58	52

Vibration levels assume an attenuation rate of 6 VdB per doubling of distance.
Source: Federal Transit Administration (FTA), May 2006

The nearest sensitive receptor is located immediately adjacent to the project site in the mobile home park to the east (within about ten feet of the property line) and the single-family residential neighborhood immediately adjacent to the east of the proposed Senior Living project site . As shown in Table 7, vibration levels could be as high as 86 VdB 25 feet from the project site.

Noise levels associated with the use of heavy equipment at construction sites can range from about 82 to 91 dBA 25 feet from the source, depending upon the types of equipment in operation at any given time and the phase of construction (Table 8). The operation of heavy equipment during construction would result in temporary increases in noise in the immediate vicinity of the project area. The highest noise levels would generally occur during grading, excavation, and foundation development, which involve the use of such equipment as backhoes, bulldozers, shovels, and front-end loaders. In addition, construction vehicles traveling on local roadways can generate intermittent noise levels that affect adjacent receptors.

Table 8
Typical Noise Levels at Construction Sites

Equipment Onsite	Typical Level (dBA) 25 Feet from the Source	Typical Level (dBA) 50 Feet from the Source
Air Compressor	87	81
Backhoe	86	80
Concrete Mixer	91	85
Crane, mobile	89	83
Dozer	91	85
Jack Hammer	94	88
Paver	95	89
Saw	82	76
Truck	94	88

Noise levels assume a noise attenuation rate of 6 dBA per doubling of distance. The analysis provided does not account for attenuating factors, such as topography, structures, or vegetation. Such factors would decrease the noise levels at sensitive receptors.
Source: Federal Transit Administration (FTA), May 2006

Sensitive receptors are typically less noise sensitive during daytime hours. Oxnard Municipal Code Section 7-188 exempts construction and grading activities from the noise restrictions above provided the activities occur between the hours of 7:00 AM and 6:00 PM Monday through Saturday. Therefore, provided construction and grading activities only occur in specified hours, construction-related noise and vibration would not exceed the City's exterior noise standards. Further, construction-related noise and vibration would be temporary and intermittent in nature and would not result in long-term noise impacts. **Impacts would be less than significant with Mitigation Measures N-2 and N-3.**

e, f) Aircraft noise affecting the City is primarily generated by the Oxnard Airport and Naval Air Station Point Mugu (City of Oxnard, 2006). The project site approximately 4 miles south of Oxnard Airport and is outside the noise contours as depicted on Figure 6-2 City of Oxnard 2030 General Plan Program EIR. Additionally, the project site is approximately three miles north of Naval Air Station Point Mugu and five miles west of the Camarillo Airport. As described in Section VIII, Hazards and Hazardous Materials, the project site is not with the flight paths of the Camarillo Airport or the airstrip located at Point Mugu. **No impact related to airport noise would occur.**

Mitigation: The following mitigation measures shall apply to the Apartments and Senior Living Project. With incorporation and monitoring of the mitigation measures, noise impacts would be considered less than significant.

N-1 **Acoustical Analysis and Design Mitigation**. The applicant shall retain a professional acoustical consultant to conduct an acoustical analysis. The recommendations of the acoustical analysis shall be incorporated into project design in order to ensure that interior City noise level standards are achieved. Noise reduction measures that can be incorporated into site design include (but are not limited to):

- Air conditioning or a mechanical ventilation system that will allow doors and windows to remain closed;
- Double-paned glass on all windows;
- Windows and sliding glass doors mounted in low air infiltration rate frames;
- Solid core exterior doors with perimeter weather stripping and threshold seals; and
- Acoustically insulated building wall construction.

Incorporation of these and other similar design requirements would achieve an exterior-to-interior interior noise level reduction of 30 dBA or greater and would attenuate exterior noise levels to acceptable levels.

Construction Mitigation:

N -2 During all excavation and grading on site, the project contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards.

N -3 Construction times shall be limited to 7 a.m. to 7 p.m. daily or in accordance with City Ordinances restricting construction times at the time of construction, whichever is more restrictive.

Monitoring: Development Services Department staff shall verify that these mitigation measures are included on all grading and building plans for each project. Development Services staff will provide on-site monitoring during construction activities. Development Services Department Staff will verify that building plans incorporate requirements identified in mitigation measure N-1.

Result after mitigation: Upon implementation of the above mitigation measures, the project would not result in any residual significant adverse effects on the environment related to noise.

Cumulative Impact: The cumulative project area is defined as the entire City of Oxnard at its planned 2030 buildout which included development of the project site. Noise impacts were analyzed by the 2030 General Plan PEIR and found to be significant for which an overriding consideration was adopted. As discussed above, the proposed project's impacts would be less than significant with mitigation; therefore, the projects would not make a considerable contribution to cumulative impacts. The 2030 General Plan PEIR is incorporated by reference, specifically Chapter 6.4, Draft PEIR, February 2009, page 6-15.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XIII. POPULATION AND HOUSING — Would the Projects:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

a) The proposed projects consist of the development of an 83,121 square foot multi-family mixed-income apartment complex containing 23 one-bedroom units, 70 two-bedroom units, and 8 three-bedroom units on a 6.24 acre site, as well as the 51,589 square foot, 70-bed Senior Project, which would include memory care units and studio/one-bedroom units. The site is located in an established urban area surrounded by residences, a school, and a cemetery. A factor of 3.85 (average for the City of Oxnard) (City of Oxnard, 2013) persons per household was used to calculate the number of residents the Apartment Homes would accommodate and found approximately 389 residents would reside at the Apartment Homes. The Senior Project would accommodate 70 residents (based on the number of beds) for a total of 459 residents for both the Apartment Homes and Senior Living Project.

Oxnard's 2015 total population is estimated at 206,148 (CA Department of Finance). Development of the proposed projects could accommodate a population increase of approximately 0.2% of the 2015 estimated population. The Southern California Council of Governments population forecast for the City of Oxnard in 2035 is 244,500, an increase of 40,855 residents. The project's estimated 459 residents would constitute 1.2% of the predicted growth for the City. Further, population growth associated with the projects has been anticipated in the 2030 General Plan build-out scenario. **Because the population growth facilitated by the proposed development would be within the predicted growth of the City, impacts would be less than significant.**

b, c) The project site was previously occupied by a mid-20th century farm complex composed of a residence and four farm buildings, collectively the Naumann Farm Complex. In the summer of 2014, all onsite structures were demolished. The project site does not currently contain any residential uses.

The project site is identified as site B-8 in Figure F-1, AAHOP (All-Affordable Housing Opportunity Program) Affordable Residential Sites, in the 2006-2014 Housing Element. The site is classified as largely vacant which is defined to be “Minor structures and/or paving to be demolished, and homes and small business to be relocated.” The proposed project does not include an affordable housing component. However, there are ample AAHOP sites in the City as identified in Figure F-1 of the 2006-2014 Housing Element where affordable housing can be provided. The removal of the AAHOP designation from the project site will be addressed in the 2013-2021 Housing Element which is anticipated to be adopted in Fall of 2015.

The project would not displace any existing housing or population. **There would be no impact.**

Mitigation: No mitigation measures are required or proposed.

Cumulative Impact: The cumulative project area is defined as the entire City of Oxnard at its planned 2030 buildout which included development of the project site. Population and housing were analyzed by the 2030 General Plan PEIR and found not to be significant after implementation of uniformly applied development policies and regulations. As discussed above, the proposed project’s impacts would be less than significant; therefore, the projects would not make a considerable contribution to cumulative impacts. The 2030 General Plan PEIR is incorporated by reference, specifically Chapters 3.2 and 3.4, Draft PEIR, February 2009, pages 3-2 and 3-17.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XIV. PUBLIC SERVICES				
a) Would the Projects result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire protection?	☐	☐	☒	☐
ii) Police protection?	☐	☐	☒	☐
iii) Schools?	☐	☐	☒	☐
iv) Parks?	☐	☐	☒	☐
v) Other public facilities?	☐	☐	☒	☐

a.i) The Oxnard Fire Department (OFD) provides fire protection to the City of Oxnard. The OFD, among its 108 total staff, currently has 35 uniformed personnel (firefighters), which equates to 0.17 firefighters for every 1,000 people in the City, based on its current population of

203,645 (California Department of Finance, May 2014). There are seven fire stations in the City with an eighth fire station under construction. The basic unit is the engine company, which consists of a captain who supervises the crew, an engineer who is responsible for the safe operation of the equipment, and a firefighter who carries out the basic firefighting and medical tasks. The National Fire Protection Association's (NFPA) recommended standard for fire department staffing is one firefighter per 1,000 residents. In the City of Oxnard there are currently a total of 28 uniformed firefighters that serve a population of 203,645, which equates to approximately 0.14 firefighters for every 1,000 people. This is below the City of Oxnard's standard of one firefighter for every 1,000 people. The population growth that would result from the proposed projects would not have a significant effect on these ratios. In addition, the NFPA recommends that each fire station serve approximately 15,000 residents. Oxnard's seven fire stations serve approximately 30,000 residents per station. Furthermore, the Fire Department can access additional manpower and equipment through an automatic aid agreement with Ventura County and a mutual aid agreement with the City of Ventura and Point Mugu Naval Air Station. The projects would include uniformly applied development policies that require adequate fire hydrants, OFD site access, emergency signage, fire alarms, addressable smoke detectors, and other requirements of the Uniform Fire Code to minimize any potential impacts on Fire Services. The project would provide primary and secondary access for emergency vehicles. No new facilities would be required as a result of the projects. **The projects would have less than significant impacts and no mitigation is necessary or required.**

a.ii) The Oxnard Police Department (OPD) provides police protection in this area, which operates from the police station located at 251 South C Street. The station is located approximately 3.2 miles northwest of the project site. The City is divided into four Police Districts, each of which is further divided into smaller response beats. Each beat is patrolled 24 hours a day, seven days a week in three overlapping 12-hour shifts. The project site is located in Beat 41, which is part of District 4. In addition to its police stations, the OPD operates eight storefront police substations.

The OPD currently has 237 sworn officers and 156 civil support personnel (Jeri Williams, OPD Chief of Police, pers. comm January 2015). With a current population of 203,645 (California Department of Finance, May 2014) and 237 sworn officers, Oxnard's police officer to population ratio is currently 1.16 officers for every 1,000 persons. As described in Section XIV, *Population and Housing*, the two projects would add a total of approximately 474 residents. This would result in an incremental decrease (less than .01) in the police officer to population ratio. No new police facilities would be needed. **Impacts to police services would be less than significant.**

a.iii) The project site is located within the Ocean View School District (OVSD) and Oxnard Union High School District (OUHSD). Construction of the proposed projects would accommodate an estimated 459 new residents to the area. This population increase would include the 70 residents of the Senior Project, none of whom would be school-aged children. The population at the Apartments would be approximately 389 people and would be expected to include school-aged children who would attend local schools. Students would attend Mar Vista Elementary or Terra Vista Elementary, Ocean View Jr. High School, and Channel Islands High School. Table 9 below provides the enrollment and capacity for Ocean View School District and Channel Islands High School.

Table 9
Current Enrollment and Capacity at Local Schools

School	Enrollment 2013-2014[1,2]	Capacity[3]	Percent of Capacity
Ocean View School District Elementary School (Grades K-6)	2119	2304	92%
Ocean View School District Junior High (Grades 7-8)	520	520	100%
Channel Islands High School	2,576	2,240	115%

[1]Enrollment and capacity data from email correspondence with Superintendent (Craig W. Helmstedte, April 14, 2015)
[2] Enrollment data for Channel Islands High School from California Department of Education DataQuest website, October 2014.
[3]Capacity data for Channel Islands High School from Oxnard Union High School District School Facilities Needs Analysis (SFNA), May 2010 (most recent SFNA).

To offset a project's potential impact on schools, Government Code 65995 (b) establishes the base amount of allowable developer fees a school district can collect from development projects located within its boundaries. The fees obtained by OVSD and OUHSD are used to maintain the desired school capacity and the maintenance and/or development of new school facilities. The project proponents for any future residential developments would be required to pay the state-mandated school impact fees. Pursuant to Section 65995 (3)(h) of the California Government Code (Senate Bill 50, chaptered August 27, 1998), the payment of statutory fees "...is deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization." **Therefore, with payment of mandatory school impact fees, impacts would be less than significant.**

a.iv) Impacts to parks are discussed in Section XV, *Recreation*.

a.v) During the plan check and permitting process the Development Services Division will assess and determine the project impact fees that are required for this type of development. Development impact fees typically involve, but are not limited: Planned Traffic Circulation System Facilities Fees (Traffic Impact); Planned Water Facilities Fee; Planned Wastewater Facilities Fee; Planned Drainage Facilities Fee; and Growth Requirement Capital Fee. As previously described in Section IX, *Hydrology and Water Quality*, w~~W~~ater service to the~~is~~ project area is currently provided by the City of Oxnard. A portion of the City's water supply is comprised of imported surface waters provided by the Calleguas Municipal Water District. It is possible that water service to the project site could be provided directly by Calleguas, but only if the project is annexed from the City's water service area to Calleguas' jurisdiction; ~~Furthermore,~~ maintenance and development of the water facilities ~~under the~~ within the Calleguas jurisdiction ~~of the Calleguas Municipal Water District (CMWD)~~ are provided for through a Capital Construction Charge. For the purposes of this analysis, it is anticipated that the project site would remain within the City of Oxnard water service territory, and water would continue to be provided to the project site by the City of Oxnard. **Impacts would be less than significant.**

Mitigation: No mitigation measures are required or proposed.

Cumulative Impact: The cumulative project area is defined as the entire City of Oxnard at its planned 2030 buildout which included development of the project site. Public services were analyzed by the 2030 General Plan PEIR and found not to be significant after implementation of uniformly applied development policies and regulations. As discussed above, the proposed project's impacts would be less than significant; therefore, the projects would not make a considerable contribution to cumulative impacts. The 2030 General Plan PEIR is incorporated by reference, specifically Chapter 4.4, Draft PEIR, February 2009, page 4-39.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XV. RECREATION --				
a) Would the Projects increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b) Does the Projects include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐

a, b) As identified in the City of Oxnard 2030 General Plan, the City's existing, under development, or planned parks total about 759 acres and the traditional city and county parks, beaches, golf courses, and parks now under construction total about 1,637 acres. The City of Oxnard's estimated 2014 population of 203,645 (United States 2010 Census) therefore has approximately eight acres of parkland per 1,000 residents. The proposed projects would accommodate a population increase of approximately 459 residents and the parkland would remain eight acres per 1,000 residents. The Quimby Act uses the standard ratio of three acres of parkland per 1,000 residents; therefore, the City currently has sufficient parkland to serve the population and would continue to do so with development of the proposed projects. The incremental increase in population would create an incremental increase in use of the existing parks. However, the existing parkland ratio would stay the same and no significant impacts would occur to existing parks. In addition, both the Apartment Homes and Senior Living Projects would include recreational facilities. The Apartment Homes includes a conference room, gym, TV room, lounge, exterior kitchen/BBQ areas, and other amenities. The Senior Living Project includes lounges, craft rooms, TV rooms, card rooms, a movie theater, a gym, computer lounges, a library, a salon, a doctor's office, multipurpose rooms, and exterior patios, along with shared gardens, a gazebo, fruit grove, and lawn area on the adjacent Apartment Homes property. **These facilities would further reduce the demand on the City's parkland. Impacts would be less than significant**.

Mitigation: No mitigation measures are required or proposed.

Cumulative Impact: The cumulative project area is defined as the entire City of Oxnard at its planned 2030 buildout which included development of the project site. Recreation was analyzed by the 2030 General Plan PEIR and found not to be significant after implementation of uniformly applied development policies and regulations. As discussed above, the proposed project's impacts would be less than significant; therefore, the projects would not make a considerable contribution to cumulative impacts. The 2030 General Plan PEIR is incorporated by reference, specifically Chapter 4.5, Draft PEIR, February 2009, page 4-45.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XVI. TRANSPORTATION / TRAFFIC -- Would the Projects:				
a) Conflict with an applicable plan, ordinance or policy establishing a measure of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways, and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	☐	☐	☒	☐
e) Result in inadequate emergency access?	☐	☐	☒	☐
f) Conflict with adopted policies, plans, or programs regarding public transit, bikeways, or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities?	☐	☐	☒	☐

a) The Revised Traffic and Circulation Study (Traffic Study) prepared for the proposed projects by Associated Transportation Engineers (ATE) dated May 8, 2015 (Appendix J) focused on 12 key intersections within the study area during the AM and PM commute periods, when peak traffic volumes typically occur. The Traffic Study assumed that the proposed projects would utilize driveway connections to Pleasant Valley Road as primary access and that a driveway on Etting Road would be secondary emergency access only. As peak morning traffic on Pleasant

Valley Road occurs outside the typical critical time period of 7:00 AM to 9:00 AM used for traffic analysis in the City of Oxnard, the driveway on Etting Road may be used as an exit only access.

To identify the operating condition at intersections, a level of service (LOS) ranking scale is used. This scale compares traffic volumes to intersection capacity and assigns a letter value to this relationship. The letter scale ranges from A to F with LOS A representing free flow conditions and LOS F representing congested conditions. The City of Oxnard considers LOS C or better acceptable for most intersection operations, including those intersections that would be affected by foreseeable development of the project site. Caltrans has established the cusp of the LOS C/D range as the target LOS standard for State Highway facilities.

Pursuant to Oxnard Traffic Study Guidelines, the Intersection Capacity Utilization Methodology (ICU) was used to determine LOS for signalized intersections and the results are shown as a volume-to-capacity (V/C) ratio. LOS for the unsignalized intersections in the study area were calculated using the methodologies outlined in the Highway Capacity Manual (HCM) and the results are presented as seconds of delay. LOS for unsignalized intersections were calculated using HCS software.

Tables 10 and 11 provide the Existing LOS and Existing + Project LOS for the A.M and P.M. peak hours for the 12 key intersections. All intersections except for Rose Avenue/Oxnard Boulevard currently operate at at LOS C or better during both peak hours under the Existing conditions. The Rose Avenue/Oxnard Boulevard intersection currently operates at LOS D during the P.M. peak hour.

Table 10
Existing + Project A.M. Peak Hour Levels of Service

Intersection	Existing		Existing + Project		Change	Significant Impact?
	ICU/Delay	LOS	ICU/Delay	LOS		
Rose Ave./Oxnard Blvd	0.62	LOS B	0.62	LOS B	0.00	No
Rose Ave./Channel Islands Blvd.	0.50	LOS A	0.50	LOS A	0.00	No
Rose Ave./Raider Way	0.44	LOS A	0.44	LOS A	0.00	No
Rose Ave./Bard Rd.	0.50	LOS A	0.50	LOS A	0.00	No
Rose Ave./Pleasant Valley Rd.	0.49	LOS A	0.50	LOS A	0.01	No
Pleasant Valley Rd./Beaumont Ave	0.49	LOS A	0.49	LOS A	0.00	No
Pleasant Valley Rd./Bard Rd.	0.39	LOS A	0.39	LOS A	0.00	No
Pleasant Valley Rd./Etting Rd.	0.54	LOS A	0.56	LOS A	0.02	No
Pleasant Valley Rd./Orange Grove Rd.	12.7 sec.	LOS B	13.3 sec	LOS B	0.6 sec	No
Pleasant Valley Rd./Butler Rd	16.3 sec.	LOS C	16.5 sec	LOS A	0.2 sec	No
Pleasant Valley Rd./Oxnard Blvd.	0.73	LOS C	0.74	LOS C	0.01	No
Etting Rd./Olds Rd.	15.5 sec.	LOS C	16.0 sec	LOS C	0.5 sec	No

Source: Associated Traffic Engineers, May 8, 2015.
Bold values exceed the City's LOS C standard.

Table 11
Existing + Project P.M. Peak Hour Levels of Service

Intersection	Existing		Existing + Project		Change	Significant Impact?
	ICU/Delay	LOS	ICU/Delay	LOS		
Rose Ave./Oxnard Blvd	**0.89**	**LOS D**	**0.89**	**LOS D**	0.00	No
Rose Ave./Channel Islands Blvd.	0.63	LOS B	0.63	LOS B	0.00	No
Rose Ave./Raider Way	0.44	LOS A	0.44	LOS A	0.00	No
Rose Ave./Bard Rd.	0.53	LOS A	0.53	LOS A	0.00	No
Rose Ave./Pleasant Valley Rd.	0.52	LOS A	0.52	LOS A	0.00	No
Pleasant Valley Rd./Beaumont Ave	0.38	LOS A	0.38	LOS A	0.00	No
Pleasant Valley Rd./Bard Rd.	0.57	LOS A	0.58	LOS A	0.01	No
Pleasant Valley Rd./Etting Rd.	0.57	LOS A	0.58	LOS A	0.01	No
Pleasant Valley Rd./Orange Grove Rd.	17.2 sec	LOS C	15.5 sec	LOS C	0.00	No
Pleasant Valley Rd./Butler Rd	23.3 sec	LOS C	24.1 sec	LOS C	0.8 sec	No
Pleasant Valley Rd./Oxnard Blvd.	0.65	LOS C	0.66	LOS C	0.01	No
Etting Rd./Olds Rd.	10.5 sec	LOS B	10.6 sec	LOS B	0.1 sec	No

Source: Associated Traffic Engineers, May 8, 2015.
Bold values exceed the City's LOS C standard.

The proposed projects would generate a total of 863 average daily trips (ADT), including 59 AM peak hour trips and 79 PM peak hour trips. As shown in tables 10 and 11, the project would not significantly impact most study area intersections based on City thresholds. The Rose Avenue/Oxnard Boulevard intersection would continue to operate at LOS D during the P.M. peak period with the addition of project traffic; however, the project's traffic would not exceed City thresholds at this location.

The City requires analysis of intersections with the addition of traffic generated by projects that have been approved or are pending within the project study area. One approved project that would impact study area intersections, a 42-unit multiple family residential development, was identified. Tables 12 and 13 compare Cumulative and Cumulative + Project LOS for the A.M. and P.M. peak hours. The project would not contribute to a significant cumulative impact as most study area intersections. The Rose Avenue/Oxnard Boulevard intersection is forecast to operate at LOS D during the P.M. peak period with Cumulative + Project traffic; however, the project's traffic would not exceed City thresholds at this location.

The ATE traffic study identifies an improvement for Etting Road to improve traffic flow on Etting Road during school drop-off and pick-up hours. This involves widening of Etting Road from Pleasant Valley Road to Olds Road to provide two eastbound travel lanes. At the Etting Road/Olds Road intersection, the two eastbound travel lanes would transition to a through lane and exclusive right-turn lane on the eastbound approach. This improvement would reduce the A.M. peak hour delay at Etting Road/Olds Road from 16.0 seconds to 13.7 seconds, improving the LOS from C to B.

Table 12
Cumulative + Project A.M. Peak Hour Levels of Service

Intersection	Cumulative		Cum. + Project		Change	Significant Impact?
	ICU/Delay	LOS	ICU/Delay	LOS		
Rose Ave./Oxnard Blvd	0.62	LOS B	0.62	LOS B	0.00	No
Rose Ave./Channel Islands Blvd.	0.50	LOS A	0.50	LOS A	0.00	No
Rose Ave./Raider Way	0.44	LOS A	0.44	LOS A	0.00	No
Rose Ave./Bard Rd.	0.50	LOS A	0.50	LOS A	0.00	No
Rose Ave./Pleasant Valley Rd.	0.49	LOS A	0.50	LOS A	0.01	No
Pleasant Valley Rd./Beaumont Ave	0.49	LOS A	0.49	LOS A	0.00	No
Pleasant Valley Rd./Bard Rd.	0.39	LOS A	0.40	LOS A	0.01	No
Pleasant Valley Rd./Etting Rd.	0.55	LOS A	0.56	LOS A	0.01	No
Pleasant Valley Rd./Orange Grove Rd.	12.7 sec.	LOS B	13.3 sec	LOS B	0.6 sec	No
Pleasant Valley Rd./Butler Rd	16.3 sec.	LOS C	16.5 sec	LOS C	0.2 sec	No
Pleasant Valley Rd./Oxnard Blvd.	0.73	LOS C	0.74	LOS C	0.01	No
Etting Rd./Olds Rd.	15.7 sec.	LOS C	16.0 sec	LOS C	0.3 sec	No

Source: Associated Traffic Engineers, May 8, 2015.
Bold values exceed the City's LOS C standard.

Table 13
Cumulative + Project P.M. Peak Hour Levels of Service

Intersection	Cumulative		Cum. + Project		Change	Significant Impact?
	ICU/Delay	LOS	ICU/Delay	LOS		
Rose Ave./Oxnard Blvd	**0.89**	**LOS D**	**0.89**	**LOS D**	0.00	No
Rose Ave./Channel Islands Blvd.	0.63	LOS B	0.63	LOS B	0.00	No
Rose Ave./Raider Way	0.44	LOS A	0.44	LOS A	0.00	No
Rose Ave./Bard Rd.	0.53	LOS A	0.54	LOS A	0.01	No
Rose Ave./Pleasant Valley Rd.	0.52	LOS A	0.52	LOS A	0.00	No
Pleasant Valley Rd./Beaumont Ave	0.38	LOS A	0.38	LOS A	0.00	No
Pleasant Valley Rd./Bard Rd.	0.58	LOS A	0.58	LOS A	0.00	No
Pleasant Valley Rd./Etting Rd.	0.57	LOS A	0.58	LOS A	0.01	No
Pleasant Valley Rd./Orange Grove Rd.	17.3 sec	LOS C	15.6 sec	LOS C	0.0 sec	No
Pleasant Valley Rd./Butler Rd	23.4 sec	LOS C	24.2 sec	LOS C	0.8 sec	No
Pleasant Valley Rd./Oxnard Blvd.	0.66	LOS C	0.66	LOS B	0.00	No
Etting Rd./Olds Rd.	10.5 sec	LOS B	10.7 sec	LOS B	0.2 sec	No

Source: Associated Traffic Engineers, May 8, 2015.
Bold values exceed the City's LOS C standard.

The Revised Traffic and Circulation Study includes a signal warrant analysis that considers a traffic signal at the Pleasant Valley Road/Orange Grove Avenue intersection. The traffic signal warrant analysis was completed based on the Manual on Uniform Traffic Control Devices, California Supplement, Peak Hour warrant criteria. The approach volumes on the minor streets at the Pleasant Valley Road/Orange Grove Avenue intersection do not satisfy the Peak Hour Vehicular Volume warrant under any scenario (see Table 10 of the Revised Traffic and Circulation Study).

Based on City of Oxnard impact criteria, the projects would not significantly impact any of the 12 study area intersections. **Impacts would therefore be less than significant. Mitigation measures are recommended to further improve the circulation system.**

b) The 2009 Ventura County Congestion Management Program (CMP) provides local agencies and private developers the procedures and tools necessary to manage and decrease traffic congestion in the County. The Ventura County Transportation Commission (VCTC) is the designated Congestion Management Agency (CMA) responsible for implementing the CMP in Ventura County. For the purposes of a CMP traffic impact analysis, LOS E is considered to be acceptable, and a significant impact occurs if the proposed project increases traffic demand on a CMP facility by 2% of capacity (V/C > 0.02), causing or worsening LOS F (V/C > 1.00.

The study area intersections along Pleasant Valley Road and Rose Avenue are contained in the County's CMP. The intersections are all expected to operate at LOS D or better with the addition of cumulative plus project peak hour volumes and thus would not exceed the CMP LOS E standard. Based on the CMP criteria outlined above, the project would not generate a significant impact at this intersection. **Impacts related to conflicts with the Ventura County CMP would be less than significant.**

c) Oxnard Airport is located approximately four miles northwest of the project site and Camarillo Airport is located approximately five miles to the northeast. Project implementation would not affect operations at either airport. **There would be no impact in this regard.**

d) Primary access to the two projects would be provided via an internal roadway connection to Pleasant Valley Road opposite the Orange Grove intersection. An emergency vehicle entry/exit driveway from the Senior Project would also be provided on Pleasant Valley Road. An exit only gated driveway connection would be provided on Etting Road. The Senior Project would also be allowed to use the outbound only driveway on Etting Road. The Etting Road driveway would also provide secondary emergency access. The Pleasant Valley Road/Orange Grove intersection would allow inbound right and left-turns and would be restricted to outbound only right-turns from the project site. The applicant would be required to complete roadway improvements (curb, gutter, and sidewalk) on Etting Road and Pleasant Valley Road along its frontage. **Project development would not result in design hazards and impacts would be less than significant.**

e) The project site plan provides three access points whereby emergency vehicles would be able to reach the project site during emergencies. The final project site plan would be subject to review by the Oxnard Fire Department to ensure that the project's internal circulation and project changes to surrounding roadways would not impact emergency access. **Impacts would be less than significant**.

f) The project site is located within walking distance of two schools. The Mar Vista Elementary School is located on the south side of Etting Road, east of Olds Avenue. The Ocean View Junior High School is located on the east side of Old Roads, south of Etting Road. Students living north of Pleasant Valley Road use the signalized Bard Road and Etting Road intersections to cross to the south side of the street and walk along Etting Road to the schools. The proposed projects would implement improvements to enhance school access for children in addition to constructing curb, gutter and sidewalk along its Etting Road frontage as required by the City. The proposed projects include a new crosswalk to be provided on the east side of the intersection to allow children to cross Etting Road. In addition, the proposed projects would extend sidewalk improvements to Olds Road ending opposite the southeast corner curb return to allow pedestrians to walk to the Etting Road and Olds Road intersection. The applicant also proposes to provide an all-weather walking surface by extending the asphalt paving on the north side of Etting Road eastbound to the existing crosswalk at the Mar Vista Elementary School.

The proposed projects would not conflict with adopted policies, plans, or programs regarding public transit, bikeways, or pedestrian facilities; therefore impacts from the proposed projects would be **less than significant**.

Mitigation: The following mitigation measures are recommended to improve the circulation system:

T-1 Widen Etting Road from Pleasant Valley Road to Olds Road to provide two eastbound travel lanes. At the Etting Road/Olds Road intersection, the two eastbound travel lanes shall transition to a through lane and exclusive right-turn lane on the eastbound approach. Install a north-south pedestrian crosswalk on the westbound approach of the Etting Road/Olds Avenue intersection in order to enhance the pedestrian route. This shall be completed prior to issuance of Certificate of Occupancy for the Apartment Homes.

T-2 Install a No Left-Turn sign at the westbound approach of the proposed primary access along Pleasant Valley Road. This shall be completed prior to issuance of Certificate of Occupancy for the Apartment Homes or Senior Project.

T-3 Install a No Entry sign at the proposed gated driveway connection at Etting Road. This shall be completed prior to issuance of Certificate of Occupancy for the Apartment Homes.

Monitoring: Development Services shall verify these mitigation measures prior to issuance of a Certificate of Occupancy.

Result after mitigation: Upon implementation of the above mitigation measures, the project would not result in any residual significant adverse effects on the environment related to traffic.

Cumulative Impact: Cumulative impacts associated with the project and other pending development in the area are discussed above. Long-term traffic and circulation impacts were also analyzed by the 2030 General Plan PEIR and found to be significant. An overriding consideration was adopted for cumulative traffic impacts. The 2030 General Plan PEIR is incorporated by reference, specifically Chapter 4.2, Draft PEIR, February 2009, page 4-2.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XVII. UTILITIES AND SERVICE SYSTEMS -- Would the Projects:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
d) Have sufficient water supplies available to serve the Projects from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐
e) Result in a determination by the wastewater treatment provider which serves or may serve the Projects that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

a–e) The projects represent additional demand on master-planned utilities and service systems that have been anticipated in the 2030 General Plan build-out scenario for this area. The development of the site is anticipated in City growth forecasts as it was designated for Low Medium Density Residential in the 2030 General Plan. The City is initiating a zone change to R-2-PD to bring the site in compliance with the 2030 General Plan.

Appendix A

Air Quality Modeling Results

Daly/Dansk Pleasant Valley Road Apartments and Senior Living/Memory Care Center Project

Ventura County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	230.00	Space	2.07	92,000.00	0
Parking Lot	18.00	Space	0.16	7,200.00	0
Apartments Mid Rise	101.00	Dwelling Unit	2.66	101,000.00	309
Congregate Care (Assisted Living)	71.00	Dwelling Unit	4.44	71,000.00	217

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Land uses based on proejct traffic study. Lot acreage and square footage estimates based on CalEEMod default values.

Construction Phase -

Trips and VMT - Truck trips provided by construction manager

Table Name	Column Name	Default Value	New Value
tblTripsAndVMT	HaulingTripNumber	0.00	800.00
tblTripsAndVMT	VendorTripLength	7.30	9.00
tblTripsAndVMT	VendorTripLength	7.30	45.00
tblTripsAndVMT	VendorTripNumber	0.00	120.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2015	0.5742	4.5861	3.9612	6.2600e-003	0.3345	0.2744	0.6089	0.1314	0.2570	0.3883	0.0000	552.4845	552.4845	0.0866	0.0000	554.3038
2016	0.9792	0.5604	0.4709	7.7000e-004	0.0187	0.0339	0.0527	5.0200e-003	0.0317	0.0368	0.0000	67.9429	67.9429	0.0131	0.0000	68.2189
Total	**1.5534**	**5.1465**	**4.4321**	**7.0300e-003**	**0.3532**	**0.3083**	**0.6615**	**0.1364**	**0.2887**	**0.4251**	**0.0000**	**620.4274**	**620.4274**	**0.0998**	**0.0000**	**622.5227**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2015	0.5742	4.5860	3.9612	6.2600e-003	0.3345	0.2744	0.6089	0.1314	0.2570	0.3883	0.0000	552.4841	552.4841	0.0866	0.0000	554.3034
2016	0.9792	0.5604	0.4709	7.7000e-004	0.0187	0.0339	0.0527	5.0200e-003	0.0317	0.0368	0.0000	67.9428	67.9428	0.0131	0.0000	68.2189
Total	**1.5534**	**5.1465**	**4.4321**	**7.0300e-003**	**0.3532**	**0.3083**	**0.6615**	**0.1364**	**0.2887**	**0.4251**	**0.0000**	**620.4270**	**620.4270**	**0.0998**	**0.0000**	**622.5223**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.1930	0.0155	1.3107	7.0000e-005		6.9600e-003	6.9600e-003		6.9600e-003	6.9600e-003	0.0000	2.0906	2.0906	2.2400e-003	0.0000	2.1376
Energy	7.9900e-003	0.0683	0.0291	4.4000e-004		5.5200e-003	5.5200e-003		5.5200e-003	5.5200e-003	0.0000	275.2746	275.2746	0.0105	3.3200e-003	276.5236
Mobile	0.6340	1.6640	6.6703	0.0120	0.8875	0.0215	0.9090	0.2369	0.0197	0.2566	0.0000	1,004.970 1	1,004.970 1	0.0473	0.0000	1,005.962 6
Waste						0.0000	0.0000		0.0000	0.0000	22.5827	0.0000	22.5827	1.3346	0.0000	50.6094
Water						0.0000	0.0000		0.0000	0.0000	3.5553	64.2191	67.7744	0.3681	9.2300e-003	78.3671
Total	**1.8349**	**1.7478**	**8.0101**	**0.0125**	**0.8875**	**0.0339**	**0.9215**	**0.2369**	**0.0322**	**0.2691**	**26.1380**	**1,346.554 4**	**1,372.692 4**	**1.7628**	**0.0126**	**1,413.600 3**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.1930	0.0155	1.3107	7.0000e-005		6.9600e-003	6.9600e-003		6.9600e-003	6.9600e-003	0.0000	2.0906	2.0906	2.2400e-003	0.0000	2.1376
Energy	7.9900e-003	0.0683	0.0291	4.4000e-004		5.5200e-003	5.5200e-003		5.5200e-003	5.5200e-003	0.0000	275.2746	275.2746	0.0105	3.3200e-003	276.5236
Mobile	0.6340	1.6640	6.6703	0.0120	0.8875	0.0215	0.9090	0.2369	0.0197	0.2566	0.0000	1,004.970 1	1,004.970 1	0.0473	0.0000	1,005.962 6
Waste						0.0000	0.0000		0.0000	0.0000	22.5827	0.0000	22.5827	1.3346	0.0000	50.6094
Water						0.0000	0.0000		0.0000	0.0000	3.5553	64.2191	67.7744	0.3681	9.2200e-003	78.3614
Total	**1.8349**	**1.7478**	**8.0101**	**0.0125**	**0.8875**	**0.0339**	**0.9215**	**0.2369**	**0.0322**	**0.2691**	**26.1380**	**1,346.554 4**	**1,372.692 4**	**1.7627**	**0.0125**	**1,413.594 6**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.08**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/29/2015	2/11/2015	5	10	
2	Grading	Grading	2/12/2015	3/11/2015	5	20	
3	Building Construction	Building Construction	3/12/2015	1/27/2016	5	230	
4	Paving	Paving	1/28/2016	2/24/2016	5	20	
5	Architectural Coating	Architectural Coating	2/25/2016	3/23/2016	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 348,300; Residential Outdoor: 116,100; Non-Residential Indoor: 4,464; Non-Residential Outdoor: 1,488 (Architectural Coating – sqft)

<u>OffRoad Equipment</u>

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	120.00	0.00	10.80	9.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	800.00	10.80	45.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	166.00	35.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	33.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0263	0.2845	0.2132	2.0000e-004		0.0154	0.0154		0.0142	0.0142	0.0000	18.6506	18.6506	5.5700e-003	0.0000	18.7675
Total	**0.0263**	**0.2845**	**0.2132**	**2.0000e-004**	**0.0903**	**0.0154**	**0.1058**	**0.0497**	**0.0142**	**0.0639**	**0.0000**	**18.6506**	**18.6506**	**5.5700e-003**	**0.0000**	**18.7675**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.8600e-003	0.0815	0.0829	1.6000e-004	4.7800e-003	1.4500e-003	6.2400e-003	1.3600e-003	1.3400e-003	2.7000e-003	0.0000	14.8902	14.8902	1.1000e-004	0.0000	14.8925
Worker	3.5000e-004	4.3000e-004	4.2500e-003	1.0000e-005	7.3000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6645	0.6645	4.0000e-005	0.0000	0.6653
Total	**7.2100e-003**	**0.0819**	**0.0871**	**1.7000e-004**	**5.5100e-003**	**1.4600e-003**	**6.9700e-003**	**1.5500e-003**	**1.3500e-003**	**2.9000e-003**	**0.0000**	**15.5547**	**15.5547**	**1.5000e-004**	**0.0000**	**15.5578**

3.2 Site Preparation - 2015

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0263	0.2845	0.2132	2.0000e-004		0.0154	0.0154		0.0142	0.0142	0.0000	18.6505	18.6505	5.5700e-003	0.0000	18.7675
Total	**0.0263**	**0.2845**	**0.2132**	**2.0000e-004**	**0.0903**	**0.0154**	**0.1058**	**0.0497**	**0.0142**	**0.0639**	**0.0000**	**18.6505**	**18.6505**	**5.5700e-003**	**0.0000**	**18.7675**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.8600e-003	0.0815	0.0829	1.6000e-004	4.7800e-003	1.4500e-003	6.2400e-003	1.3600e-003	1.3400e-003	2.7000e-003	0.0000	14.8902	14.8902	1.1000e-004	0.0000	14.8925
Worker	3.5000e-004	4.3000e-004	4.2500e-003	1.0000e-005	7.3000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6645	0.6645	4.0000e-005	0.0000	0.6653
Total	**7.2100e-003**	**0.0819**	**0.0871**	**1.7000e-004**	**5.5100e-003**	**1.4600e-003**	**6.9700e-003**	**1.5500e-003**	**1.3500e-003**	**2.9000e-003**	**0.0000**	**15.5547**	**15.5547**	**1.5000e-004**	**0.0000**	**15.5578**

3.3 Grading - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0383	0.4042	0.2667	3.0000e-004		0.0233	0.0233		0.0214	0.0214	0.0000	28.3860	28.3860	8.4700e-003	0.0000	28.5639
Total	**0.0383**	**0.4042**	**0.2667**	**3.0000e-004**	**0.0655**	**0.0233**	**0.0888**	**0.0337**	**0.0214**	**0.0551**	**0.0000**	**28.3860**	**28.3860**	**8.4700e-003**	**0.0000**	**28.5639**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.1200e-003	0.1416	0.0965	2.9000e-004	6.8200e-003	2.3600e-003	9.1800e-003	1.8700e-003	2.1700e-003	4.0400e-003	0.0000	26.6540	26.6540	2.0000e-004	0.0000	26.6581
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-004	7.1000e-004	7.0800e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.1075	1.1075	6.0000e-005	0.0000	1.1088
Total	**8.7100e-003**	**0.1423**	**0.1036**	**3.0000e-004**	**8.0300e-003**	**2.3700e-003**	**0.0104**	**2.1900e-003**	**2.1800e-003**	**4.3700e-003**	**0.0000**	**27.7615**	**27.7615**	**2.6000e-004**	**0.0000**	**27.7669**

3.3 Grading - 2015

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0383	0.4042	0.2667	3.0000e-004		0.0233	0.0233		0.0214	0.0214	0.0000	28.3859	28.3859	8.4700e-003	0.0000	28.5639
Total	**0.0383**	**0.4042**	**0.2667**	**3.0000e-004**	**0.0655**	**0.0233**	**0.0888**	**0.0337**	**0.0214**	**0.0551**	**0.0000**	**28.3859**	**28.3859**	**8.4700e-003**	**0.0000**	**28.5639**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.1200e-003	0.1416	0.0965	2.9000e-004	6.8200e-003	2.3600e-003	9.1800e-003	1.8700e-003	2.1700e-003	4.0400e-003	0.0000	26.6540	26.6540	2.0000e-004	0.0000	26.6581
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-004	7.1000e-004	7.0800e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.1075	1.1075	6.0000e-005	0.0000	1.1088
Total	**8.7100e-003**	**0.1423**	**0.1036**	**3.0000e-004**	**8.0300e-003**	**2.3700e-003**	**0.0104**	**2.1900e-003**	**2.1800e-003**	**4.3700e-003**	**0.0000**	**27.7615**	**27.7615**	**2.6000e-004**	**0.0000**	**27.7669**

3.4 Building Construction - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3860	3.1682	1.9776	2.8300e-003		0.2233	0.2233		0.2100	0.2100	0.0000	257.4140	257.4140	0.0646	0.0000	258.7703
Total	**0.3860**	**3.1682**	**1.9776**	**2.8300e-003**		**0.2233**	**0.2233**		**0.2100**	**0.2100**	**0.0000**	**257.4140**	**257.4140**	**0.0646**	**0.0000**	**258.7703**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0393	0.4223	0.4861	8.2000e-004	0.0239	7.3400e-003	0.0312	6.8000e-003	6.7500e-003	0.0136	0.0000	75.4148	75.4148	5.8000e-004	0.0000	75.4270
Worker	0.0683	0.0827	0.8270	1.6400e-003	0.1412	1.1700e-003	0.1424	0.0375	1.0700e-003	0.0386	0.0000	129.3030	129.3030	7.0200e-003	0.0000	129.4504
Total	**0.1077**	**0.5051**	**1.3131**	**2.4600e-003**	**0.1651**	**8.5100e-003**	**0.1736**	**0.0443**	**7.8200e-003**	**0.0521**	**0.0000**	**204.7178**	**204.7178**	**7.6000e-003**	**0.0000**	**204.8774**

3.4 Building Construction - 2015

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3860	3.1682	1.9776	2.8300e-003		0.2233	0.2233		0.2100	0.2100	0.0000	257.4137	257.4137	0.0646	0.0000	258.7700
Total	**0.3860**	**3.1682**	**1.9776**	**2.8300e-003**		**0.2233**	**0.2233**		**0.2100**	**0.2100**	**0.0000**	**257.4137**	**257.4137**	**0.0646**	**0.0000**	**258.7700**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0393	0.4223	0.4861	8.2000e-004	0.0239	7.3400e-003	0.0312	6.8000e-003	6.7500e-003	0.0136	0.0000	75.4148	75.4148	5.8000e-004	0.0000	75.4270
Worker	0.0683	0.0827	0.8270	1.6400e-003	0.1412	1.1700e-003	0.1424	0.0375	1.0700e-003	0.0386	0.0000	129.3030	129.3030	7.0200e-003	0.0000	129.4504
Total	**0.1077**	**0.5051**	**1.3131**	**2.4600e-003**	**0.1651**	**8.5100e-003**	**0.1736**	**0.0443**	**7.8200e-003**	**0.0521**	**0.0000**	**204.7178**	**204.7178**	**7.6000e-003**	**0.0000**	**204.8774**

3.4 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0324	0.2708	0.1758	2.5000e-004		0.0187	0.0187		0.0176	0.0176	0.0000	23.0046	23.0046	5.7100e-003	0.0000	23.1244
Total	**0.0324**	**0.2708**	**0.1758**	**2.5000e-004**		**0.0187**	**0.0187**		**0.0176**	**0.0176**	**0.0000**	**23.0046**	**23.0046**	**5.7100e-003**	**0.0000**	**23.1244**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.1100e-003	0.0333	0.0408	7.0000e-005	2.1500e-003	5.3000e-004	2.6900e-003	6.1000e-004	4.9000e-004	1.1000e-003	0.0000	6.7216	6.7216	5.0000e-005	0.0000	6.7226
Worker	5.5700e-003	6.6900e-003	0.0669	1.5000e-004	0.0127	1.0000e-004	0.0128	3.3800e-003	9.0000e-005	3.4700e-003	0.0000	11.2311	11.2311	5.8000e-004	0.0000	11.2433
Total	**8.6800e-003**	**0.0400**	**0.1077**	**2.2000e-004**	**0.0149**	**6.3000e-004**	**0.0155**	**3.9900e-003**	**5.8000e-004**	**4.5700e-003**	**0.0000**	**17.9528**	**17.9528**	**6.3000e-004**	**0.0000**	**17.9658**

3.4 Building Construction - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0324	0.2708	0.1758	2.5000e-004		0.0187	0.0187		0.0176	0.0176	0.0000	23.0046	23.0046	5.7100e-003	0.0000	23.1244
Total	**0.0324**	**0.2708**	**0.1758**	**2.5000e-004**		**0.0187**	**0.0187**		**0.0176**	**0.0176**	**0.0000**	**23.0046**	**23.0046**	**5.7100e-003**	**0.0000**	**23.1244**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.1100e-003	0.0333	0.0408	7.0000e-005	2.1500e-003	5.3000e-004	2.6900e-003	6.1000e-004	4.9000e-004	1.1000e-003	0.0000	6.7216	6.7216	5.0000e-005	0.0000	6.7226
Worker	5.5700e-003	6.6900e-003	0.0669	1.5000e-004	0.0127	1.0000e-004	0.0128	3.3800e-003	9.0000e-005	3.4700e-003	0.0000	11.2311	11.2311	5.8000e-004	0.0000	11.2433
Total	**8.6800e-003**	**0.0400**	**0.1077**	**2.2000e-004**	**0.0149**	**6.3000e-004**	**0.0155**	**3.9900e-003**	**5.8000e-004**	**4.5700e-003**	**0.0000**	**17.9528**	**17.9528**	**6.3000e-004**	**0.0000**	**17.9658**

3.5 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0209	0.2239	0.1482	2.2000e-004		0.0126	0.0126		0.0116	0.0116	0.0000	21.0138	21.0138	6.3400e-003	0.0000	21.1469
Paving	2.9200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0238**	**0.2239**	**0.1482**	**2.2000e-004**		**0.0126**	**0.0126**		**0.0116**	**0.0116**	**0.0000**	**21.0138**	**21.0138**	**6.3400e-003**	**0.0000**	**21.1469**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3000e-004	6.4000e-004	6.3600e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0683	1.0683	5.0000e-005	0.0000	1.0694
Total	**5.3000e-004**	**6.4000e-004**	**6.3600e-003**	**1.0000e-005**	**1.2100e-003**	**1.0000e-005**	**1.2200e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.0683**	**1.0683**	**5.0000e-005**	**0.0000**	**1.0694**

3.5 Paving - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0209	0.2239	0.1482	2.2000e-004		0.0126	0.0126		0.0116	0.0116	0.0000	21.0138	21.0138	6.3400e-003	0.0000	21.1469
Paving	2.9200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0238**	**0.2239**	**0.1482**	**2.2000e-004**		**0.0126**	**0.0126**		**0.0116**	**0.0116**	**0.0000**	**21.0138**	**21.0138**	**6.3400e-003**	**0.0000**	**21.1469**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3000e-004	6.4000e-004	6.3600e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0683	1.0683	5.0000e-005	0.0000	1.0694
Total	**5.3000e-004**	**6.4000e-004**	**6.3600e-003**	**1.0000e-005**	**1.2100e-003**	**1.0000e-005**	**1.2200e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.0683**	**1.0683**	**5.0000e-005**	**0.0000**	**1.0694**

3.6 Architectural Coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.9089					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6800e-003	0.0237	0.0188	3.0000e-005		1.9700e-003	1.9700e-003		1.9700e-003	1.9700e-003	0.0000	2.5533	2.5533	3.0000e-004	0.0000	2.5596
Total	**0.9126**	**0.0237**	**0.0188**	**3.0000e-005**		**1.9700e-003**	**1.9700e-003**		**1.9700e-003**	**1.9700e-003**	**0.0000**	**2.5533**	**2.5533**	**3.0000e-004**	**0.0000**	**2.5596**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1600e-003	1.4000e-003	0.0140	3.0000e-005	2.6600e-003	2.0000e-005	2.6800e-003	7.1000e-004	2.0000e-005	7.3000e-004	0.0000	2.3502	2.3502	1.2000e-004	0.0000	2.3528
Total	**1.1600e-003**	**1.4000e-003**	**0.0140**	**3.0000e-005**	**2.6600e-003**	**2.0000e-005**	**2.6800e-003**	**7.1000e-004**	**2.0000e-005**	**7.3000e-004**	**0.0000**	**2.3502**	**2.3502**	**1.2000e-004**	**0.0000**	**2.3528**

3.6 Architectural Coating - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.9089					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6800e-003	0.0237	0.0188	3.0000e-005		1.9700e-003	1.9700e-003		1.9700e-003	1.9700e-003	0.0000	2.5533	2.5533	3.0000e-004	0.0000	2.5596
Total	**0.9126**	**0.0237**	**0.0188**	**3.0000e-005**		**1.9700e-003**	**1.9700e-003**		**1.9700e-003**	**1.9700e-003**	**0.0000**	**2.5533**	**2.5533**	**3.0000e-004**	**0.0000**	**2.5596**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1600e-003	1.4000e-003	0.0140	3.0000e-005	2.6600e-003	2.0000e-005	2.6800e-003	7.1000e-004	2.0000e-005	7.3000e-004	0.0000	2.3502	2.3502	1.2000e-004	0.0000	2.3528
Total	**1.1600e-003**	**1.4000e-003**	**0.0140**	**3.0000e-005**	**2.6600e-003**	**2.0000e-005**	**2.6800e-003**	**7.1000e-004**	**2.0000e-005**	**7.3000e-004**	**0.0000**	**2.3502**	**2.3502**	**1.2000e-004**	**0.0000**	**2.3528**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.6340	1.6640	6.6703	0.0120	0.8875	0.0215	0.9090	0.2369	0.0197	0.2566	0.0000	1,004.970 1	1,004.970 1	0.0473	0.0000	1,005.962 6
Unmitigated	0.6340	1.6640	6.6703	0.0120	0.8875	0.0215	0.9090	0.2369	0.0197	0.2566	0.0000	1,004.970 1	1,004.970 1	0.0473	0.0000	1,005.962 6

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	665.59	723.16	613.07	1,841,067	1,841,067
Congregate Care (Assisted Living)	194.54	156.20	173.24	513,987	513,987
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	860.13	879.36	786.31	2,355,054	2,355,054

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	32.90	18.00	49.10	86	11	3
Congregate Care (Assisted	10.80	7.30	7.50	32.90	18.00	49.10	86	11	3
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.475873	0.063741	0.180085	0.160840	0.068896	0.010406	0.012442	0.015456	0.000807	0.000660	0.005504	0.000319	0.004970

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	196.2122	196.2122	9.0200e-003	1.8700e-003	196.9801
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	196.2122	196.2122	9.0200e-003	1.8700e-003	196.9801
NaturalGas Mitigated	7.9900e-003	0.0683	0.0291	4.4000e-004		5.5200e-003	5.5200e-003		5.5200e-003	5.5200e-003	0.0000	79.0624	79.0624	1.5200e-003	1.4500e-003	79.5436
NaturalGas Unmitigated	7.9900e-003	0.0683	0.0291	4.4000e-004		5.5200e-003	5.5200e-003		5.5200e-003	5.5200e-003	0.0000	79.0624	79.0624	1.5200e-003	1.4500e-003	79.5436

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Apartments Mid Rise	869994	4.6900e-003	0.0401	0.0171	2.6000e-004		3.2400e-003	3.2400e-003		3.2400e-003	3.2400e-003	0.0000	46.4262	46.4262	8.9000e-004	8.5000e-004	46.7087
Congregate Care (Assisted Living)	611580	3.3000e-003	0.0282	0.0120	1.8000e-004		2.2800e-003	2.2800e-003		2.2800e-003	2.2800e-003	0.0000	32.6362	32.6362	6.3000e-004	6.0000e-004	32.8349
Total		**7.9900e-003**	**0.0683**	**0.0291**	**4.4000e-004**		**5.5200e-003**	**5.5200e-003**		**5.5200e-003**	**5.5200e-003**	**0.0000**	**79.0624**	**79.0624**	**1.5200e-003**	**1.4500e-003**	**79.5436**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Apartments Mid Rise	869994	4.6900e-003	0.0401	0.0171	2.6000e-004		3.2400e-003	3.2400e-003		3.2400e-003	3.2400e-003	0.0000	46.4262	46.4262	8.9000e-004	8.5000e-004	46.7087
Congregate Care (Assisted Living)	611580	3.3000e-003	0.0282	0.0120	1.8000e-004		2.2800e-003	2.2800e-003		2.2800e-003	2.2800e-003	0.0000	32.6362	32.6362	6.3000e-004	6.0000e-004	32.8349
Total		**7.9900e-003**	**0.0683**	**0.0291**	**4.4000e-004**		**5.5200e-003**	**5.5200e-003**		**5.5200e-003**	**5.5200e-003**	**0.0000**	**79.0624**	**79.0624**	**1.5200e-003**	**1.4500e-003**	**79.5436**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	351363	100.5484	4.6200e-003	9.6000e-004	100.9419
Congregate Care (Assisted Living)	246998	70.6826	3.2500e-003	6.7000e-004	70.9592
Parking Lot	6336	1.8132	8.0000e-005	2.0000e-005	1.8203
Parking Lot	80960	23.1681	1.0600e-003	2.2000e-004	23.2587
Total		**196.2122**	**9.0100e-003**	**1.8700e-003**	**196.9801**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	351363	100.5484	4.6200e-003	9.6000e-004	100.9419
Congregate Care (Assisted Living)	246998	70.6826	3.2500e-003	6.7000e-004	70.9592
Parking Lot	6336	1.8132	8.0000e-005	2.0000e-005	1.8203
Parking Lot	80960	23.1681	1.0600e-003	2.2000e-004	23.2587
Total		**196.2122**	**9.0100e-003**	**1.8700e-003**	**196.9801**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.1930	0.0155	1.3107	7.0000e-005		6.9600e-003	6.9600e-003		6.9600e-003	6.9600e-003	0.0000	2.0906	2.0906	2.2400e-003	0.0000	2.1376
Unmitigated	1.1930	0.0155	1.3107	7.0000e-005		6.9600e-003	6.9600e-003		6.9600e-003	6.9600e-003	0.0000	2.0906	2.0906	2.2400e-003	0.0000	2.1376

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0909					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0592					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0429	0.0155	1.3107	7.0000e-005		6.9600e-003	6.9600e-003		6.9600e-003	6.9600e-003	0.0000	2.0906	2.0906	2.2400e-003	0.0000	2.1376
Total	**1.1930**	**0.0155**	**1.3107**	**7.0000e-005**		**6.9600e-003**	**6.9600e-003**		**6.9600e-003**	**6.9600e-003**	**0.0000**	**2.0906**	**2.0906**	**2.2400e-003**	**0.0000**	**2.1376**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0909					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0592					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0429	0.0155	1.3107	7.0000e-005		6.9600e-003	6.9600e-003		6.9600e-003	6.9600e-003	0.0000	2.0906	2.0906	2.2400e-003	0.0000	2.1376
Total	**1.1930**	**0.0155**	**1.3107**	**7.0000e-005**		**6.9600e-003**	**6.9600e-003**		**6.9600e-003**	**6.9600e-003**	**0.0000**	**2.0906**	**2.0906**	**2.2400e-003**	**0.0000**	**2.1376**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	67.7744	0.3681	9.2200e-003	78.3614
Unmitigated	67.7744	0.3681	9.2300e-003	78.3671

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	6.58056 / 4.14861	39.7978	0.2162	5.4200e-003	46.0179
Congregate Care (Assisted Living)	4.62594 / 2.91635	27.9767	0.1520	3.8100e-003	32.3492
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**67.7744**	**0.3681**	**9.2300e-003**	**78.3671**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	6.58056 / 4.14861	39.7978	0.2161	5.4100e-003	46.0146
Congregate Care (Assisted Living)	4.62594 / 2.91635	27.9767	0.1519	3.8100e-003	32.3469
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**67.7744**	**0.3681**	**9.2200e-003**	**78.3614**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	22.5827	1.3346	0.0000	50.6094
Unmitigated	22.5827	1.3346	0.0000	50.6094

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	46.46	9.4310	0.5574	0.0000	21.1354
Congregate Care (Assisted Living)	64.79	13.1518	0.7773	0.0000	29.4740
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**22.5827**	**1.3346**	**0.0000**	**50.6094**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	46.46	9.4310	0.5574	0.0000	21.1354
Congregate Care (Assisted Living)	64.79	13.1518	0.7773	0.0000	29.4740
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**22.5827**	**1.3346**	**0.0000**	**50.6094**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Daly/Dansk Pleasant Valley Road Apartments and Senior Living/Memory Care Center Project

Ventura County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	230.00	Space	2.07	92,000.00	0
Parking Lot	18.00	Space	0.16	7,200.00	0
Apartments Mid Rise	101.00	Dwelling Unit	2.66	101,000.00	309
Congregate Care (Assisted Living)	71.00	Dwelling Unit	4.44	71,000.00	217

1.2 Other Project Characteristics

Urbanization Urban **Wind Speed (m/s)** 2.6 **Precipitation Freq (Days)** 31

Climate Zone 8 **Operational Year** 2014

Utility Company Southern California Edison

CO2 Intensity (lb/MWhr) 630.89 **CH4 Intensity (lb/MWhr)** 0.029 **N2O Intensity (lb/MWhr)** 0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Land uses based on proejct traffic study. Lot acreage and square footage estimates based on CalEEMod default values.

Construction Phase -

Trips and VMT - Truck trips provided by construction manager

Table Name	Column Name	Default Value	New Value
tblTripsAndVMT	HaulingTripNumber	0.00	800.00
tblTripsAndVMT	VendorTripLength	7.30	9.00
tblTripsAndVMT	VendorTripLength	7.30	45.00
tblTripsAndVMT	VendorTripNumber	0.00	120.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	6.5935	72.6484	57.4830	0.0734	19.1857	3.3791	22.5648	10.2459	3.1086	13.3545	0.0000	7,556.3485	7,556.3485	1.2598	0.0000	7,582.8049
2016	91.3793	32.5065	29.1955	0.0509	1.5938	2.0338	3.6276	0.4271	1.9095	2.3366	0.0000	4,809.8238	4,809.8238	0.7343	0.0000	4,825.2433
Total	**97.9728**	**105.1549**	**86.6785**	**0.1242**	**20.7795**	**5.4129**	**26.1924**	**10.6730**	**5.0181**	**15.6911**	**0.0000**	**12,366.1723**	**12,366.1723**	**1.9941**	**0.0000**	**12,408.0482**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	6.5935	72.6484	57.4830	0.0734	19.1857	3.3791	22.5648	10.2459	3.1086	13.3545	0.0000	7,556.3485	7,556.3485	1.2598	0.0000	7,582.8049
2016	91.3793	32.5065	29.1955	0.0509	1.5938	2.0338	3.6276	0.4271	1.9095	2.3366	0.0000	4,809.8238	4,809.8238	0.7343	0.0000	4,825.2433
Total	**97.9728**	**105.1549**	**86.6785**	**0.1242**	**20.7795**	**5.4129**	**26.1924**	**10.6730**	**5.0181**	**15.6911**	**0.0000**	**12,366.1723**	**12,366.1723**	**1.9941**	**0.0000**	**12,408.0482**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.7785	0.1726	14.5633	7.5000e-004		0.0773	0.0773		0.0773	0.0773	0.0000	25.6053	25.6053	0.0274	0.0000	26.1808
Energy	0.0438	0.3741	0.1592	2.3900e-003		0.0302	0.0302		0.0302	0.0302		477.5419	477.5419	9.1500e-003	8.7500e-003	480.4481
Mobile	3.7058	9.1771	38.2169	0.0734	5.3482	0.1266	5.4749	1.4254	0.1162	1.5416		6,779.1013	6,779.1013	0.3085		6,785.5799
Total	**10.5280**	**9.7237**	**52.9394**	**0.0765**	**5.3482**	**0.2342**	**5.5824**	**1.4254**	**0.2237**	**1.6491**	**0.0000**	**7,282.2484**	**7,282.2484**	**0.3451**	**8.7500e-003**	**7,292.2088**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.7785	0.1726	14.5633	7.5000e-004		0.0773	0.0773		0.0773	0.0773	0.0000	25.6053	25.6053	0.0274	0.0000	26.1808
Energy	0.0438	0.3741	0.1592	2.3900e-003		0.0302	0.0302		0.0302	0.0302		477.5419	477.5419	9.1500e-003	8.7500e-003	480.4481
Mobile	3.7058	9.1771	38.2169	0.0734	5.3482	0.1266	5.4749	1.4254	0.1162	1.5416		6,779.1013	6,779.1013	0.3085		6,785.5799
Total	**10.5280**	**9.7237**	**52.9394**	**0.0765**	**5.3482**	**0.2342**	**5.5824**	**1.4254**	**0.2237**	**1.6491**	**0.0000**	**7,282.2484**	**7,282.2484**	**0.3451**	**8.7500e-003**	**7,292.2088**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/29/2015	2/11/2015	5	10	
2	Grading	Grading	2/12/2015	3/11/2015	5	20	
3	Building Construction	Building Construction	3/12/2015	1/27/2016	5	230	
4	Paving	Paving	1/28/2016	2/24/2016	5	20	
5	Architectural Coating	Architectural Coating	2/25/2016	3/23/2016	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 348,300; Residential Outdoor: 116,100; Non-Residential Indoor: 4,464; Non-Residential Outdoor: 1,488 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	120.00	0.00	10.80	9.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	800.00	10.80	45.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	166.00	35.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	33.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412		4,111.7444	4,111.7444	1.2275		4,137.5225
Total	**5.2609**	**56.8897**	**42.6318**	**0.0391**	**18.0663**	**3.0883**	**21.1545**	**9.9307**	**2.8412**	**12.7719**		**4,111.7444**	**4,111.7444**	**1.2275**		**4,137.5225**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.2620	15.6837	13.9927	0.0325	0.9716	0.2896	1.2612	0.2760	0.2663	0.5423		3,291.9606	3,291.9606	0.0244		3,292.4719
Worker	0.0706	0.0750	0.8586	1.7600e-003	0.1479	1.2000e-003	0.1491	0.0392	1.1000e-003	0.0403		152.6436	152.6436	7.9500e-003		152.8106
Total	**1.3326**	**15.7587**	**14.8513**	**0.0343**	**1.1194**	**0.2908**	**1.4102**	**0.3152**	**0.2674**	**0.5826**		**3,444.6042**	**3,444.6042**	**0.0323**		**3,445.2825**

3.2 Site Preparation - 2015

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412	0.0000	4,111.744 4	4,111.744 4	1.2275		4,137.522 4
Total	**5.2609**	**56.8897**	**42.6318**	**0.0391**	**18.0663**	**3.0883**	**21.1545**	**9.9307**	**2.8412**	**12.7719**	**0.0000**	**4,111.744 4**	**4,111.744 4**	**1.2275**		**4,137.522 4**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.2620	15.6837	13.9927	0.0325	0.9716	0.2896	1.2612	0.2760	0.2663	0.5423		3,291.960 6	3,291.960 6	0.0244		3,292.471 9
Worker	0.0706	0.0750	0.8586	1.7600e-003	0.1479	1.2000e-003	0.1491	0.0392	1.1000e-003	0.0403		152.6436	152.6436	7.9500e-003		152.8106
Total	**1.3326**	**15.7587**	**14.8513**	**0.0343**	**1.1194**	**0.2908**	**1.4102**	**0.3152**	**0.2674**	**0.5826**		**3,444.604 2**	**3,444.604 2**	**0.0323**		**3,445.282 5**

3.3 Grading - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	3.8327	40.4161	26.6731	0.0298		2.3284	2.3284		2.1421	2.1421		3,129.0158	3,129.0158	0.9341		3,148.6328
Total	**3.8327**	**40.4161**	**26.6731**	**0.0298**	**6.5523**	**2.3284**	**8.8807**	**3.3675**	**2.1421**	**5.5096**		**3,129.0158**	**3,129.0158**	**0.9341**		**3,148.6328**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.7647	13.5708	8.4652	0.0289	0.6936	0.2353	0.9289	0.1897	0.2164	0.4060		2,941.0881	2,941.0881	0.0216		2,941.5414
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0588	0.0625	0.7155	1.4700e-003	0.1232	1.0000e-003	0.1242	0.0327	9.2000e-004	0.0336		127.2030	127.2030	6.6300e-003		127.3421
Total	**0.8235**	**13.6333**	**9.1807**	**0.0304**	**0.8168**	**0.2363**	**1.0531**	**0.2224**	**0.2173**	**0.4396**		**3,068.2911**	**3,068.2911**	**0.0282**		**3,068.8835**

3.3 Grading - 2015

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	3.8327	40.4161	26.6731	0.0298		2.3284	2.3284		2.1421	2.1421	0.0000	3,129.015 8	3,129.015 8	0.9341		3,148.632 8
Total	**3.8327**	**40.4161**	**26.6731**	**0.0298**	**6.5523**	**2.3284**	**8.8807**	**3.3675**	**2.1421**	**5.5096**	**0.0000**	**3,129.015 8**	**3,129.015 8**	**0.9341**		**3,148.632 8**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.7647	13.5708	8.4652	0.0289	0.6936	0.2353	0.9289	0.1897	0.2164	0.4060		2,941.088 1	2,941.088 1	0.0216		2,941.541 4
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0588	0.0625	0.7155	1.4700e-003	0.1232	1.0000e-003	0.1242	0.0327	9.2000e-004	0.0336		127.2030	127.2030	6.6300e-003		127.3421
Total	**0.8235**	**13.6333**	**9.1807**	**0.0304**	**0.8168**	**0.2363**	**1.0531**	**0.2224**	**0.2173**	**0.4396**		**3,068.291 1**	**3,068.291 1**	**0.0282**		**3,068.883 5**

3.4 Building Construction - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904		2,689.5771	2,689.5771	0.6748		2,703.7483
Total	**3.6591**	**30.0299**	**18.7446**	**0.0268**		**2.1167**	**2.1167**		**1.9904**	**1.9904**		**2,689.5771**	**2,689.5771**	**0.6748**		**2,703.7483**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3405	3.8570	3.8538	7.8100e-003	0.2300	0.0692	0.2992	0.0654	0.0636	0.1289		790.6619	790.6619	6.0000e-003		790.7880
Worker	0.6507	0.6917	7.9182	0.0163	1.3637	0.0111	1.3747	0.3617	0.0101	0.3718		1,407.7129	1,407.7129	0.0733		1,409.2530
Total	**0.9912**	**4.5487**	**11.7720**	**0.0241**	**1.5937**	**0.0802**	**1.6739**	**0.4271**	**0.0737**	**0.5008**		**2,198.3748**	**2,198.3748**	**0.0793**		**2,200.0409**

3.4 Building Construction - 2015

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904	0.0000	2,689.5771	2,689.5771	0.6748		2,703.7483
Total	**3.6591**	**30.0299**	**18.7446**	**0.0268**		**2.1167**	**2.1167**		**1.9904**	**1.9904**	**0.0000**	**2,689.5771**	**2,689.5771**	**0.6748**		**2,703.7483**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3405	3.8570	3.8538	7.8100e-003	0.2300	0.0692	0.2992	0.0654	0.0636	0.1289		790.6619	790.6619	6.0000e-003		790.7880
Worker	0.6507	0.6917	7.9182	0.0163	1.3637	0.0111	1.3747	0.3617	0.0101	0.3718		1,407.7129	1,407.7129	0.0733		1,409.2530
Total	**0.9912**	**4.5487**	**11.7720**	**0.0241**	**1.5937**	**0.0802**	**1.6739**	**0.4271**	**0.0737**	**0.5008**		**2,198.3748**	**2,198.3748**	**0.0793**		**2,200.0409**

3.4 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**		**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2989	3.3790	3.5551	7.8100e-003	0.2302	0.0559	0.2860	0.0654	0.0514	0.1168		782.6082	782.6082	5.1600e-003		782.7165
Worker	0.5904	0.6212	7.1338	0.0162	1.3637	0.0105	1.3742	0.3617	9.6900e-003	0.3714		1,357.9291	1,357.9291	0.0671		1,359.3378
Total	**0.8893**	**4.0002**	**10.6889**	**0.0241**	**1.5938**	**0.0664**	**1.6602**	**0.4271**	**0.0611**	**0.4882**		**2,140.5374**	**2,140.5374**	**0.0722**		**2,142.0543**

3.4 Building Construction - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**	**0.0000**	**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2989	3.3790	3.5551	7.8100e-003	0.2302	0.0559	0.2860	0.0654	0.0514	0.1168		782.6082	782.6082	5.1600e-003		782.7165
Worker	0.5904	0.6212	7.1338	0.0162	1.3637	0.0105	1.3742	0.3617	9.6900e-003	0.3714		1,357.9291	1,357.9291	0.0671		1,359.3378
Total	**0.8893**	**4.0002**	**10.6889**	**0.0241**	**1.5938**	**0.0664**	**1.6602**	**0.4271**	**0.0611**	**0.4882**		**2,140.5374**	**2,140.5374**	**0.0722**		**2,142.0543**

3.5 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601		2,316.3767	2,316.3767	0.6987		2,331.0495
Paving	0.2921					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.3819**	**22.3859**	**14.8176**	**0.0223**		**1.2610**	**1.2610**		**1.1601**	**1.1601**		**2,316.3767**	**2,316.3767**	**0.6987**		**2,331.0495**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0534	0.0561	0.6446	1.4700e-003	0.1232	9.5000e-004	0.1242	0.0327	8.8000e-004	0.0336		122.7044	122.7044	6.0600e-003		122.8317
Total	**0.0534**	**0.0561**	**0.6446**	**1.4700e-003**	**0.1232**	**9.5000e-004**	**0.1242**	**0.0327**	**8.8000e-004**	**0.0336**		**122.7044**	**122.7044**	**6.0600e-003**		**122.8317**

3.5 Paving - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601	0.0000	2,316.3767	2,316.3767	0.6987		2,331.0495
Paving	0.2921					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.3819**	**22.3859**	**14.8176**	**0.0223**		**1.2610**	**1.2610**		**1.1601**	**1.1601**	**0.0000**	**2,316.3767**	**2,316.3767**	**0.6987**		**2,331.0495**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0534	0.0561	0.6446	1.4700e-003	0.1232	9.5000e-004	0.1242	0.0327	8.8000e-004	0.0336		122.7044	122.7044	6.0600e-003		122.8317
Total	**0.0534**	**0.0561**	**0.6446**	**1.4700e-003**	**0.1232**	**9.5000e-004**	**0.1242**	**0.0327**	**8.8000e-004**	**0.0336**		**122.7044**	**122.7044**	**6.0600e-003**		**122.8317**

3.6 Architectural Coating - 2016

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Archit. Coating	90.8935					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449
Total	**91.2620**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**		**281.4481**	**281.4481**	**0.0332**		**282.1449**

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1174	0.1235	1.4182	3.2300e-003	0.2711	2.0900e-003	0.2732	0.0719	1.9300e-003	0.0738		269.9498	269.9498	0.0133		270.2298
Total	**0.1174**	**0.1235**	**1.4182**	**3.2300e-003**	**0.2711**	**2.0900e-003**	**0.2732**	**0.0719**	**1.9300e-003**	**0.0738**		**269.9498**	**269.9498**	**0.0133**		**270.2298**

3.6 Architectural Coating - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	90.8935					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332		282.1449
Total	**91.2620**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**	**0.0000**	**281.4481**	**281.4481**	**0.0332**		**282.1449**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1174	0.1235	1.4182	3.2300e-003	0.2711	2.0900e-003	0.2732	0.0719	1.9300e-003	0.0738		269.9498	269.9498	0.0133		270.2298
Total	**0.1174**	**0.1235**	**1.4182**	**3.2300e-003**	**0.2711**	**2.0900e-003**	**0.2732**	**0.0719**	**1.9300e-003**	**0.0738**		**269.9498**	**269.9498**	**0.0133**		**270.2298**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.7058	9.1771	38.2169	0.0734	5.3482	0.1266	5.4749	1.4254	0.1162	1.5416		6,779.1013	6,779.1013	0.3085		6,785.5799
Unmitigated	3.7058	9.1771	38.2169	0.0734	5.3482	0.1266	5.4749	1.4254	0.1162	1.5416		6,779.1013	6,779.1013	0.3085		6,785.5799

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	665.59	723.16	613.07	1,841,067	1,841,067
Congregate Care (Assisted Living)	194.54	156.20	173.24	513,987	513,987
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	860.13	879.36	786.31	2,355,054	2,355,054

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	32.90	18.00	49.10	86	11	3
Congregate Care (Assisted	10.80	7.30	7.50	32.90	18.00	49.10	86	11	3
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.475873	0.063741	0.180085	0.160840	0.068896	0.010406	0.012442	0.015456	0.000807	0.000660	0.005504	0.000319	0.004970

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0438	0.3741	0.1592	2.3900e-003		0.0302	0.0302		0.0302	0.0302		477.5419	477.5419	9.1500e-003	8.7500e-003	480.4481
NaturalGas Unmitigated	0.0438	0.3741	0.1592	2.3900e-003		0.0302	0.0302		0.0302	0.0302		477.5419	477.5419	9.1500e-003	8.7500e-003	480.4481

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Apartments Mid Rise	2383.54	0.0257	0.2197	0.0935	1.4000e-003		0.0178	0.0178		0.0178	0.0178		280.4170	280.4170	5.3700e-003	5.1400e-003	282.1236
Congregate Care (Assisted Living)	1675.56	0.0181	0.1544	0.0657	9.9000e-004		0.0125	0.0125		0.0125	0.0125		197.1248	197.1248	3.7800e-003	3.6100e-003	198.3245
Total		**0.0438**	**0.3741**	**0.1592**	**2.3900e-003**		**0.0302**	**0.0302**		**0.0302**	**0.0302**		**477.5419**	**477.5419**	**9.1500e-003**	**8.7500e-003**	**480.4481**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Apartments Mid Rise	2.38354	0.0257	0.2197	0.0935	1.4000e-003		0.0178	0.0178		0.0178	0.0178		280.4170	280.4170	5.3700e-003	5.1400e-003	282.1236
Congregate Care (Assisted Living)	1.67556	0.0181	0.1544	0.0657	9.9000e-004		0.0125	0.0125		0.0125	0.0125		197.1248	197.1248	3.7800e-003	3.6100e-003	198.3245
Total		**0.0438**	**0.3741**	**0.1592**	**2.3900e-003**		**0.0302**	**0.0302**		**0.0302**	**0.0302**		**477.5419**	**477.5419**	**9.1500e-003**	**8.7500e-003**	**480.4481**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.7785	0.1726	14.5633	7.5000e-004		0.0773	0.0773		0.0773	0.0773	0.0000	25.6053	25.6053	0.0274	0.0000	26.1808
Unmitigated	6.7785	0.1726	14.5633	7.5000e-004		0.0773	0.0773		0.0773	0.0773	0.0000	25.6053	25.6053	0.0274	0.0000	26.1808

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4981					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.8037					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.4767	0.1726	14.5633	7.5000e-004		0.0773	0.0773		0.0773	0.0773		25.6053	25.6053	0.0274		26.1808
Total	**6.7785**	**0.1726**	**14.5633**	**7.5000e-004**		**0.0773**	**0.0773**		**0.0773**	**0.0773**	**0.0000**	**25.6053**	**25.6053**	**0.0274**	**0.0000**	**26.1808**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4981					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.8037					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.4767	0.1726	14.5633	7.5000e-004		0.0773	0.0773		0.0773	0.0773		25.6053	25.6053	0.0274		26.1808
Total	**6.7785**	**0.1726**	**14.5633**	**7.5000e-004**		**0.0773**	**0.0773**		**0.0773**	**0.0773**	**0.0000**	**25.6053**	**25.6053**	**0.0274**	**0.0000**	**26.1808**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Daly/Dansk Pleasant Valley Road Apartments and Senior Living/Memory Care Center Project

Ventura County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	230.00	Space	2.07	92,000.00	0
Parking Lot	18.00	Space	0.16	7,200.00	0
Apartments Mid Rise	101.00	Dwelling Unit	2.66	101,000.00	309
Congregate Care (Assisted Living)	71.00	Dwelling Unit	4.44	71,000.00	217

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2014
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Land uses based on proejct traffic study. Lot acreage and square footage estimates based on CalEEMod default values.

Construction Phase -

Trips and VMT - Truck trips provided by construction manager

Table Name	Column Name	Default Value	New Value
tblTripsAndVMT	HaulingTripNumber	0.00	800.00
tblTripsAndVMT	VendorTripLength	7.30	9.00
tblTripsAndVMT	VendorTripLength	7.30	45.00
tblTripsAndVMT	VendorTripNumber	0.00	120.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	6.8243	73.1593	62.2300	0.0732	19.1857	3.3824	22.5681	10.2459	3.1117	13.3576	0.0000	7,527.0377	7,527.0377	1.2604	0.0000	7,553.5070
2016	91.3886	32.7117	30.6253	0.0500	1.5938	2.0345	3.6283	0.4271	1.9102	2.3373	0.0000	4,738.3149	4,738.3149	0.7344	0.0000	4,753.7379
Total	**98.2129**	**105.8710**	**92.8553**	**0.1232**	**20.7795**	**5.4169**	**26.1964**	**10.6730**	**5.0219**	**15.6948**	**0.0000**	**12,265.3526**	**12,265.3526**	**1.9949**	**0.0000**	**12,307.2449**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	6.8243	73.1593	62.2300	0.0732	19.1857	3.3824	22.5681	10.2459	3.1117	13.3576	0.0000	7,527.0377	7,527.0377	1.2604	0.0000	7,553.5070
2016	91.3886	32.7117	30.6253	0.0500	1.5938	2.0345	3.6283	0.4271	1.9102	2.3373	0.0000	4,738.3149	4,738.3149	0.7344	0.0000	4,753.7379
Total	**98.2129**	**105.8710**	**92.8553**	**0.1232**	**20.7795**	**5.4169**	**26.1964**	**10.6730**	**5.0219**	**15.6948**	**0.0000**	**12,265.3526**	**12,265.3526**	**1.9949**	**0.0000**	**12,307.2449**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.7785	0.1726	14.5633	7.5000e-004		0.0773	0.0773		0.0773	0.0773	0.0000	25.6053	25.6053	0.0274	0.0000	26.1808
Energy	0.0438	0.3741	0.1592	2.3900e-003		0.0302	0.0302		0.0302	0.0302		477.5419	477.5419	9.1500e-003	8.7500e-003	480.4481
Mobile	4.0414	9.9389	41.4153	0.0706	5.3482	0.1277	5.4759	1.4254	0.1172	1.5425		6,517.6513	6,517.6513	0.3087		6,524.1331
Total	**10.8636**	**10.4856**	**56.1378**	**0.0737**	**5.3482**	**0.2352**	**5.5834**	**1.4254**	**0.2247**	**1.6501**	**0.0000**	**7,020.7984**	**7,020.7984**	**0.3452**	**8.7500e-003**	**7,030.7620**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.7785	0.1726	14.5633	7.5000e-004		0.0773	0.0773		0.0773	0.0773	0.0000	25.6053	25.6053	0.0274	0.0000	26.1808
Energy	0.0438	0.3741	0.1592	2.3900e-003		0.0302	0.0302		0.0302	0.0302		477.5419	477.5419	9.1500e-003	8.7500e-003	480.4481
Mobile	4.0414	9.9389	41.4153	0.0706	5.3482	0.1277	5.4759	1.4254	0.1172	1.5425		6,517.6513	6,517.6513	0.3087		6,524.1331
Total	**10.8636**	**10.4856**	**56.1378**	**0.0737**	**5.3482**	**0.2352**	**5.5834**	**1.4254**	**0.2247**	**1.6501**	**0.0000**	**7,020.7984**	**7,020.7984**	**0.3452**	**8.7500e-003**	**7,030.7620**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/29/2015	2/11/2015	5	10	
2	Grading	Grading	2/12/2015	3/11/2015	5	20	
3	Building Construction	Building Construction	3/12/2015	1/27/2016	5	230	
4	Paving	Paving	1/28/2016	2/24/2016	5	20	
5	Architectural Coating	Architectural Coating	2/25/2016	3/23/2016	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 348,300; Residential Outdoor: 116,100; Non-Residential Indoor: 4,464; Non-Residential Outdoor: 1,488 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	162	0.38
Grading	Graders	1	8.00	174	0.41
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	125	0.42
Paving	Paving Equipment	2	8.00	130	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	120.00	0.00	10.80	9.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	800.00	10.80	45.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	166.00	35.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	33.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412		4,111.744 4	4,111.744 4	1.2275		4,137.522 5
Total	**5.2609**	**56.8897**	**42.6318**	**0.0391**	**18.0663**	**3.0883**	**21.1545**	**9.9307**	**2.8412**	**12.7719**		**4,111.744 4**	**4,111.744 4**	**1.2275**		**4,137.522 5**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.4870	16.1819	18.7268	0.0324	0.9716	0.2929	1.2645	0.2760	0.2694	0.5453		3,269.963 0	3,269.963 0	0.0250		3,270.487 2
Worker	0.0764	0.0878	0.8715	1.6800e-003	0.1479	1.2000e-003	0.1491	0.0392	1.1000e-003	0.0403		145.3304	145.3304	7.9500e-003		145.4974
Total	**1.5634**	**16.2697**	**19.5982**	**0.0340**	**1.1194**	**0.2941**	**1.4136**	**0.3152**	**0.2705**	**0.5857**		**3,415.293 4**	**3,415.293 4**	**0.0329**		**3,415.984 5**

3.2 Site Preparation - 2015

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.2609	56.8897	42.6318	0.0391		3.0883	3.0883		2.8412	2.8412	0.0000	4,111.744 4	4,111.744 4	1.2275		4,137.522 4
Total	**5.2609**	**56.8897**	**42.6318**	**0.0391**	**18.0663**	**3.0883**	**21.1545**	**9.9307**	**2.8412**	**12.7719**	**0.0000**	**4,111.744 4**	**4,111.744 4**	**1.2275**		**4,137.522 4**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.4870	16.1819	18.7268	0.0324	0.9716	0.2929	1.2645	0.2760	0.2694	0.5453		3,269.963 0	3,269.963 0	0.0250		3,270.487 2
Worker	0.0764	0.0878	0.8715	1.6800e-003	0.1479	1.2000e-003	0.1491	0.0392	1.1000e-003	0.0403		145.3304	145.3304	7.9500e-003		145.4974
Total	**1.5634**	**16.2697**	**19.5982**	**0.0340**	**1.1194**	**0.2941**	**1.4136**	**0.3152**	**0.2705**	**0.5857**		**3,415.293 4**	**3,415.293 4**	**0.0329**		**3,415.984 5**

3.3 Grading - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	3.8327	40.4161	26.6731	0.0298		2.3284	2.3284		2.1421	2.1421		3,129.0158	3,129.0158	0.9341		3,148.6328
Total	**3.8327**	**40.4161**	**26.6731**	**0.0298**	**6.5523**	**2.3284**	**8.8807**	**3.3675**	**2.1421**	**5.5096**		**3,129.0158**	**3,129.0158**	**0.9341**		**3,148.6328**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.8596	14.0708	10.6330	0.0289	0.6936	0.2363	0.9299	0.1897	0.2173	0.4070		2,933.9753	2,933.9753	0.0219		2,934.4349
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0636	0.0731	0.7262	1.4000e-003	0.1232	1.0000e-003	0.1242	0.0327	9.2000e-004	0.0336		121.1087	121.1087	6.6300e-003		121.2478
Total	**0.9232**	**14.1439**	**11.3592**	**0.0303**	**0.8168**	**0.2373**	**1.0541**	**0.2224**	**0.2182**	**0.4406**		**3,055.0839**	**3,055.0839**	**0.0285**		**3,055.6827**

3.3 Grading - 2015

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	3.8327	40.4161	26.6731	0.0298		2.3284	2.3284		2.1421	2.1421	0.0000	3,129.015 8	3,129.015 8	0.9341		3,148.632 8
Total	**3.8327**	**40.4161**	**26.6731**	**0.0298**	**6.5523**	**2.3284**	**8.8807**	**3.3675**	**2.1421**	**5.5096**	**0.0000**	**3,129.015 8**	**3,129.015 8**	**0.9341**		**3,148.632 8**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.8596	14.0708	10.6330	0.0289	0.6936	0.2363	0.9299	0.1897	0.2173	0.4070		2,933.975 3	2,933.975 3	0.0219		2,934.434 9
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0636	0.0731	0.7262	1.4000e-003	0.1232	1.0000e-003	0.1242	0.0327	9.2000e-004	0.0336		121.1087	121.1087	6.6300e-003		121.2478
Total	**0.9232**	**14.1439**	**11.3592**	**0.0303**	**0.8168**	**0.2373**	**1.0541**	**0.2224**	**0.2182**	**0.4406**		**3,055.083 9**	**3,055.083 9**	**0.0285**		**3,055.682 7**

3.4 Building Construction - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904		2,689.5771	2,689.5771	0.6748		2,703.7483
Total	**3.6591**	**30.0299**	**18.7446**	**0.0268**		**2.1167**	**2.1167**		**1.9904**	**1.9904**		**2,689.5771**	**2,689.5771**	**0.6748**		**2,703.7483**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4063	3.9723	5.2360	7.7700e-003	0.2300	0.0701	0.3001	0.0654	0.0645	0.1298		784.2459	784.2459	6.1800e-003		784.3757
Worker	0.7043	0.8095	8.0367	0.0155	1.3637	0.0111	1.3747	0.3617	0.0101	0.3718		1,340.2690	1,340.2690	0.0733		1,341.8091
Total	**1.1105**	**4.7817**	**13.2727**	**0.0232**	**1.5937**	**0.0812**	**1.6749**	**0.4271**	**0.0746**	**0.5017**		**2,124.5149**	**2,124.5149**	**0.0795**		**2,126.1848**

3.4 Building Construction - 2015

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.6591	30.0299	18.7446	0.0268		2.1167	2.1167		1.9904	1.9904	0.0000	2,689.577 1	2,689.577 1	0.6748		2,703.748 3
Total	**3.6591**	**30.0299**	**18.7446**	**0.0268**		**2.1167**	**2.1167**		**1.9904**	**1.9904**	**0.0000**	**2,689.577 1**	**2,689.577 1**	**0.6748**		**2,703.748 3**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4063	3.9723	5.2360	7.7700e-003	0.2300	0.0701	0.3001	0.0654	0.0645	0.1298		784.2459	784.2459	6.1800e-003		784.3757
Worker	0.7043	0.8095	8.0367	0.0155	1.3637	0.0111	1.3747	0.3617	0.0101	0.3718		1,340.269 0	1,340.269 0	0.0733		1,341.809 1
Total	**1.1105**	**4.7817**	**13.2727**	**0.0232**	**1.5937**	**0.0812**	**1.6749**	**0.4271**	**0.0746**	**0.5017**		**2,124.514 9**	**2,124.514 9**	**0.0795**		**2,126.184 8**

3.4 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**		**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3561	3.4782	4.9145	7.7700e-003	0.2302	0.0566	0.2867	0.0654	0.0520	0.1174		776.2272	776.2272	5.3200e-003		776.3390
Worker	0.6368	0.7271	7.2042	0.0155	1.3637	0.0105	1.3742	0.3617	9.6900e-003	0.3714		1,292.8013	1,292.8013	0.0671		1,294.2099
Total	**0.9929**	**4.2053**	**12.1187**	**0.0232**	**1.5938**	**0.0671**	**1.6609**	**0.4271**	**0.0617**	**0.4888**		**2,069.0285**	**2,069.0285**	**0.0724**		**2,070.5488**

3.4 Building Construction - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.286 4	2,669.286 4	0.6620		2,683.189 0
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**	**0.0000**	**2,669.286 4**	**2,669.286 4**	**0.6620**		**2,683.189 0**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3561	3.4782	4.9145	7.7700e-003	0.2302	0.0566	0.2867	0.0654	0.0520	0.1174		776.2272	776.2272	5.3200e-003		776.3390
Worker	0.6368	0.7271	7.2042	0.0155	1.3637	0.0105	1.3742	0.3617	9.6900e-003	0.3714		1,292.801 3	1,292.801 3	0.0671		1,294.209 9
Total	**0.9929**	**4.2053**	**12.1187**	**0.0232**	**1.5938**	**0.0671**	**1.6609**	**0.4271**	**0.0617**	**0.4888**		**2,069.028 5**	**2,069.028 5**	**0.0724**		**2,070.548 8**

3.5 Paving - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601		2,316.3767	2,316.3767	0.6987		2,331.0495
Paving	0.2921					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.3819**	**22.3859**	**14.8176**	**0.0223**		**1.2610**	**1.2610**		**1.1601**	**1.1601**		**2,316.3767**	**2,316.3767**	**0.6987**		**2,331.0495**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0575	0.0657	0.6510	1.4000e-003	0.1232	9.5000e-004	0.1242	0.0327	8.8000e-004	0.0336		116.8194	116.8194	6.0600e-003		116.9467
Total	**0.0575**	**0.0657**	**0.6510**	**1.4000e-003**	**0.1232**	**9.5000e-004**	**0.1242**	**0.0327**	**8.8000e-004**	**0.0336**		**116.8194**	**116.8194**	**6.0600e-003**		**116.9467**

3.5 Paving - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0898	22.3859	14.8176	0.0223		1.2610	1.2610		1.1601	1.1601	0.0000	2,316.3767	2,316.3767	0.6987		2,331.0495
Paving	0.2921					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.3819**	**22.3859**	**14.8176**	**0.0223**		**1.2610**	**1.2610**		**1.1601**	**1.1601**	**0.0000**	**2,316.3767**	**2,316.3767**	**0.6987**		**2,331.0495**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0575	0.0657	0.6510	1.4000e-003	0.1232	9.5000e-004	0.1242	0.0327	8.8000e-004	0.0336		116.8194	116.8194	6.0600e-003		116.9467
Total	**0.0575**	**0.0657**	**0.6510**	**1.4000e-003**	**0.1232**	**9.5000e-004**	**0.1242**	**0.0327**	**8.8000e-004**	**0.0336**		**116.8194**	**116.8194**	**6.0600e-003**		**116.9467**

3.6 Architectural Coating - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	90.8935					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966		281.4481	281.4481	0.0332		282.1449
Total	**91.2620**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**		**281.4481**	**281.4481**	**0.0332**		**282.1449**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1266	0.1446	1.4322	3.0700e-003	0.2711	2.0900e-003	0.2732	0.0719	1.9300e-003	0.0738		257.0027	257.0027	0.0133		257.2827
Total	**0.1266**	**0.1446**	**1.4322**	**3.0700e-003**	**0.2711**	**2.0900e-003**	**0.2732**	**0.0719**	**1.9300e-003**	**0.0738**		**257.0027**	**257.0027**	**0.0133**		**257.2827**

3.6 Architectural Coating - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	90.8935					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3685	2.3722	1.8839	2.9700e-003		0.1966	0.1966		0.1966	0.1966	0.0000	281.4481	281.4481	0.0332		282.1449
Total	**91.2620**	**2.3722**	**1.8839**	**2.9700e-003**		**0.1966**	**0.1966**		**0.1966**	**0.1966**	**0.0000**	**281.4481**	**281.4481**	**0.0332**		**282.1449**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1266	0.1446	1.4322	3.0700e-003	0.2711	2.0900e-003	0.2732	0.0719	1.9300e-003	0.0738		257.0027	257.0027	0.0133		257.2827
Total	**0.1266**	**0.1446**	**1.4322**	**3.0700e-003**	**0.2711**	**2.0900e-003**	**0.2732**	**0.0719**	**1.9300e-003**	**0.0738**		**257.0027**	**257.0027**	**0.0133**		**257.2827**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.0414	9.9389	41.4153	0.0706	5.3482	0.1277	5.4759	1.4254	0.1172	1.5425		6,517.6513	6,517.6513	0.3087		6,524.1331
Unmitigated	4.0414	9.9389	41.4153	0.0706	5.3482	0.1277	5.4759	1.4254	0.1172	1.5425		6,517.6513	6,517.6513	0.3087		6,524.1331

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	665.59	723.16	613.07	1,841,067	1,841,067
Congregate Care (Assisted Living)	194.54	156.20	173.24	513,987	513,987
Parking Lot	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	860.13	879.36	786.31	2,355,054	2,355,054

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	7.30	7.50	32.90	18.00	49.10	86	11	3
Congregate Care (Assisted	10.80	7.30	7.50	32.90	18.00	49.10	86	11	3
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.475873	0.063741	0.180085	0.160840	0.068896	0.010406	0.012442	0.015456	0.000807	0.000660	0.005504	0.000319	0.004970

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0438	0.3741	0.1592	2.3900e-003		0.0302	0.0302		0.0302	0.0302		477.5419	477.5419	9.1500e-003	8.7500e-003	480.4481
NaturalGas Unmitigated	0.0438	0.3741	0.1592	2.3900e-003		0.0302	0.0302		0.0302	0.0302		477.5419	477.5419	9.1500e-003	8.7500e-003	480.4481

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Apartments Mid Rise	2383.54	0.0257	0.2197	0.0935	1.4000e-003		0.0178	0.0178		0.0178	0.0178		280.4170	280.4170	5.3700e-003	5.1400e-003	282.1236
Congregate Care (Assisted Living)	1675.56	0.0181	0.1544	0.0657	9.9000e-004		0.0125	0.0125		0.0125	0.0125		197.1248	197.1248	3.7800e-003	3.6100e-003	198.3245
Total		**0.0438**	**0.3741**	**0.1592**	**2.3900e-003**		**0.0302**	**0.0302**		**0.0302**	**0.0302**		**477.5419**	**477.5419**	**9.1500e-003**	**8.7500e-003**	**480.4481**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Apartments Mid Rise	2.38354	0.0257	0.2197	0.0935	1.4000e-003		0.0178	0.0178		0.0178	0.0178		280.4170	280.4170	5.3700e-003	5.1400e-003	282.1236
Congregate Care (Assisted Living)	1.67556	0.0181	0.1544	0.0657	9.9000e-004		0.0125	0.0125		0.0125	0.0125		197.1248	197.1248	3.7800e-003	3.6100e-003	198.3245
Total		**0.0438**	**0.3741**	**0.1592**	**2.3900e-003**		**0.0302**	**0.0302**		**0.0302**	**0.0302**		**477.5419**	**477.5419**	**9.1500e-003**	**8.7500e-003**	**480.4481**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.7785	0.1726	14.5633	7.5000e-004		0.0773	0.0773		0.0773	0.0773	0.0000	25.6053	25.6053	0.0274	0.0000	26.1808
Unmitigated	6.7785	0.1726	14.5633	7.5000e-004		0.0773	0.0773		0.0773	0.0773	0.0000	25.6053	25.6053	0.0274	0.0000	26.1808

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4981					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.8037					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.4767	0.1726	14.5633	7.5000e-004		0.0773	0.0773		0.0773	0.0773		25.6053	25.6053	0.0274		26.1808
Total	**6.7785**	**0.1726**	**14.5633**	**7.5000e-004**		**0.0773**	**0.0773**		**0.0773**	**0.0773**	**0.0000**	**25.6053**	**25.6053**	**0.0274**	**0.0000**	**26.1808**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4981					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.8037					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.4767	0.1726	14.5633	7.5000e-004		0.0773	0.0773		0.0773	0.0773		25.6053	25.6053	0.0274		26.1808
Total	**6.7785**	**0.1726**	**14.5633**	**7.5000e-004**		**0.0773**	**0.0773**		**0.0773**	**0.0773**	**0.0000**	**25.6053**	**25.6053**	**0.0274**	**0.0000**	**26.1808**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Vegetation

Appendix B

Biological Resource Assessment

Biological Resources Assessment:

PLEASANT VALLEY APARTMENTS
2295 ETTING ROAD
CITY OF OXNARD, VENTURA, CALIFORNIA

Prepared for:
Dansk Investments, LLC
6951 Campus Park Drive
Moorpark, CA 93021

Prepared by:
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805-644-4455

March 2014

INTRODUCTION

This report documents the findings of a Biological Resources Assessment conducted for proposed development of a 7.4-acre site located at 2295 Etting Road in the City of Oxnard, California. The assessment was completed to document existing site conditions and determine potential impacts to sensitive biological resources based upon current project plans.

The following actions should be performed prior to project implementation to ensure compliance with applicable biological regulations:

- If project activities occur during the nesting season (February 15 – September 15) a nesting bird survey should be conducted by a qualified biologist immediately prior to construction. If nests are observed, nest buffers, biological monitoring, or delaying construction in particular areas may be recommended.

- The removal of both orchard and ornamental trees requires approval by the City of Oxnard Parks and Recreation Department per section 1.A.4. Preservation of Existing Trees of the Landscape Standards

PROJECT LOCATION AND DESCRIPTION

The project site is located in the City of Oxnard in Ventura County at 2295 Etting Road. The project site is in the Oxnard USGS topographic quadrangle, on assessor's parcel numbers (APN) 225-0-014-160 and 225-0-014-190 approximately 2.5 miles northwest of the Pacific Ocean. The project site is located adjacent to an existing mobile home park to the east, the Masonic and Japanese Cemeteries to the west, and Ocean View school facilities to the south. The surrounding region is comprised of residential development to the west and agricultural lands to the east.

The project includes the proposed development of a 7.4-acre (322,344 sq. ft.) site which consists of a 1950's residential dwelling, three barn structures, avocado orchards, and mature trees. It is our understanding that Dansk would like to develop the site with approximately 121 multi-family dwellings, and a 60-80 unit senior care facility.

METHODOLOGY

The Biological Resources Assessment for the proposed project consisted of a review of relevant literature followed by a field reconnaissance survey. The literature review included information on sensitive resource occurrences from the California Department of Fish and Wildlife (CDFW) California Natural Diversity Data Base (CNDDB), Biogeographic Information and Observation System (BIOS – www.bios.dfg.ca.gov), and U.S. Fish and Wildlife Service (USFWS) Critical Habitat Portal (http://criticalhabitatfws.gov). Site plans provided by the client, aerial photographs, and topographic maps were also examined.

The field reconnaissance survey documented existing site conditions and the potential presence of sensitive biological resources, including sensitive plant and wildlife species, sensitive plant communities, jurisdictional waters and wetlands, and habitat for nesting birds. The field biologist surveyed the project site on foot and recorded the biological resources present onsite such as plant and wildlife species.

The potential presence of sensitive species is based on a literature review and field survey designed to assess habitat suitability only. Definitive surveys to confirm the presence or absence of special-status species were not performed. Definitive surveys for sensitive plant and wildlife species generally require specific survey protocols and extensive field survey time, and are usually conducted only at certain times of the year. The findings and opinions conveyed in this report are based on this methodology.

EXISTING SITE CONDITIONS

The field survey was conducted on March 4, 2014, between the hours of 10:50 and 11:30 am. Weather conditions during the survey included an average temperature of 61 degrees Fahrenheit, with winds of 0 to1 mile per hour and approximately 50 percent cloud cover.

The project site is disturbed and contains an avocado orchard, three barns, and a residential house. In addition to the orchard, ornamental trees such as eucalyptus (*Ecalyptus globulus*), fir (*Abies* sp.), redwood (*Sequoia sempervirens*), and additional varieties occur within the project site. The ground is mostly barren with scatter ruderal species such as redstem stork's bill (*Erodium cicutarium*). No native plant communities occur on or adjacent to the project site.

Wildlife activity was moderate during the field survey including many birds within the orchard and ornamental trees. Wildlife observed included red-railed hawk (*Buteo jamaicensis*), American kestrel (*Falco sparverius*), western gull (*Larus occidentalis*), mourning dove (*Zenaida macroura*), Anna's hummingbird (*Calypte anna*), northern flicker (*Colaptes auratus*), Hutton's vireo (*Vireo huttoni*), bushtit (*Psaltriparus minimus*), yellow-rumped warbler (*Dendroica coronate*), California towhee (*Melozone crissalis*), side-blotched lizard (*Uta stansburiana*), and western fence lizard (*Sceloporus occidentalis*).

SENSITIVE BIOLOGICAL RESOURCES AND IMPACT ANALYSIS

The CNDDB has records for 4 sensitive plant species, 3 sensitive plant communities, and 17 sensitive wildlife species within the Oxnard USGS topographic quadrangle that contains the project site. Sensitive plant and wildlife species typically have very specific habitat requirements.

Sensitive Plant Species. No sensitive plant species were observed on site. This project site does not contain suitable habitat or natural soil conditions for sensitive plant species.

Sensitive Plant Communities. No sensitive plant communities as defined by the CNDBB or local ordinances are present on or adjacent to the project site.

Sensitive Wildlife Species. Based on the existing development, onsite and adjacent disturbances, and the lack of contiguous native habitat, the project site does not contain suitable habitat for any sensitive wildlife species.

Nesting Birds. During the field reconnaissance survey, a raptor nest was observed in a eucalyptus approximately 180 feet west of the project site. Native birds and their nests are protected by California Fish and Game (CFG) Code §3503 and the Migratory Bird Treaty Act (MBTA). Due to the large trees and orchard within and near the project site, the project could impact protected nesting birds.

Jurisdictional Drainages and Wetlands. No potentially jurisdictional drainages or wetlands were observed within the project site.

Protected Trees. The project site includes avocado orchard trees, wind brake trees, and ornamental trees. Trees in healthy condition are protected and preserved by the City of Oxnard Parks and Recreation Department by section 1.A.4. Preservation of Existing Trees of the Landscape Standards.

Other Regulated Areas. The project site is not within a Habitat Conservation Plan (HCP) area or other sensitive biological area as indicated by the U.S. Fish and Wildlife Service Critical Habitat portal (http://criticalhabitat.fws.gov/) or the California Department of Fish and Wildlife Biogeographic Information and Observation System (http://bios.dfg.ca.gov/).

CONCLUSIONS AND RECOMMENDATIONS

Protected Trees.

The project site includes hundreds of healthy avocado orchard trees as well as eucalyptus wind brake trees and multiple species of ornamental trees. The City of Oxnard Parks and Recreation department protects and preserves healthy trees per section 1.A.4. Preservation of Existing Trees of the Landscape Standards.

Per the Landscape Standards, removal of trees within the project site will require approval by the City of Oxnard Parks and Recreation Department. This approval will be contingent upon a certified arborist's report which assesses trees planned for removal and concludes that the trees cannot feasibly be preserved.

Nesting Birds.

Due to the available nesting habitat on site and the raptor nest observed approximately 180 feet west of the project site, nesting birds could be impacted by project activities. Therefore, project activities should begin outside of nesting bird season (February 15^{th} to September 15^{th}).

Alternatively, if project activities cannot be delayed, we recommend that nesting bird surveys be performed for the project site and adjacent suitable raptor nesting habitat (including the existing nest). These surveys should occur immediately prior to the initiation of project activities to determine if nesting birds protected by CFG Code are present within the project area and the status of the existing nest. If nesting birds are present, buffers of suitable distance where work does not occur until the nest is vacated can be established. The biologist would demarcate a nest avoidance buffer and educate the crew on any necessary nest avoidance measures for the project. Alternatively, if the nesting birds are suitable distance from the proposed activities, the biologist could observe the nesting birds to document baseline behavior for the pair(s). This would allow the biologist to conclude whether or not the proposed activities cause disturbance to the nesting birds when project activities are initiated. In this case, the biological monitor would be present for the first day of land clearance activities. If the biologist determines that no disturbance occurs, construction can continue. If the biologist determines the activity could potentially cause the nest to fail, the biologist may recommend that construction in certain areas be halted until the nest is vacated. Depending upon the biologist's observations, the project schedule, and the level and type of project activities, continued biological monitoring during construction may be warranted.

QUALIFICATIONS OF PREPARER(S)

PRINCIPAL INVESTIGATOR

Mark Ziman was the primary investigator for this project. Mr. Ziman is an Associate Biologist with Rincon Consultants and has over 2 years of experience as a professional biologist. Mr. Ziman conducts nesting bird surveys; habitat assessments; vegetation mapping; wetland delineation; focused surveys for endangered threatened, and sensitive wildlife and plant species; and monitoring in a variety of habitats in southern California. His responsibilities also include the preparation of biological reports and environmental documents for compliance with both NEPA and CEQA.

Nancy Fox-Fernandez provided peer review and coordination for this project. She serves as a Senior Biologist/Project Manager for biological, environmental, and land use planning studies specializing in ornithology. Ms. Fox-Fernandez has an M.S. in Natural Resources with a focus in Wildlife from Humboldt State University. She has over 10 years of experience in the fields of endangered species management and behavior, wildlife and habitat ecology, resource management, regulatory compliance, and the preparation of biological reports and environmental documents for compliance with both NEPA and CEQA. She holds 10(a)(1)(A) recovery permits for Western snowy plover and California least tern.

John Dreher, Jr., provided principal review for the project. Mr. Dreher is a Principal with Rincon Consultants and has over 15 years of experience. He has developed expertise in environmental regulatory compliance, regulatory permitting, and restoration ecology. Mr. Dreher's responsibilities include research and field surveys for endangered species, habitat evaluation, general biological surveys, resource constraints analysis, construction and mitigation monitoring, regulatory compliance, and the preparation of biological reports and environmental documents for compliance with both NEPA and CEQA. He has been the client manager for numerous public and private agencies, ranging geographically throughout California.

Appendix C

Historic Resources Report

HISTORIC RESOURCES

REPORT

for

2295 Etting Road,

Oxnard California

Prepared for:

Moller Investment Group, Inc., 6591 Collins Drive

Suite E-11

Moorpark, CA 93021

By
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June 23, 2014

1.0 INTRODUCTION

This Historic Resources Report is for two parcels (APN 225-0-014-165 and APN 225-0-014-190) totaling 7.4 acres at 2295 Etting Road in the City of Oxnard, California (Figures 1 & 2). The study was prepared for Mark Pettit and Daly/Dansk Investments, Moorpark, California. The parcels are historically known as the Naumann farm. The California Environmental Quality Act (CEQA) requires analysis of impacts that may result from project development, including impacts to historic resources. The report follows the guidelines for Historic Cultural Resource Studies set forth in General Plan of the City of Oxnard, as well as State and Federal guidelines pertaining to the assessment of impacts to historic resources. These include the State CEQA Guidelines, specifically Section 15064.5, Determining the Significance of Impacts to Archaeological and Historical Resources, as well as the CEQA guidelines adopted by the City of Oxnard City Council. The methodology for determining whether the property meets the eligibility requirements for listing as a historic resource under City of Oxnard, State, and Federal eligibility criteria was based on archival research to determine the historic context of the properties within the project area, as well as on-site evaluation of the physical and visual integrity of each building. The report applies the historic resource evaluation guidelines outlined in Ventura County Ordinance 4225 amending Division 1, Chapter 3, Article 5, of the Ventura County Ordinance Code, Section 1360. This historic resources study includes the following:

1) Documentation of the historic context and physical appearance of the resources within the project site and its individual buildings, structures, and features;
2) Evaluation of the integrity of the Naumann Farm and its individual components;
3) Identification of potential historic, architectural, and cultural resources within the project area;
4) Evaluation of potential resources eligible for listing as historic resources at the City of Oxnard, State, and Federal levels;
5) Assessment of the impact of the proposed project on historic resources identified by this study.

This report includes required findings regarding the potential environmental impact of the proposed project to the significant historic resources identified in this report. The report meets the requirements of a historical resource survey as outlined in Section 5020.1(k) of the Public Resources Code. Pamela Post, Ph.D., principal investigator and senior historian, and Timothy Hazeltine prepared this report.

2.0 PROJECT DESCRIPTION

The project site is currently occupied by a mid-20th century farm complex composed of a residence, four farm buildings and portions of Blue Gum windrows located on the Pleasant Valley Road and Etting Road street frontages (Figure 3 and see Figures 1 & 2). The applicant proposes to demolish the property's existing improvements and replace them with a residential development of multi-family dwellings and a senior care facility.

2.1 Lead Agency

The Lead Agency for the project is the City of Oxnard.

3.0 PREVIOUS ASSESSEMENTS AND DESIGNATIONS

The historic significance of the parcel at 2295 Etting Road was previously assessed in a CALTRANS Historic Architectural Survey Report of the Pleasant Valley Road/State Route 1 Interchange in April 1996. The report determined that the property was not a significant historic resource for the purposes of CEQA. The property is not included on the County of Ventura's official list of Cultural Heritage Sites at the Landmark, Sites of Merit, or Point of Interest levels. The surrounding neighborhood was the focus of two CALTRANS studies, a Historic Architectural Survey Report of the Pleasant Valley Road/State Route 1 Interchange in April 1996 and a Historic Property Survey Report of the Pleasant Valley Road/State Interchange on May 15, 1996.

Designated historic Ventura County landmarks located near the project area include the following: In 1971, the Naumann Giant Gum Tree/Eucalyptus Grove, located along Pleasant Valley Road, was designated Ventura County Historical Landmark #15 and in that same year, the Japanese Cemetery, located at the corner of Pleasant Valley Road and Etting Road, was designated Ventura County Historical Landmark #18. In November 2012 the Ventura County Heritage Board recommended that the Oxnard City Council designate the Hueneme Masonic Cemetery, located on the corner of Etting Road and Pleasant Valley Road, as Ventura County Landmark #173.

4.0 DOCUMENTS REVIEW

The following resources and information sources were consulted during the preparation of this report (a complete list of resources can be found in Section 12):

City of Oxnard, Building and Safety Division
Museum of Ventura County
Oxnard Public Library Local History Collection

5.0 ENVIRONMENTAL SETTING AND NEIGHBORHOOD SETTING

The project area is within the Oxnard Plain, which is a coastal plain composed of alluvial deposits that extend north from the base of the Santa Monica Mountains to the Santa Clara River Valley, east to the Conejo Grade and west to the Pacific Ocean. The plain is composed of deep alluvial deposits from Calleguas Creek which flows from eastern Ventura County to the Pacific Ocean and the Santa Clara River. The most notable feature of the topography is its flatness which slopes very gently from the bordering mountain ranges to the coast.

The project parcel at 2295 Etting Road is bounded by Etting Road on its south, Pleasant

Valley Road on its north, the Hueneme Masonic Cemetery on its west and the Colony Mobile Home Park on its east. Pleasant Valley Road is a surface road transportation corridor extending from Camarillo to Port Hueneme; it is linked to California State Route 1 (SR 1) via an interchange located about a mile northeast of the project parcel. The development pattern for the vicinity of the project area is characterized by residential subdivisions, mobile home parks, commercial development, and school facilities. Four mobile home parks are located on the north side of Pleasant Valley Road between Olds Road and the intersection of Pleasant Valley Road and State Route 1. On the other side of Etting Road, to the south of the Naumann property is a large tract of land, the location of Ocean View Junior High School and Mar Vista Elementary School. On the south side of Etting Road a large housing tract is located west of the Ocean View Elementary School and Ocean View Junior High School, Etting Road and Pleasant Valley Road. To the east of Ocean View Elementary School agricultural schools extend to SR-1. To the west of the project parcels is the Hueneme Masonic Cemetery, a vacant parcel (APN 225-0-014-020) and the Japanese Cemetery (APN 225-0-014-200). A larger tract of cultivated farmland is located on the north side of Etting Road between the Colony Mobile Home Park and State Route 1.

6.0 HISTORICAL CONTEXT

This section of the report provides a historical overview of the Naumann property and the surrounding area.

6.1 History of the Project Area (1769 –1898)

The first chronicles describing the coastal area of Ventura County were written by members of the Gaspar de Portala expedition as it traveled along the California Coast in 1769. Diaries by expedition members noted that the area was populated by the Chumash, a Native American group that inhabited the coastal and inland area between present-day Malibu and San Luis Obispo County. In 1782, the Spanish established near the mouth of the Ventura River, Mission San Buenaventura to Christianize the Chumash. Over the succeeding decades the indigenous settlements were gradually abandoned and their occupants drawn into the mission system. Spanish control of California passed to Mexico in 1821. Within 13 years of independence, Mexico had begun to secularize the Franciscan-run missions, including Mission San Buenaventura. The Mexican government soon began granting ex-mission lands, as well as other tracts, to Mexican citizens in California. One of these land grants, the 48,000-acre *Rancho El Rio de Santa Clara y La Colonia*, was conferred, in 1837, to Valentine Cota, Leonardo Gonzales, Rafael Gonzalez, Salvador Valenzuela, Jose Maria Valenzuela, Vincente Pico, Rafael Valdez, and Vincente Feliz, with the intention that the grantees establish a settlement on the lower reaches of the Santa Clara River (the rancho later became known as *La Colonia*). Only one of the eight grantees, Rafael Gonzales, settled the land grant that encompassed the future location of the project parcel. Beyond the construction of an adobe house Gonzales made few improvements to his rancho, which was used primarily for stock raising. In 1848, eleven years after the creation of the *La Colonia* rancho, California became a part of the United States as an outcome of the Mexican-American War.

La Colonia rancho remained intact until 1864 when an approximately 32,000 acre section was sold to Thomas Scott. Scott, who had been President Lincoln's acting Assistant Secretary of War, had made his fortune through his railroad and petroleum investments in Pennsylvania, where the country's first oil drilling industry was established (Triem 1990: 50-51). Subsequently, Scott saw the potential for establishing the petroleum industry in the Ventura area, which had been the focus of several enthusiastic reports by geologists. Acting on the findings of the reports, Scott purchased several other ranches, including *Rancho Ojai* and *Rancho Cañada Larga*, both of which comprised over 200,000 acres in Ventura County (Triem 1990: 51-52). Shortly after his purchase, Scott sent out Thomas Bard to oversee his acquisitions. Bard, who later became a noted landowner and politician in his own right, was responsible as executor of Scott's estate, for the eventual subdivision and sale of much of Scott's holdings beginning in the late 1860s. By 1888, Bard, who was executor of Scott's estate, had begun to sell off a considerable portion of Scott's *Rancho El Rio de Santa Clara y La Colonia*, including large tracts of land in the vicinity of Pleasant Valley Road and Etting Road (Figure 4). By the late1880s sale and subdivision of the land had increased considerably with many of the properties being sold to small landholders including a tract purchased by a Mr. A. Guillou located at the intersection of New Road (later Etting Road) and Pleasant Valley Road (see Figure 4). In 1898 Guillou sold nine acres of his land to the Hueneme Masonic Lodge to be used as a cemetery for their members. It is the subsequent sale of a portion of the Hueneme Masonic Cemetery that forms the genesis of the Naumann Farm at 2295 Etting Road.

6.2 Hueneme Masonic Cemetery (1898-2014)

The Hueneme Masonic Cemetery was created as a Protestant cemetery for members of the Hueneme Masonic Lodge and the surrounding community. The members formed the Hueneme Masonic Cemetery Association (HMCA) in order to provide burial plots at a time few cemeteries existed in the area. On August 9, 1898 the Hueneme Masonic Cemetery Association was established as a legal entity. Its first directors were Winfield Scott Saviers, a local farmer and Achille Levy, an Oxnard banker. According to the Masonic Lodge's mission statement the purpose of the HMCA was:

"*...to establish and maintain a cemetery in the vicinity of the town of Hueneme, County of Ventura, State of California, and to care for, embellish, and preserve the graves within said cemetery, and to erect and keep in repair monuments therein. To purchase or receive by donation or device, land for cemetery purposes; to survey and subdivide the same into lots or plats, avenues and walks, and to hold, occupy, sell and convey the same for cemetery purposes. To borrow money on mortgage or other security and to issue bonds for the purchase of land for cemetery purposes*" (Oberg, 1997: 7).

To finance the purchase and subsequent improvements of the cemetery, stock was issued in the amount of $5,000.00 in 1,000 shares of $5.00 each. The original subscription was for $645.00 (There is no indication that they were ever able to sell the total issue) (Oberg, 1997:7). The triangular 9-acre parcel located at the intersection of Pleasant Valley Road and Etting Road was made on January 18, 1898 when $450.00 was paid to Guillou by Messrs. Lehmann, Witman and Petit who were acting as trustees for the HMCA (Oberg, 1997: 7). After purchasing the parcel the HMCA set about to plat off the cemetery plots and to make other improvements, including the construction of a well and tank house at the east end of cemetery, on what later became the Robert Naumann farm (Letter from Robert Naumann to R. Blinn Maxwell, of the Hueneme Masonic Cemetery Association, August 8, 1989). Some two years later, in circa-1900, the HMCA planted Eucalyptus windrows to act as a border and wind break for the cemetery (State of California DPR Form for Hueneme Masonic Cemetery, March, 1996).

Designed in a classically Beaux Arts configuration, the cemetery "featured a central axis bisected by two axes" (Clement 1996: DPR Form for Hueneme Masonic Cemetery). Graves were arranged in a grid pattern in rows running north to south with family blocks bordered by concrete curbing delineated at each corner by either square piers or chamfered capitals or wood fencing (Figure 5) (Clements 1996: DPR Form for Hueneme Masonic Cemetery) (Figure 5). "Of the 358 grave sites, one area (Lot 96, of Section 2) was reserved for the local Japanese community(now known as the Japanese Cemetery on APN 225-0-014-200) and was further divided into approximately 130 (cremation)grave sites" (Oxnard Cultural Heritage Board Agenda, August 27, 2012, Item 4a: n.p.). Some documents indicate that the first burial took place in early 1898, though the oldest surviving gravestone at the cemetery dates to 1899 (Oberg, 1997: 7; and Oxnard Cultural Heritage Board Agenda, August 27, 2012, Item 4a: n.p.). As a child during the 1910s and 1920s, Robert Naumann, who lived nearby on the family farm located on the south side of Etting Road, recollected of the early days of the Hueneme Masonic Cemetery. He recalled how he and other children at the Ocean View School would be asked "just before Memorial Day to bring a hoe or rake and all would spend an afternoon cleaning up graves and walkways" (Letter from Robert Naumann to R. Blinn Maxwell, of the Hueneme Masonic Cemetery Association, August 8, 1989).

In the fall of 1899 a second parcel located at the east end of the cemetery was purchased by the HMCA (see Figure 5). The 0.9-acre triangular parcel was purchased by Lehmann, Witman and Petit for $9.00 in gold coin from F. H. Pidduck. According to the HMCA's minutes, the purchase was made to "square the lines of both parties" (Oberg, 1997: 7). In the first decade of the 20th century 32 ½ burial lots, located at the tip of the triangular parcel, were purchased by the Japanese community. While the Japanese paid for the plots, "now known locally as the Japanese Cemetery," official records of the Hueneme Masonic Cemetery Association show that the HMCA continued to own the land (Oberg, 1997: 8). At its greatest extent the cemetery encompassed what are now APN 225-0-014-200, APN 225-0-014-020, APN 225-0-014-195, and what are now portions of APN 225-0-014-120 and APN 225-0-014-165 (see Figure 5). In circa1903-1904 the Bakersfield and Ventura Railroad ran a branch line along the north side of Etting Road; the line jogged into the Etting Road Right-Of-Way between the cemetery's southeast corner and Pleasant Valley Road to avoid impinging the cemetery's grounds. While surviving cemetery records suggest burials only took place in the areas now encompassed by APN 225-0-014-020 (the current Masonic Cemetery property) and APN 225-0-014-200 (the Japanese Cemetery), the incomplete nature of surviving records make it difficult to be definitive regarding this issue. The Hueneme Masonic Cemetery remained active until 1949, the year of the last recorded burial (Hueneme Masonic Cemetery Record Book, Exhibit 3 of Oxnard Cultural Heritage Board Agenda, August 27, 2012, Item 4a: n.p.). During the period it was in operation there were approximately 100 burials in the cemetery most occurring between 1899 and 1917.

In the 1920s the HMCA began to sell off portions of the cemetery that had apparently not been used for burials. These sales were likely engendered by the need to raise funds for maintaining the cemetery, in which few burials took place after 1917. The most likely reason for this was the opening in that same year of the Ivy Lawn Cemetery in Montalvo. Unlike the Hueneme Masonic Cemetery, which did not provide for perpetual care of the grave sites, Ivy Lawn Cemetery did and though more costly, it was a much more attractive option for those who did not want to have to care for individual or family plots on their own (*Los Angeles Times*, April 12, 1994). After Ivy Lawn opened, approximately 14 bodies were disinterred from the Hueneme Masonic Cemetery and re-buried in Ivy Lawn Cemetery, including Samuel Naumann, the founding patriarch of the Naumann family farm in Oxnard. The total number and dates of the various real estate transactions made by HMCA to divest HMCA of portions of the cemetery property are unclear as surviving records are not complete and published sources and professional reports differ in the dates and details of these sales.

According to Oberg the first property transaction occurred on June 5, 1924 when a 1.97-acre portion of the cemetery, lying between the Japanese Cemetery and the present western boundary of the Hueneme Masonic Cemetery, was sold to Herman S. Philbrook of Oxnard for $400.00 (Oberg, 1997: 8). Oberg's contention that this parcel was sold in 1924 appears to be in error as other sources, including the 2012 report for nominating the Masonic Cemetery property as a Ventura County Landmark and the biography of Robert Naumann states the 1.97-acre parcel was acquired by Naumann in the 1940s (Staff Report and Recommendations for nominating the Masonic Cemetery Property as a Ventura County Landmark, August 27, 2012: n.p. & Madsen 1985: 163). It is possible that the 1924 purchased referred to by Oberg was for the very easterly end of the cemetery property which encompassed portions of what are now APN 225-0-014-165 (one of the project parcels) and APN 225-0-014-120 (a mobile home park). (see Figures 2 and 5 - 7).

In 1925, the HMCA's president, Winfield Saviers, sold a 3.48-acre tract of cemetery land on the eastern boundary of the HMCA property to Herman C. Philbrook (Oxnard Cultural Heritage Board Agenda, August 27, 2012, Item 4a: n.p.). This 3.48-acre tract appears to have been Parcel B of APN 225-0-014-195 (2295 Etting Road property) (Figure 6). Finally, in 1948 the HMCA sold a 1.186-acre parcel located along the eastern boundary of the present cemetery property to Robert Naumann (Oberg 1997: 8 & Madsen 1985: 163) (see Figures 5 – 8). We would like to note that there appears to be no records for the sale of the far eastern end of the parcel which is now encompassed in the adjoining mobile home park property (APN 225-0-014-120) and part of APN 225-0-014-165).

After the sale of the last parcel to Robert Naumann in 1948 the Hueneme Masonic Cemetery was reduced to the existing 3.94-acre parcel (APN 225-0-014-020) (see Figure 2). No burials appear to have taken place since and the cemetery is no longer in operation. In 2012, the Ventura County Cultural Heritage Board recommended to the Oxnard City Council that the Hueneme Masonic Cemetery be designated Ventura County Landmark No. 173.

6.3 The Naumann Farm at 2295 Etting Road (1944-2014)

In 1944, Robert Naumann, the grandson of Samuel Naumann, moved with his wife, June and daughter, Rose, to the project parcel at 2295 Etting Road which was once part of the adjacent Hueneme Masonic Cemetery. There the Naumanns built a combined barn and residence, at the easterly end of the property. This parcel was bought from Herman S. Philbrook who had purchased it in 1924-1925 from the Hueneme Masonic Association (Oxnard Cultural Heritage Board Agenda, August 27, 2012, Item 4a: n.p.). Because it was wartime and building materials were scarce, Robert "had to go to Los Angeles and get a priority and purchasing number from the War Production Board in order to build a barn" (Madsen, 1985: 141). The priority purchase was most likely granted because Robert was a farmer and farming was considered an important contribution to the war effort. The residential component consisted of a living room and kitchen. Subsequently, Robert and June attached an 8 foot by 16 foot cook house, scavenged from a wagon, to use as a bedroom. In order to provide another bedroom, a small detached sleeping room located on a property they farmed near the beach was moved to the Etting Road property where it was appended to the barn; between the two bedrooms a bathroom was built (Madsen, 1985: 141-142).

In the mid-1940s two more bedrooms were added to what Robert referred to as a "pretty big place, albeit a conglomeration" (Madsen, 1985: 142). In addition to the barn, Robert installed a pump house, and several sheds to house the farm equipment. During the war years meat was scarce so Robert decided that it would be profitable to raise pigs, which, indeed it turned out to be. During this period Robert grew beans and started to grow flower and vegetable seeds for the Burpee Seed Company (Madsen, 1985: 160). As noted above, Naumann purchased a 1.972-acre parcel of land, sometime between 1944 and 1948, from the HMCA. Naumann would use the acreage to raise commercial flower seeds. In the postwar period Robert partnered with Dominic Tassano to raise commercial flowers, in place of seeds; among the first crops were stocks. Four years later, on March 26, 1948, Robert bought a 1.186-acre parcel from the Hueneme Masonic Cemetery Association; this parcel was located to the east of the present cemetery boundaries (Oberg, 1997: 8). About this same time, Naumann and

Tessano jointly purchased a 17-acre tract that abutted the east side of the Naumann property. In the late 1960s or early 1970s this 17-acre property was subdivided to create a mobile home park, with an L-shaped section of the parcel remaining in the hands of Naumann (this is now APN 225-0-014-165).

In 1957, Robert and June began construction on a California Ranch style house at 2295 Etting Road to replace their existing home. The contractor/designer for the house was Carl Ingraham a licensed contractor based in Oxnard (Frank Naumann personal communication to Mark Pettit, June 16, 2014). The one-story wood-framed house has an L-shaped configuration with a combination of stucco, used brick and faux board-and-batten siding. Capped by a combination of side gable and hipped on gable roof the house has an attached garage at its south end. In its architecture and plan the house is typical of the type of California Ranch style house being built throughout southern California between circa-1945 and the mid-1960s. With the construction of the house the property appears to have reached its full complement of buildings, which included two sheds, and a pump house, as well as the barn/residence, which now included an attached carport.

While the Naumanns continued to farm on Etting Road, Oxnard's population growth during the 1960s and 1970s, including the construction of residential subdivisions, mobile home parks, commercial development, and school facilities, were impinging on the surrounding farmland, especially along Pleasant Valley Road. In 1968, the agricultural land between Olds Road and South Rose Avenue was developed with a subdivision of single-family houses. Between the mid- 1960s and the early 1970s at least four mobile home parks were built along the north side of Pleasant Valley Road, between Olds Road and the intersection of Pleasant Valley Road and the SR-1 Highway. In 1971, Ocean View Junior High was built on the other side of Etting Road, to the south of the Naumann property. Sometime in the late 1960s or early 1970s the Colony Mobile Home Park was developed on farmland owned by the Naumann family. Because of this development the Naumann's remaining farmland was enveloped on its north and east by mobile home parks and on its south and west by Ocean View Junior High School and residential subdivisions. By the 1970s the Naumann's property at 2295 Naumann Road had been converted to citrus and avocado orchards.

7.0 THE NAUMANN FAMILY

7.1 Samuel Naumann (1836-1905)

The history of the Naumann family begins with its patriarch, Samuel Naumann, who was the first of the Naumanns to purchase land on the Oxnard Plain. In 1901, Samuel Ernest Naumann, a German immigrant who arrived in the United States in 1886, purchased a 159.48 parcel located approximately one mile southeast of the project parcel from Charles F. Etting for $14,000.00 (Deed Book, 79, page 110, November 1, 1901). Samuel Naumann was born in Atzendorf, Germany in September 1835 (Madsen, 1985: n.p). Other documentary sources cite his birthplace as Magdeburg, Germany and his birthdate as May 12, 1836 (Guinn, 1907: 1678). As a young man Samuel initially learned to be a bricklayer. At some point Samuel married and had three children, August, Dorothea and Bertha (the name of his first wife is unknown, as are the birthdates of his three children). It is not known as to whether his first wife died or they divorced and since the three children are not further mentioned, other than in Samuel's will in which they receive $5.00 each, it is assumed that August, Dorothea and Bertha remained in Germany (Madsen, 1985: n.p.; Guinn, 1907: 1678).

On April 12, 1874 Samuel married Rosina Caroline Wilcke (1848-1927) (Rosina Wilcke Family Tree). The couple would eventually have seven children, six of them born in Germany, including Herman (born 1875); Louise (born 1876); Emma (born 1878); twins Paul and Otto (born (1879); followed by Gustav (born 1884). Shortly after the birth of Gustav, Samuel Naumann and his family immigrated to the United States. Leaving the port of Bremen they crossed the Atlantic aboard the steamship Ems, arriving in New York City on August 17, 1886 (New York Passenger List, 1886). Initially, Samuel and his family settled in Texas where he bought a 100 acres of farmland near Victoria, Texas, a town known for its large German immigrant population (Mulhardt, 2013: 40). It was while he was in Victoria that Samuel applied to become a United States citizen and where Samuel and Rosina's last child, Martha, was born in 1888 (*Ventura County Star*, January 6, 2008; Rosina Wilcke Family Tree). Several years later, in 1891, the family relocated to Germantown, Texas.

By 1893, however, the peripatetic Samuel had moved once again, this time to Chino, a small town in sprawling San Bernardino County, California. While living in Chino Samuel delivered beets to the local sugar beet factory (Mulhardt, 2013: 40). By 1898 his twin sons, Otto and Paul had moved to Ventura County where the two worked on a construction crew building the sugar beet factory in Oxnard. Possibly in hopes of reuniting the family, as well as the potential for work, Samuel soon moved the rest of his family to the community of Ocean View, located on the Oxnard Plains. During this period Samuel helped establish, in 1901, the German Lutheran Church in Oxnard (Mulhardt, 2013: 40). In that same year Samuel purchased his land from Charles F. Etting located off what is now Etting Road (Madsen, 1985: n.p; Mulhardt, 2013: 40). Three years later, in 1904, he purchased another 80 acres from Etting for $5,600.00; almost all of which, including his initial 159 acres, was devoted to the cultivation of sugar beets, lima beans, and alfalfa (Madsen, 1985: n.p; Deed Book 101, page 286, Parcel G, Subdivision 71). During this period Samuel would often engage both Japanese and Chinese labor to work the fields. As migratory workers Japanese laborers often called themselves *buranke katsugi* (blanket carriers) in reference to their moving from farm to farm with their blankets (www.californiajapantowns.org/oxnard.html). Because the sugar beet was such a profitable crop, "bringing in nearly $50.00 an acre profit" it was not long before Samuel paid off the money he owned for the land. By now he was able to build a commodiously-sized clapboard-sided farm house designed in the Free Classic Queen Anne style (Madsen, 1985: 23).

Less than four years after he established his farm, Samuel Naumann was found dead in his farm's hay shed, having committed suicide at the age of 69 on March 16, 1905 Madsen, 1985: n.p and 22); Samuel was buried in the Hueneme Masonic Cemetery. Later, he was disinterred and re-buried in the Ivy Lawn Cemetery near Montalvo (Rosina is also buried at Ivy Lawn along with other members of the Naumann family) (Madsen, 1985: n.p and 22). At the time of Samuel's death his estate consisted of over 300 acres of farmland, $4,137.60 in cash, and other personal property consisting of farm equipment, a buggy, a surrey, two milk cows, and a piano, as well as furniture and household items, almost all of which Samuel left to his wife, Rosina (Madsen, 1985: n.p and 22). When Rosina's son, Gustav, married in 1910 she rented the family farm to him. Rosina then moved to a large two-story house on C Street in Oxnard; a few years later Gustav purchased the farm from his mother. Rosina continued to live in her home in Oxnard until her death on June 19, 1927 (Madsen, 1985: n.p).

7.2 Gustav Naumann (1884-1954)

Gustav Naumann was born in Aschersleben, Germany on May 12, 1884. At the age of not quite two Gustav accompanied his parents and siblings to the United States. As a young child he settled first in Texas and then in Chino, California, subsequently moving with his family to the Oxnard area in 1893, at the age of nine. By age 17 Gustav was living on the family farm located on the south side of Etting Road. On December 26, 1910, 26-year old Gustav married Catherine Marie Webel, born in Ashley, Illinois (Madsen, 1985: n.p). Gustav and Catherine eventually would have three children, including Robert, born on September 27, 1911, Alvin, born on August 4, 1914, and Rose, born on February 14, 1922 (Madsen, 1985: n.p).

Like his father, Gustav continued to grow beets and lima beans. During this period all of the Naumann brothers "took their turn at farming" (Mulhardt, 2013: 40). When the beet crop was ready for harvesting the beets would be pulled from the soil, topped, and then loaded onto a wagon and driven to the Naumann's beet dump. The beet dump was an elevated wood ramp on Etting Road east of the intersection with Olds Road. The beet dump abutted the northern side of the Ventura County Railroad (VCRR) tracks, which extended along the north side of Etting Road. Once pulled to the top of the ramp the beets would be dropped into rail cars for transportation to the Oxnard Sugar Beet factory located at Five Points in Oxnard (Mulhardt, 2013: 40). As a farmer of lima beans Gustav was an early member of the California Lima Bean Growers Association and a supporter of the Ventura County Farm Bureau (Madsen, 1988: 37). In addition to the family farm purchased from his mother, Gustav made one other land purchase, a small parcel previously owned by J. E. Borchard. Gustav Naumann continued to farm his property until his death in June 1954. By this time agriculture on the Oxnard Plains had changed with many of the farms having turned to the raising of citrus and irrigated row crops.

7.3 Robert Gustav Naumann (1911-1995)

Robert Gustav Naumann was born in Oxnard on September 27, 1911 to Gustav and

Catherine Naumann. As a child Robert grew up on the family farm initially established by his grandfather, Samuel Naumann and later purchased and farmed by his father, Gustav. "From the time I was born until I left home at age twenty-one, my home was 3460 Etting Road" (the location of the farm established by Samuel Naumann) (Madsen, 1985: 140). Between 1932 and 1937 Robert moved several times while he worked for the Gulf Oil Company. During this period he also rented farmland where he raised sugar beets. On September 27, 1937 Robert married June Tefferteller of Oxnard (1917-1998). Shortly after their marriage the couple moved to a rental house at 4010 Etting Road where they lived for several years. They next spent a brief stint living in a rebuilt cook's shack on wheels before moving to a property at 1531 Hueneme Road where they rented a house and 10 acres from Henry Bruns, in addition to renting another 60 acres of farmland from John Goeltz. During this period Robert raised beans, pimiento peppers, and lemons (Madsen, 1985: 155). In 1940, Robert and June's first child, Mary Lee, was born. Ambitious and hardworking Robert in the succeeding years eventually farmed on and off most of the land from Etting Road down to the ocean at the end of Arnold Road (Madsen, 1985: 155). Citrus and irrigated row crops had by now replaced sugar beets and lima beans. With motorized farm equipment either too expensive or difficult to purchase, particularly during the war years, Robert used a horse to work his lemon orchard and a mule to haul the picked and sacked peppers out of the field (Madsen, 1985: 155). As noted above, in 1944 the Naumanns moved to the project parcel at 2295 Etting Road where they built a combined barn and residence on the land they had purchased from H. S. Philbrook. During this same period Robert and June had a second child, Frank Robert, born on August 2, 1944.

Some years later Robert and June had a third child, Teresa Carol, born on April 15, 1955. In 1957, Robert and June began construction on a California Ranch style house at 2295 Etting Road to replace their existing home. Beginning in the 1960s Robert Naumann began to increase his farmland, renting and purchasing acreage, some of it as far away as Somis, where he purchased a 115-acre tract to plant lemons (Madsen, 1985: 165). While the Naumanns continued to cultivate the Etting Road property as an avocado orchard, Oxnard's population growth during the 1960s, and soon construction of residential subdivisions, mobile home parks, commercial development, and school facilities were impinging on the surrounding farmland, especially along Pleasant Valley Road. In 1968, farmland between Olds Road and South Rose Avenue was developed with a subdivision of single-family houses. Between the mid- 1960s and the early 1970s at least four mobile home parks were built along the north side of Pleasant Valley Road, between Olds Road and the intersection of Pleasant Valley Road and the SR-1 Highway. In 1971, Ocean View Junior High was built on the other side of Etting Road, to the south of the Naumann property. Sometime in the late 1960s or early 1970s the Colony Mobile Home Park was developed on farmland owned by the Naumann family. Because of this development Robert Naumann's remaining farmland was enveloped on its north and east by mobile home parks and on its south and west by Ocean View Junior High School and residential subdivisions. By the 1970s much of the remaining Naumann property had been converted to citrus and avocado orchards.

As the years progressed Robert became interested in the preservation of early Oxnard history and artifacts. One of his concerns was the preservation of a row of Blue Gum or Eucalyptus trees, originally planted along Pleasant Valley Road and Etting Road in circa-1900 in conjunction with the founding of the Hueneme Masonic Cemetery. Engendering the support of the Ventura County Cultural Heritage Board, Robert was able to elicit enough support from the community and the board to have the grove of trees designated, in June 1971, County of Ventura Historic Landmark #15 (the Naumann Giant Gum Tree/Eucalyptus Rows). In 1973, the Oxnard Historical Society presented Robert Naumann with an award for his many contributions to the community. In that same year the City Council of Oxnard presented Robert the Golden Citizen Award "in recognition of the many important contributions to the foundation, development and betterment of the Oxnard community" (Madsen: 1985: 216). Robert Naumann died in Oxnard on March 27, 1995 and is buried in the Canejo Mountain Memorial Park, in Camarillo. Three years later, in 1998, June Naumann died; like her husband, Robert, June is buried in Canejo Mountain Memorial Park. Currently, the project parcel at 2295 Etting Road is owned by Robert and June's son, Frank Naumann.

7.4 The Pleasant Valley and Etting Road Area (1900-2014)

Through the period between circa-1900 and circa-1960 much of the area surrounding the project area remained agricultural. Initially, farming focused on dry farming, which consisted primarily of grains and beans and the cultivation of irrigated crops using artesian wells (Triem 1990: 67). By 1900 irrigation had largely replace dry farming. The rerouting of the Southern Pacific Railroad line through Santa Susana to Oxnard during the late 1890s, the construction of the Oxnard Brothers' sugar beet factory and the Bakersfield and Ventura Railway's laying of tracks through the Oxnard Plain, including a line along Etting Road, provided a system for transporting crops outside of Ventura County, as well as a place for local farmers to have their sugar beets processed (the Bakersfield and Ventura Railway was eventually acquired in 1911 by the owners of the American Sugar Beet Factory). Sugar beets continued to dominate local agriculture for many years until the 1930s and 1940s when farmers turned increasingly to the planting of citrus and a more diversified range of irrigated crops. By the end of World War II, along with traditionally grown row crops and citri-culture, farmers, such as Robert Naumann, began to incorporate the raising of commercial flowers and seeds.

Prior to World War II Ventura County's agricultural industry had been its primary source of economic growth. This begins to change in the post-war period, when the county underwent an expansion of its military facilities and the growth of defense-related industries. Following the end of the war the Port Hueneme Seebee Base expanded its facilities, in 1946 Point Mugu opened and in 1952 the Oxnard Air Force Base was established at what is now the Camarillo Airport. Largely in response to the escalation of the Cold War, defense-related industries rapidly expanded in southern California. In Ventura County these included Rocketdyne, North American Aviation, and Northrup who established their companies in East Ventura County. These military installations and defense-related industries, along with the growth of residential subdivisions and commercial develop to serve the area's growing population, provided much of the impetus for Ventura County's expansion between 1960 and the 1980s. While agriculture continued to be an important industry, the expansion of military facilities, the development of defense-related industries and building of residential subdivisions and commercial development became increasingly important to the economic vitality of the Ventura County. Ventura County had large tracts of agricultural land available for development that were relatively inexpensive compared to those nearer Los Angeles. These provided a ready source of land for industrial, commercial and residential development and by 1964 Ventura County had become the fastest growing county in a state with the fastest growing in the country (Triem 1990: 139).

As noted above in Section 7.4, it was during this period the area surrounding the Naumann property was converted from farmland to commercial, institutional and residential use between the mid-1960s and the late 1970s. This transformation was a characteristic pattern for farmland surrounding many communities, including Oxnard, during this period. This pattern has continued to the present day with additional farmland in the Oxnard Plains being converted to non-agricultural use, especially along Pleasant Valley Road.

8.0 EXISTING CONDITIONS AND BUILDING CHRONOLOGY

This section of the report provides a building chronology and descriptions of the existing improvements on APN 225-0-014-165 and APN 225-0-014-195. The farm complex is composed of a house built in 1957 and a pool built in 1986 that located off a driveway on Etting Road and a complex of four farm buildings located at the north end of the lot close to Pleasant Valley Road (Figures 7 – 13). A service drive is accessed via a set of metal gates on Pleasant Valley Road. From the cluster of farm buildings the service drive extends south to another service gate on Etting Road. East of the service gate on Etting Road another driveway extends from Etting road to the front of the house; a large sign is located near the south end of the driveway. Until recently the house was surrounded by landscaping and an avocado grove. Avocado groves also extended along the Pleasant Valley Road frontage on APN 225-0-014-195, which is the location of the house and three of the farm buildings. APN 225-0-014-165 is T-shaped lot with one farm building; a narrow 35-foot wide section of the lot extends south along the boundary with the adjacent mobile home park to Etting Road. Until recently this lot was planted with an avocado orchard. Remnants of Blue Gum windrows are present at the westerly end of the Etting Road and Pleasant Valley Road street frontages. A wire fence separates the Naumann property from the Hueneme Masonic Cemetery.

8.1 The House and Swimming Pool at 2295 Etting Road (APN 225-0-014-195)

<u>The House</u>

The house, built in 1957, is a one-story wood frame house constructed of standard building materials such as dimensional lumber and factory made doors, windows, trim and hardware (Figures 14 – 16). Fenestration is primarily single-pane metal sliders and fixed windows with decorative wood shutters. Cladding is stucco with used brick sheathing the lower third of the sections of the exterior and faux board and batten siding on other elevations. Set on a concrete slab foundation the house features a complex composition shingle-clad roof with side gable, hipped and gable on hipped elements and slightly extended eaves.

East Elevation

This L-shaped elevation is the house's entrance façade. The lower third of the exterior wall is sheathed in used brick in a running bond pattern. It features a garage set at the south end of the elevation. The garage is flanked on its north by a flush panel door, a triple window and a larger picture window, with a central fixed pane, flanked by sliders. The front door is set in a shallow recessed porch set at the intersection of the projecting wing and the main block of the house. The projecting block features a gable on hipped roof with the front gable element sheathed in faux board and batten siding.

North Elevation

Capped by a gable on hipped roof, the stucco-clad north elevation is linear in configuration. Its fenestration is composed of three metal slider windows.

West Elevation (Rear Elevation)

The L-shaped stucco-clad west elevation is the rear of the house. Its fenestration is composed of metal sliders, a sliding door and a sash window. Some of the windows are embellished with decorative shutters. Two flush panel doors at the south end of the elevation provide access to the garage and kitchen.

South Elevation

The south elevation is linear in configuration with no doors or windows. The lower third of the exterior wall is sheathed in stucco while the upper section of the wall is covered in faux board and batten style siding.

Alterations and Modifications to the House

With the exception of the replacement of the garage door the house does not appear to have undergone any substantial alterations since its construction in 1957.

Swimming Pool

A swimming pool is set off the house's west elevation (see Figure 15). The pool was installed in 1986.

8.2 Farm Yard and Outbuildings

To the north of the house are four outbuildings associated with the Naumann's farm operations. They include a pump house, barn/residence, shed, and equipment storage building. These buildings are accessed via a driveway and gate that open onto Pleasant Valley Road.

Pump House (APN 225-0-014-195)

Set on a concrete foundation the pump house is a rectangular wood structure sheathed in horizontal wood board siding with a shallow-pitched side gable roof (Figures 17 &18). The building's fenestration is composed of a five panel wood door, flanked by a rectangular window (now covered by wood boards) set on the structure's south elevation.

Alterations and Modifications

The pump house appears to be substantially intact. There is not record as to when the pump house was built. It is possible that the pump house is associated with the Hueneme Masonic Cemetery since the cemetery map of 1900 depicts a well at or near this location. Some features of its design including the five panel door and narrow horizontal wood siding suggests it could have been built prior to the Philbrook or Naumann occupancy of the property. However, because of Robert Naumann's extensive use of salvaged building material during the 1940s it difficult to draw any definitive conclusions regarding its precise age, although it would appear to have been built by no later than circa-1945.

Shed/Equipment Storage Building (APN 225-0-014-195)

A one-story structure, capped by a side gable roof covered in composition shingles, is set just south of the pump house (Figures 19 - 20). Its north elevation is composed of an attached open-air shed with a corrugated metal roof that extends the length of the building. Its east and west elevations are clad in vertical board siding, while the south elevation is divided into four open bays separated by wood posts. This building appears to have been used to park vehicles. This building appears to have been built of salvaged construction materials.

Alterations and Modifications

The shed/equipment storage building appears to be substantially intact. There is no record as to when it was built. However, the use of materials, such as salvaged vertical wood planks and corrugate metal, suggest it was constructed in the 1940s.

Barn/Living Quarters (APN 225-0-014-195)

This building is composed of a concrete-floored barn with a living quarter's wing attached to its west elevation (Figures 21 -23 and see Figures 9 & 10). A complex roof with gable and shed elements covered in composition shingles caps the building. The barn wing is sheathed in wide vertical board siding on its north and south elevations while the east elevation features three open bays separated by wood posts. A small, partially enclosed porch is set at the east end of the north elevation. The east end of building is composed of a wood- framed wing partially sheathed in faux board and batten siding. Fenestration is composed of a variety of window types. This wing has been partially dismantled.

Alterations and Modifications

The barn/living quarters building was constructed in 1943-1944 by Robert Naumann and its living quarters served as the family home until 1957. As noted by Naumann in his biography the building was built of salvaged construction materials during World War II. Within the last year portions of the living quarters have been demolished.

Shop/Equipment Storage (APN 225-0-014-165)

Located across the service driveway from the barn/residence building this one-story structure has a rectangular footprint. The building is capped by a shed roof and its exterior cladding is composed of a variety of sheathing materials including plywood and corrugated metal (Figures 24 & 25 and see Figures 9 & 10). Sliding doors set on the south elevation and at the north end of the west elevation provide access to the interior. A paneled multi-light door flanked by horizontal multi-light windows on the west elevation provides access to the interior.

Alterations and Modifications

The shop/equipment storage building appears to be substantially intact. There is no record as to when it was built. However, the use of materials such as corrugated metal and plywood suggest it was constructed in phases beginning in the early-to-mid 1940s.

8.3 Landscape Elements

Blue Gum Windrows (APN 225-0-014-195)

Windrows of Blue Gum (*Eucalyptus globulus*) trees extend along part of the road frontages on Pleasant Valley Road and Etting Road (Figures 26 -27). The segment of surviving windrow on Etting Road is confined to a few trees near the property boundary with the Hueneme Masonic Cemetery. Several mature trees survive on the Pleasant Valley Road frontage to the west of the entrance drive into the project parcel.

Imported from Australia in the last quarter of the 19th century Blue Gum trees were a popular choice on the Oxnard Plain for agricultural windrows or windbreaks because of their great size and rapid growth. A review of aerial photographs and onsite inspection revealed that many of the windrow's trees, which once extended from the Naumann property west towards the Japanese Cemetery, have died or been removed. According to records on file at the Museum of Ventura County the trees were planted in circa-1900 when the Hueneme Masonic Cemetery was established.

<u>Remaining Landscape Features</u>

With the exception of the remaining elements of the windrows virtually all of the parcel's former orchards and most of the landscaping around the house have been removed within the last year.

<u>Alterations and Modifications</u>

Within the last year almost all of the original vegetation with the exception of the Blue Gum windrows has been removed.

9.0 ELIGIBILITY FOR LISTING AS A SIGNIFICANT HISTORIC RESOURCE

9.1 Previous Evaluations and Designations

Naumann Farm (Project Parcel)

The Naumann farm at 2295 Etting Road was evaluated in 1996 as part of Historic Architectural Survey Report the Pleasant Valley Road/State Route 1 Interchange, Ventura County (07-VEN-01, P.M. 15.0, 07-117040). The study concluded that the Naumann property was not eligible for listing in the National Register of Historic Places or the California Register of Historical Resources (Clement 1996: 8). A subsequent cultural resource inventory report prepared by CH2MHILL in 2004 for a Groundwater Recovery Enhancement and Treatment Program concluded that the Naumann farm was not eligible for listing in the National Register of Historic Places or the California Register of Historical Resources (CH2MHILL 2004: 25-26).

Adjacent or Nearby Parcels

<u>Hueneme Masonic Cemetery (APN 225-0-014-020)</u>

Cemetery:

The Hueneme Masonic Cemetery on APN 225-0-014-020 was evaluated in 1996 as part of a Historic Architectural Survey Report for the Pleasant Valley Road/State Route 1 Interchange project, Ventura County (07-VEN-01, P.M. 15.0, 07-117040) (Figure 28). The study concluded that the Hueneme Masonic Cemetery was not eligible for listing in the

National Register of Historic Places or the California Register of Historical Resources (Clement 1996: 8). A subsequent cultural resource inventory report prepared by CH2MHILL in 2004 for a Groundwater Recovery Enhancement and Treatment Program concluded that the Hueneme Masonic Cemetery was not eligible for listing in the National Register of Historic Places or the California Register of Historical Resources (CH2MHILL 2004: 25-26).

Blue Gum Windrows:

The Blue Gum windrows on the Hueneme Masonic Cemetery property at APN 225-0-014-020 was designated as Ventura County Landmark No. 15 in 1971. In 1996, the Blue Gum windrows were evaluated as part of a Historic Architectural Survey Report for the Pleasant Valley Road/State Route 1 Interchange improvement project, Ventura County (07-VEN-01, P.M. 15.0, 07-117040). The study concluded that the Blue Gum windrows were not eligible for listing in the National Register of Historic Places or the California Register of Historical Resources (Clement 1996: 8). A subsequent cultural resource inventory report prepared by CH2MHILL in 2004 for a Groundwater Recovery Enhancement and Treatment Program concluded that the Hueneme Masonic Cemetery was not eligible for listing in the National Register of Historic Places or the California Register of Historical Resources (CH2MHILL 2004: 25-26).

Japanese Cemetery (APN 225-0-014-200)

In 1971, the Japanese Cemetery at APN 225-0-014-200 was designated by the Oxnard City Council as Landmark No. 18. The Japanese Cemetery was evaluated in 1996 as part of Historic Architectural Survey Report the Pleasant Valley Road/State Route 1 Interchange, Ventura County (07-VEN-01, P.M. 15.0, 07-117040 (Figure 29). The study concluded that the Japanese Cemetery was not eligible for listing in the National Register of Historic Places or the California Register of Historical Resources (Clement 1996: 8). A subsequent cultural resource inventory report prepared by CH2MHILL in 2004 for a Groundwater Recovery Enhancement and Treatment Program concluded that the Japanese Cemetery was not eligible for listing in the National Register of Historic Places or the California Register of Historical Resources (CH2MHILL 2004: 25-26).

9.2 Significance Criteria

The City of Oxnard uses the following criteria to establish the eligibility of resources for listing as Cultural Heritage Sites:

For the purposes of the Ordinance, an improvement, natural feature or site may become a designated Cultural Heritage Site if it meets the following applicable criteria:

Landmarks – Satisfy one of the following criteria:

(1) It exemplifies or reflects special elements of the County's social, aesthetic,

engineering, architectural, or natural history;
(2) It is identified with persons or vents which are significant in national, state or local history;
4. It embodies elements of architectural design, details, materials or craftsmanship which represents a
significant structural or architectural achievement or innovation;
5. It is representative of the work of a master builder, designer, architect or artist;
6. It is imbued with traditional or legendary lore;
7. It has a unique location or singular physical characteristics or is a view or vista representing an
established and familiar feature associated with a neighborhood, community or the County of Ventura;
8. It is one of the few remaining examples in the County possessing distinguishing characteristics of an architectural or historical type or specimen.

Points of Interest- Satisfy the following criteria:
(a) That is a site of a building, structure or object that no longer exists, but was associated with historic events, important persons or embodied a distinctive character or architectural style; or
(b) That it has historical significance, but has been altered to the extent that the integrity of the original workmanship, materials, or style has been substantially compromised; or
(c) That the site of a historic event which has no distinguishable characteristics other than that a historic event occurred at the site and the site is not is not of sufficient historical significance to justify the establishment of a landmark.

While the criteria do not explicitly include integrity criteria, the provision for a Point of Interest that explicitly for resources with a low level of integrity indicates that consideration can be given to a resource's integrity when evaluating its eligibility for listing as a significant historic resource.

9.4 Determination of Eligibility for Listing as a County of Ventura Cultural Heritage Site

The historic significance of the property at 2295 Etting Road has not been previously evaluated; however, a historic resource survey of the property was completed by CALTRANS in a Historic Architectural Survey Report for the Pleasant Valley Road/State Route 1 Interchange, Ventura County in April 1996.

1) The Property at 2295 Etting Road

a) Landmarks – Satisfy one of the following criteria:

(1) It exemplifies or reflects special elements of the County's social, aesthetic, engineering, architectural, or natural history;

The Naumann Farm at 2295 Etting Road consists of a complex of buildings, including a California Ranch style house designed and built by Carl Ingraham a licensed contractor for Robert and June Naumann in 1957. A number of vernacular type buildings also are associated with the use of the property as farm, including a detached garage, a barn/living quarters, a pump house, an implement shed and a small shed. Large-scale landscaping elements are confined to a few Blue Gum trees on Etting Road and Pleasant Valley Road.

Hueneme Masonic Cemetery Period

While one element of the complex, a pump house, may date to the Hueneme Masonic Cemetery or Herman Philbrook's occupancy (1900-1944), its ability to convey its potential association with the Hueneme Masonic Cemetery has been substantially diminished by the conversion of the eastern end of the cemetery into farmland beginning in the mid-1920s. Consequently, the property in its current state can only convey its association with the Naumann occupancy of the property. Consequently, the project parcels cannot in their current state of preservation convey a strong association with the history of the Hueneme Masonic Cemetery. Therefore, the property at 2295 Etting Road, including its house and outbuildings, are not eligible for listing as a Landmark under criterion 1.

Blue Gum Windrows

Surviving large Blue Gum trees associated with the landmarked Blue Gum Windrows on the adjoining Hueneme Masonic Cemetery property contribute to the visual integrity of the landmarked Blue Gum windrows. Consequently, the surviving large Blue Gum trees on the Etting Road and Pleasant Valley Road street frontages are eligible for listing as a Landmark under criterion 1.

Architectural Themes

While not part of a tract development, the house at 2295 Etting Road, with its attenuated references to the California Ranch style, is an example of the type of modest Ranch style houses built in great numbers in Ventura County between the mid-1950s and the early 1970s. Because it is an example of a common architectural type and was not designed by a notable architect, designer or contractor, it is not eligible for listing as a Ventura County Landmark under criterion 1. The complex of farm buildings at 2295 Etting Road having been built between the mid-1940s through 1950s, of largely of scavenged building materials, does not have a strong association with the formative period of the area's agricultural industry, which occurred between the late 19th century and the pre-World War II period. Therefore, the farm buildings on the property at 2295 Etting Road are not eligible for listing as a Landmark under criterion 1.

Robert Naumann Family Occupancy

The Naumann farm at 2295 Etting Road is associated with the Robert Naumann family between 1944 and the present. While the Naumann family's association with farming on the Oxnard Plain began in the early 1900s with Samuel Naumann, the property at 2295 Etting Road does not have a central association with this theme since the property was not the location of Samuel and later, that of his son, Gustav Naumann's original family farm, which was located to the east of the project parcel on the south side of Etting Road. Instead, the farm postdates the first four decades of the family's association with the formative period of the area's agricultural industry, which occurred between 1901 and 1944. Moreover, while Robert Naumann was instrumental in having the Blue Gum windrows designated as a Ventura County Landmark, he did not play a leading role in the post-World War II history of Ventura County agriculture, either as a representative of the region's farming interests or as an innovator of new farming techniques or crops. Therefore, the property's association with Robert Naumann does not reach the level of significance that would make the property at 2295 Etting Road eligible for listing as a Landmark under criterion 1.

(2) It is identified with persons or events which are significant in national, state or local history;

Hueneme Masonic Cemetery Period

While the first board of directors for the cemetery included Achille Levy one of Oxnard's leading bankers and financiers during the late 19th through early 20th century and W. S. Saviers, a historically notable farmer, their role as members of the cemetery's board of directors is not directly associated with the business and agricultural activities that make them historically significant. Consequently, the property at 2295 Etting Road, which was once part of the Masonic Cemetery, is not eligible for listing as a Landmark under criterion 2.

Blue Gum Windrows

The Blue Gum windrows have no direct association with a historically significant individual. Consequently, the surviving large Blue Gum trees on the Etting Road and Pleasant Valley Road street frontages of 2295 Etting Road are not eligible for listing as a Landmark under criterion 2.

Robert Naumann

As noted above under the application of criterion 1, Robert Naumann did not play a leading role in the history of the Oxnard Plain's agricultural industry during the post-World War II period; nor did he play a leading role in the commercial or social life of Ventura County. Therefore, the association between the property and Robert Naumann does not reach the level of significance that would make the property at 2295 Etting Road eligible for listing as a Landmark under criterion 2.

(3) *It shows evidence of habitation, activity or the culture of prehistoric man;*

Association with the Hueneme Masonic Cemetery

The application of this criterion to archaeological deposits associated with the former use of the property as a cemetery or prehistory is beyond the purview of this report.

Blue Gum Windrows

The Blue Gum windrows are a landscape feature composed of living trees, it would not appear to have the potential for meeting criterion 3.

Robert Naumann Property

Robert Naumann's association with the property began in 1944. The application of this criterion to archaeological deposits dating to prehistory is beyond the purview of this report.

(4) It embodies elements of architectural design, details, materials or craftsmanship which represents a significant structural or architectural achievement or innovation;

Hueneme Masonic Cemetery Period

While one element of the complex, a pump house and the Blue Gum trees on Etting Road and Pleasant Valley Road may date to the Hueneme Masonic Cemetery period (1900-1949), their ability to convey this association has been substantially diminished by the conversion of the eastern end of the cemetery into cultivated fields and groves, as well as the construction of a house and farm yard in the period between the mid-1920s and late 1950s. This activity removed any surface elements associated with cemetery, including the network of plots and walkways that may have once existed on the property. Therefore, the property at 2295 Etting Road is not eligible for listing as a Landmark under criterion 4 because of their association with the Masonic Cemetery.

Blue Gum Windrows

The surviving elements of the Blue Gum windrows do embody the distinctive characteristics of a type, namely the visual appearance of an early 20th century Eucalyptus windrow. Therefore, the surviving large Blue Gum trees on the Etting Road and Pleasant Valley Road street frontages of 2295 Etting Road are eligible for listing as a landmark under criterion 4.

Robert Naumann Farm Complex and House

As noted above under the application of criterion 1, the house and farm complex at 2295 Etting Road is substantially intact and can convey its association with the Robert Naumann family. However, the farm complex and house, which date to the post-World War II period, do not embody the level of significance that would make them exemplars of their type or period of construction. Therefore, neither the farm complex nor the house on the property at 2295 Etting Road is eligible for listing as a Landmark under criterion 4.

(5) It is representative of the work of a master builder, designer, architect or artist

Hueneme Masonic Cemetery Period

While one element of the complex, a pump house and the Blue Gum trees on Etting Road and Pleasant Valley Road may date to the Hueneme Masonic Cemetery period (1900-1949), their ability to convey this association has been substantially diminished by the conversion of the eastern end of the cemetery into cultivated fields and groves, the construction of a house and farm yard in the period between the mid-1920s and the 1950s. This activity removed any surface elements associated with cemetery, including the network of plots and walkways that may have once existed on the property. Moreover, the cemetery designer is unknown. Therefore, the property at 2295 Etting Road is not eligible for listing as a Landmark under criterion 5 because of their association with the Masonic Cemetery.

Blue Gum Windrows

The surviving elements of the Blue Gum windrows are a vernacular landscape element that cannot be associated with a known landscape designer. Therefore, the surviving large Blue Gum trees on the Etting Road and Pleasant Valley Road street frontages of 2295 Etting Road are not eligible for listing as a Landmark under criterion 5.

Naumann Family Farm Complex and House

As noted above under the application of criterion 1, the house and farm complex at 2295 Etting Road is substantially intact and can convey its association with the Robert Naumann family. However, the farm complex and house, which date to the post-World War II period, do not embody the level of significance that would make them exemplars of their type or period of construction. Moreover, there is no documentation that Carl Ingraham, the contractor who built the house, was a designer or builder of historic note. Therefore, the farm complex and house on the property at 2295 Etting Road are not eligible for listing as a Landmark under criterion 5.

(6) It is imbued with traditional or legendary lore;

There is no documentation indicating that the property at 2295 Etting Road has an association with traditional or legendary lore. Therefore, the property at 2295 Etting Road is not eligible for listing under criterion 6.

(7) It has a unique location or singular physical characteristics or is a view or vista representing an established and familiar feature associated with a neighborhood, community or the County of Ventura;

<u>Hueneme Masonic Cemetery Period</u>

While the property was once associated with the Hueneme Masonic Cemetery the conversion of the property into farm land in 1925 has removed virtually all traces of the original cemetery scheme. Consequently, the property at 2295 Etting Road, which was once part of the Masonic Cemetery, is not eligible for listing as a Landmark under criterion 7.

<u>Blue Gum Windrows</u>

The remnants of the Blue Gum windrows on the property at 2295 Etting Road have formed an important visual feature of the surrounding area since circa-1900. Therefore, the surviving elements of the Blue Gum windrows on the property at 2295 Etting Road are eligible for listing as a Landmark under criterion 7.

<u>Robert Naumann Family Occupancy</u>

The Robert Naumann farm, which has existed in its current form since the late 1950s, does not form an important component of the surrounding area's viewshed. Therefore, the property at 2295 Etting Road is not eligible for listing as a Landmark under criterion 7.

(8) *It is one of the few remaining examples in the County possessing distinguishing characteristics of an architectural or historical type or specimen;*

<u>Hueneme Masonic Cemetery Period</u>

While one element of the complex, a pump house, may date to the Hueneme Masonic Cemetery or Herman Philbrook's occupancy (1900-1944), its ability to convey its potential association with the Hueneme Masonic Cemetery has been substantially diminished by the conversion of the eastern end of the cemetery into farmland beginning in the mid-1920s. Consequently, the property in its current ~~state,~~<u>state</u> can only convey its association with the Robert Naumann occupancy of the property.

Consequently, the project parcels cannot in their current state of preservation, convey a strong association with the history of the Hueneme Masonic Cemetery. Therefore, the property at 2295 Etting Road, including its house and outbuildings, are not eligible for listing as a Landmark under criterion 8.

Blue Gum Windrows

Surviving large Blue Gum trees associated with the landmarked Blue Gum Windrows on the adjoining Hueneme Masonic Cemetery property contribute to the visual integrity of the landmarked Blue Gum windrows. Consequently, the surviving large Blue Gum trees on the Etting Road and Pleasant Valley Road street frontages, which are an example of an increasingly rare landscape type, are eligible for listing as a Landmark under criterion 8.

Architectural Themes

While not part of a tract development, the house at 2295 Etting Road, with its attenuated references to the California Ranch style is an example of the type of modest Ranch style houses built in great numbers in Ventura County between the mid-1950s and the early 1970s. Because it is an example of a common architectural type and was not designed by a notable architect, designer or contractor, it is not eligible for listing as a Ventura County Landmark under criterion A. The complex of farm buildings at 2295 Etting Road having been built between the mid-1940s and the 1950s, largely of scavenged building materials, does not have a strong association with the formative period of the area's agricultural industry, which occurred between the late 19th century through pre-World War II period. Therefore, the farm buildings on the property at 2295 Etting Road are not eligible for listing as a Landmark under criterion 8.

9.5 Summary Statement of Significance at the Local Level for the Parcels at 2295 Etting Road

Hueneme Masonic Cemetery Period

The property at 2295 Etting Road, which has been extensively altered since its conversion to a farm between 1925 and 1944, no longer retains sufficient integrity of design, materials, workmanship, feeling or association to be eligible for listing as a Landmark because of its association with the Hueneme Masonic Cemetery. While the property was once owned by the Hueneme Masonic Cemetery Association (HMCA), it cannot be confirmed that the intended cemetery design was actually laid out with plots and pathways on what is now the property at 2295 Etting Road, as was the section occupied by the existing cemetery to the west of the Etting Road property. Instead, it may have remained unimproved throughout HMCA's ownership of the property. Therefore, the property at 2295 Etting Road does not retain sufficient integrity or depth of association to be eligible for listing as Point of Interest because of its association with the Hueneme Masonic Cemetery.

Blue Gum Windrows

The surviving elements of the Blue Gum windrows, while not a continuous, can still convey their original appearance as elements of a windrow that are still bordered by Etting Road and Pleasant Valley Road. Moreover, they are still located in the vicinity of the Hueneme Masonic Cemetery and the Japanese Cemetery. Therefore, the surviving large Blue Gum trees on the Etting Road and Pleasant Valley Road street frontages of 2295 Etting Road, while fragmentary, have retained sufficient integrity to be eligible as a Ventura County Landmark because of their association with the landmarked Blue Gum windrows on the adjacent Hueneme Masonic Cemetery property.

Robert Naumann Family Farm Complex and House

The buildings, structures, outbuildings, and features on the Robert Naumann farm at 2295 Etting Road are in good condition, with the exception of the barn/living quarters, which has been partially dismantled. Other than the barn/living quarters the other built improvements on the property retain their original layout, building materials and design and can still convey the essential feeling of a mid-20th century farm ~~and associationand~~ and association with the Robert Naumann family. While the property has retained its integrity, it does not represent an important example of its type or exemplify important architectural types or traditions. Moreover, Robert Naumann lacks sufficient significance as a farmer and community member to make the property eligible for listing as a Ventura County Landmark or Point of Interest.

9.6 Summary Statement of Eligibility for Listing in the National Register of Historic Places and the California Register of Historical Resources for the Parcels at 2295 Etting Road

This study did not reveal additional data that would change the conclusions outlined in the 1996 Historic Architectural Survey Report for the Pleasant Valley Road/State Route 1 Interchange project, Ventura County (07-VEN-01, P.M. 15.0, 07-117040) and the subsequent 2004 CH2MHILL study that neither the property at 2295 Etting Road or any of its built improvements or landscape elements was eligible for listing in the National Register of Historic Places or the California Register of Historical Resources.

10.0 EVALUATION OF THE PROPOSED PROJECT

This study has identified one significant historic resource the surviving elements of the Blue Gum windrows on Etting Road and Pleasant Valley Road as eligible for listing as a Landmark. Consequently, the surviving elements of the windrows are significant historic resources for the purposes of environmental review.

The applicants propose, to demolish the existing improvements at 2295 Etting Road and replace them with new residential construction composed of a multi-unit residential development and a senior housing complex. Detailed plans for the proposed project have not been finalized. Guidance for determining the appropriateness of proposed alterations to designated historic property or a property that is potentially eligible for listing as a historic resource is found in Section 1366 of Ordinance No. 4225. As noted in Section 1366 a Certificate of Appropriateness (COA) can be required before alterations are approved by the County of Ventura. The County of Ventura uses the Secretary of the Interior's Standards for Historic Preservation Projects (i.e. the Secretary of the Interior's Standards for Restoration and Rehabilitation) as a guide to determining if a project is appropriate.

To assess the impact of the proposed project on identified significant historic resources, the following standards known as the Secretary of the Interior's Standards, developed by the United States Department of the Interior will guide the evaluation. These standards as noted above are the accepted framework for determining if a project would (or has) maintains the historic character of a property.

1) *A property will be used as it was historically or given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.*

2) *The historic character of a property will be retained and preserved. The removal of distinctive materials or alterations of features, spaces, and spatial relationships that characterize a property will be avoided.*

3) *Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.*

4) *Changes to a property that have acquired historic significance in their own right will be retained and preserved.*

5) *Distinctive materials, features, finishes and construction techniques or examples of craftsmanship that characterize a property will be preserved.*

6) *Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.*

7) *Chemical and physical treatments, if appropriate, will be undertaken by the gentlest means possible. Treatments that cause damage to historic materials will not be used.*

8) *Archaeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.*

9) *New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic*

materials, features, size, scale, and proportion, and massing to protect the integrity of the property and its environment.

10) *New additions and adjacent or related new construction will be undertaken in such a manner that if removed, in the future, the essential form and integrity of the historic property will be unimpaired* (36 CFR Part 68, 1995 Federal Register, Vol. 60, No. 133).

Generally, the impact of a project that meets the Standards on significant historic resources is considered less than significant impact on the historic resources and would meet the County of Ventura's preservation standards.

10.1 Analysis

10.1.1 Demolition of Existing Built Site Improvements

Demolition of the existing buildings and structures at 2295 Etting Road, which are not significant historic resources for the purposes of environmental review, would not result in significant environmental impacts provided the Blue Gum windrows that qualify the trees for listing as a Landmark are preserved. Therefore, the proposed removal of the property's buildings structures and features would meet the Secretary of the Interior's Standards.

10.2 Evaluation of Impacts to Listed Significant Historic Resources

<u>Hueneme Masonic Cemetery (APN 225-0-014-020)</u>

The Hueneme Masonic Cemetery on APN 225-0-014-020 is eligible for listing as a Ventura County Landmark. Provided a sufficient landscape buffer is provided along the proposed development's boundary with the Hueneme Masonic Cemetery the project would not appear to have the potential for affecting the cemetery's viewsheds.

<u>Blue Gum Windrows (APN 225-0-014-020)</u>

The Blue Gum windrows on the Hueneme Masonic Cemetery property at APN 225-0-014-020 were designated as Ventura County Landmark No. 15 in 1971.

Demolition of the project parcels' existing improvements would not impact significant historic resources on the adjacent parcel provided any existing Blue Gum windrows trees at the eastern end of the project parcel are preserved in place. Because a design scheme has not been finalized for the property it is recommended that the project plans incorporate a sufficiently wide planter buffer along the west side of the project parcel to ensure that the new development does not visually impinge on the setting of the landmarked Hueneme Masonic Cemetery. If feasible, smaller scale Eucalypts should be considered as a border to the property as they would be in harmony with the historic boundary plantings of the cemetery. If this measure is implemented the proposed project would be consistent with Standards 9 and 10 and would be consistent with County guidelines.

Japanese Cemetery (APN 225-0-014-200)

In 1971, the Japanese Cemetery at APN 225-0-014-200 was designated by the Oxnard City Council as Landmark No. 18.

Demolition of the project parcels' existing improvements at 2295 Etting Road would not impact significant historic resources on the landmarked Japanese Cemetery, which is located more than 600 feet west of the project parcel.

10.3 Recommendations

While the pump house at 2295 Etting Road is not eligible for listing as Ventura County Landmark, Site of Merit or Point of Interest, it may have an association with the Hueneme Masonic Cemetery. Therefore, Post/Hazeltine Associates recommends that the project description include photo-documentation of the structure prior to its removal.

11.0 CONCLUSIONS

The surviving elements of the Blue Gum windrows on the property at 2295 Etting Road are eligible for listing as a County of Ventura Landmark. Implementation of the proposed project would not impact significant historic resources provided the Blue Gum trees are retained and the landscaping along the west side of the project parcel is sufficient to provide a visual buffer between the proposed development and the landmarked Hueneme Masonic Cemetery and landmarked grove of Blue Gum trees.

12.0 SOURCES CONSULTED IN THE PREPARATION OF THIS REPORT

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Maps & Figures

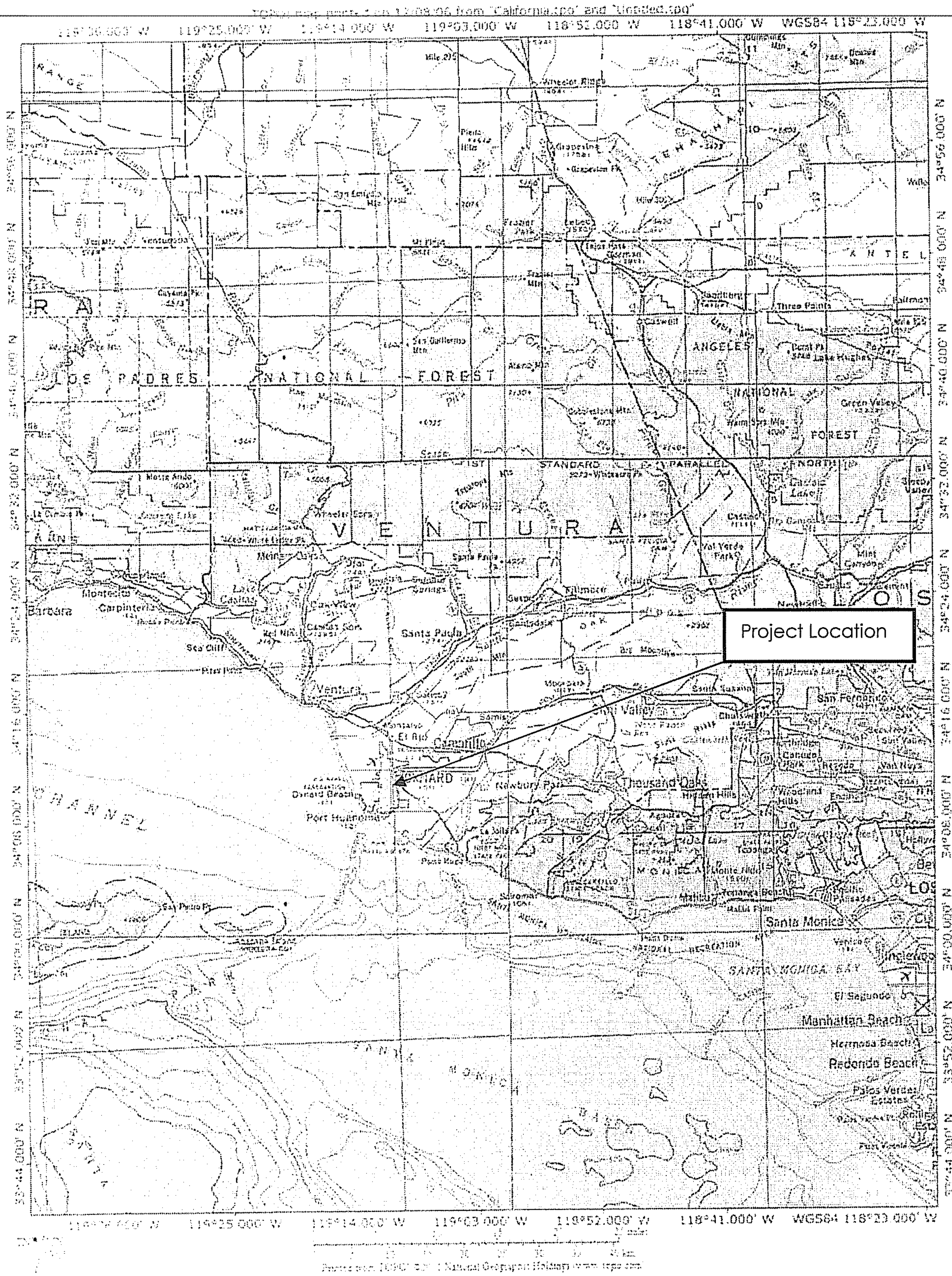


Figure 1
Project Location Map
2295 Etting Road

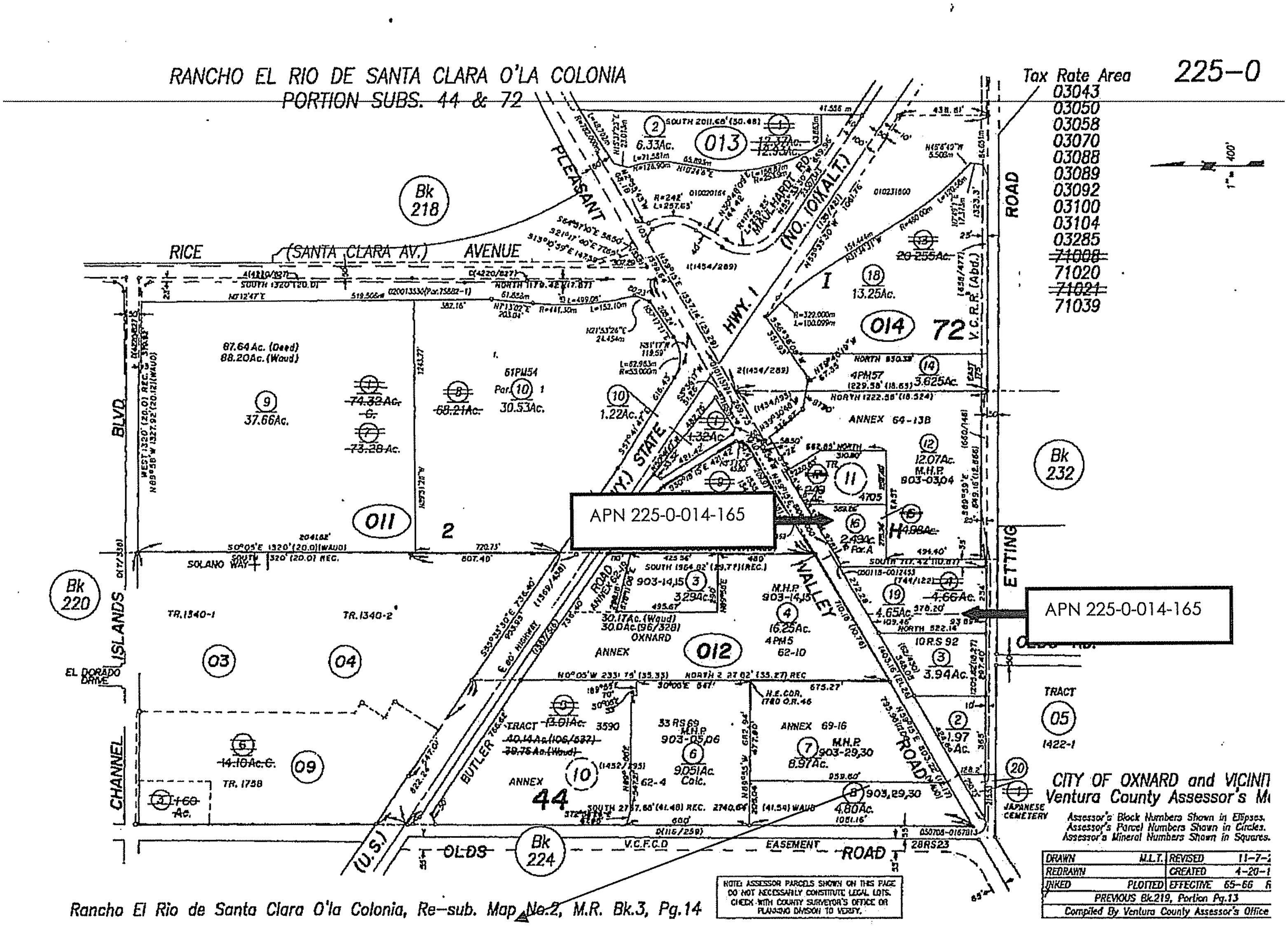


Figure 2
APN Map
2295 Etting Road

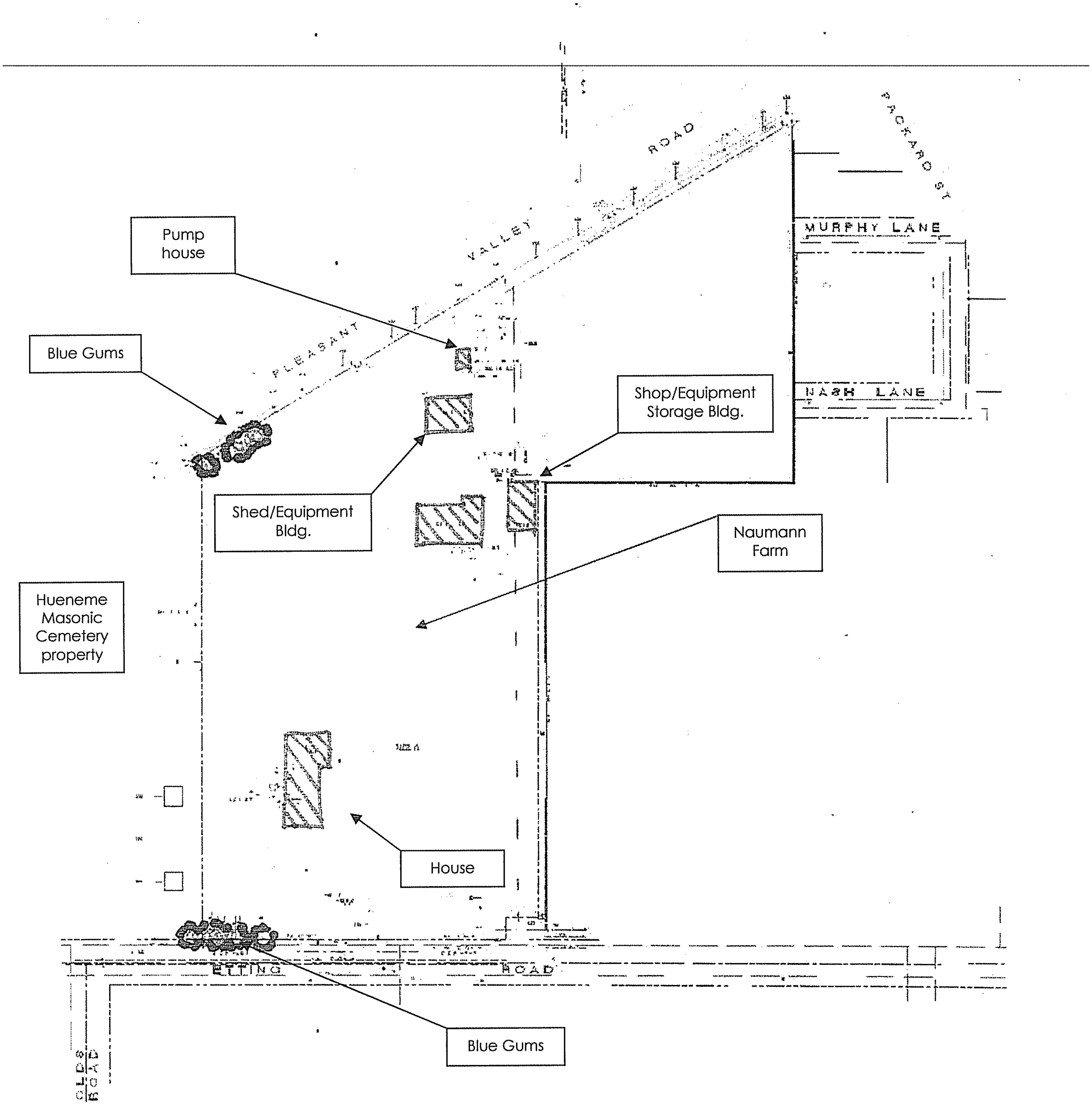


Figure 3
Site Plan
2295 Etting Road

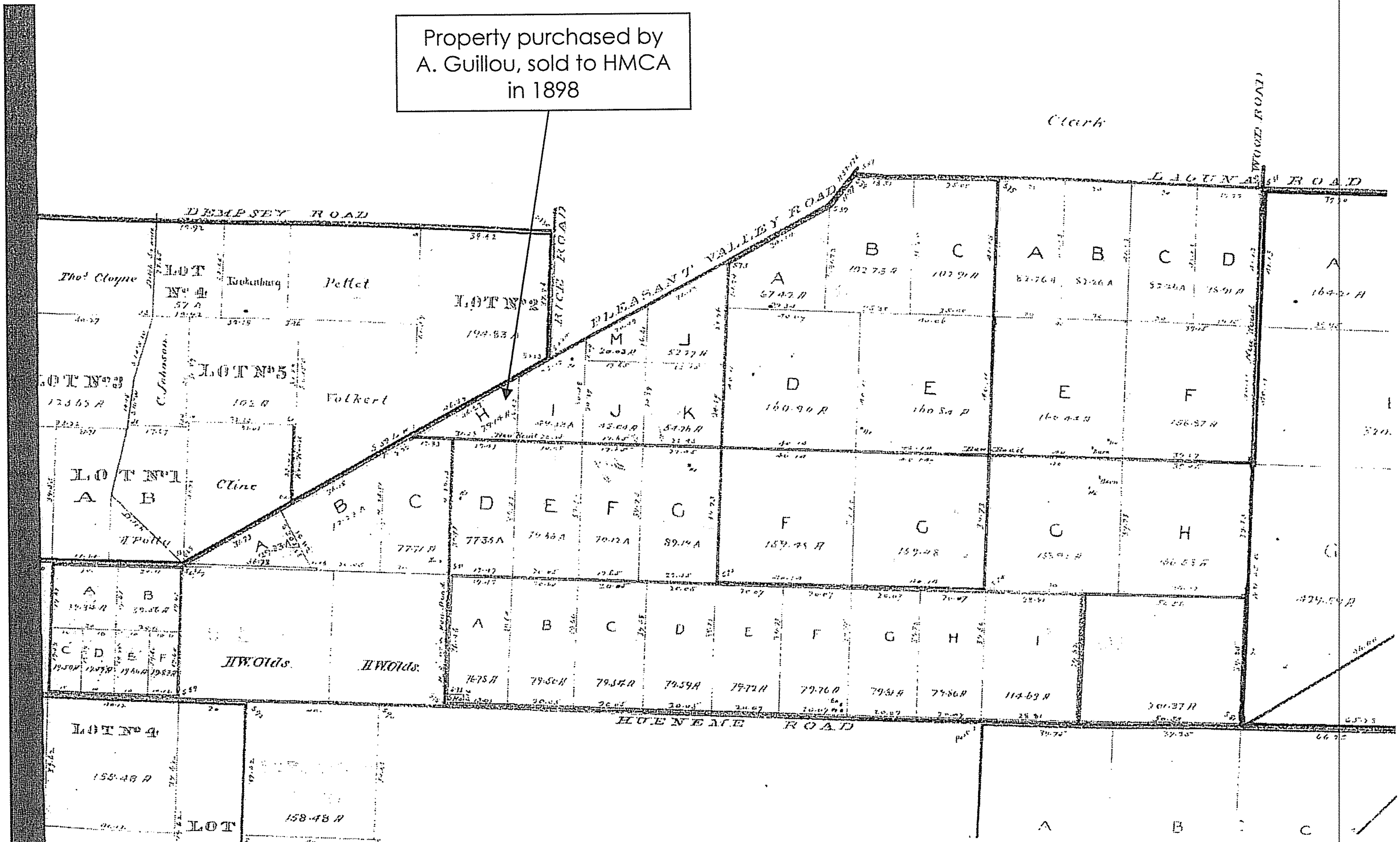


Figure 4

"Map 2 of the Lands in the Subdivision of Rancho Santa Clara O" Colonia in Ventura County Belonging to Thomas S. Scott deceased, Thomas Bard Adm. May 1888" on file at the Museum of Ventura County

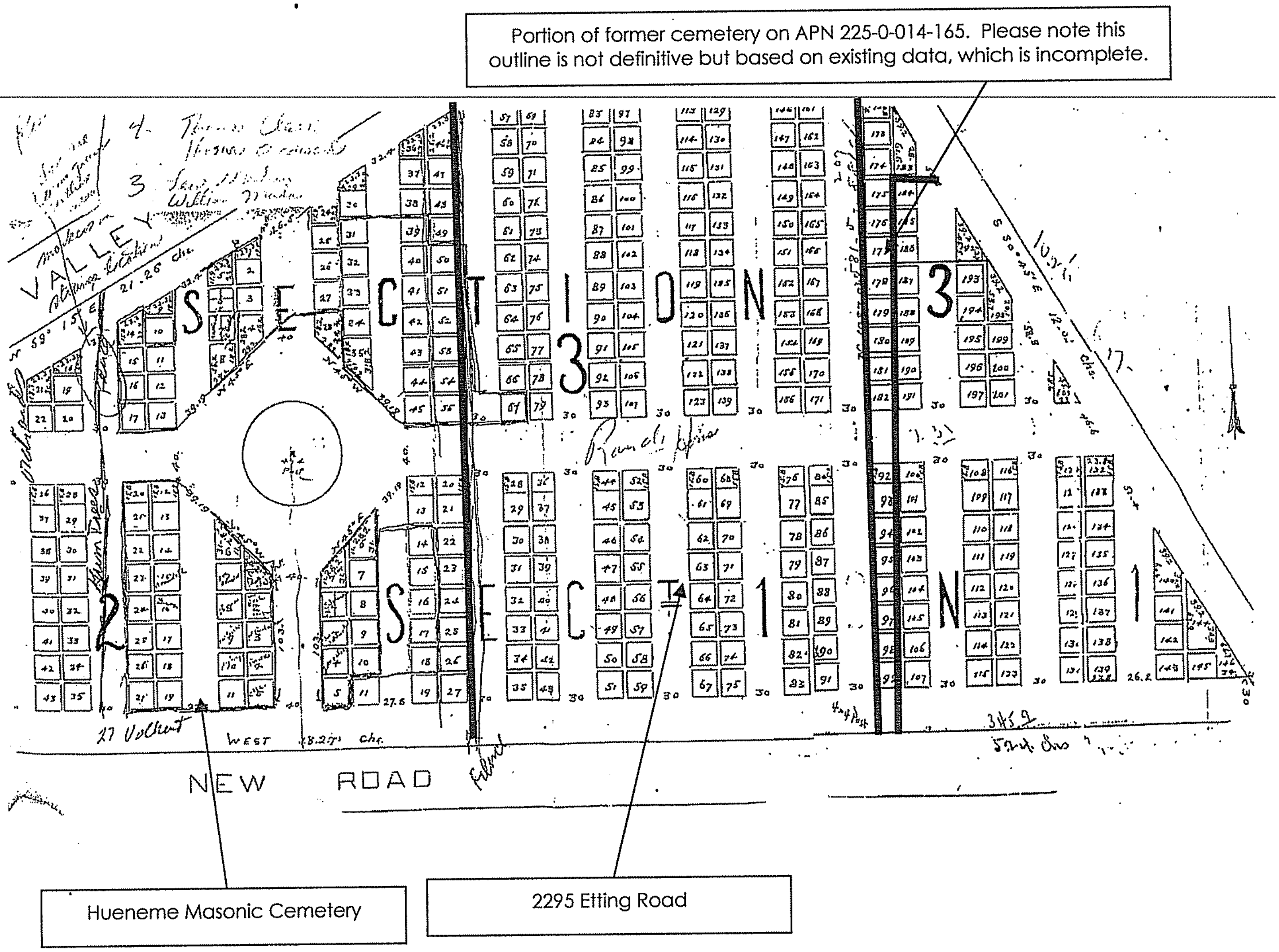


Figure 5
Partial map of original cemetery boundaries
(Museum of Ventura County, Hueneme Masonic
Cemetery file)

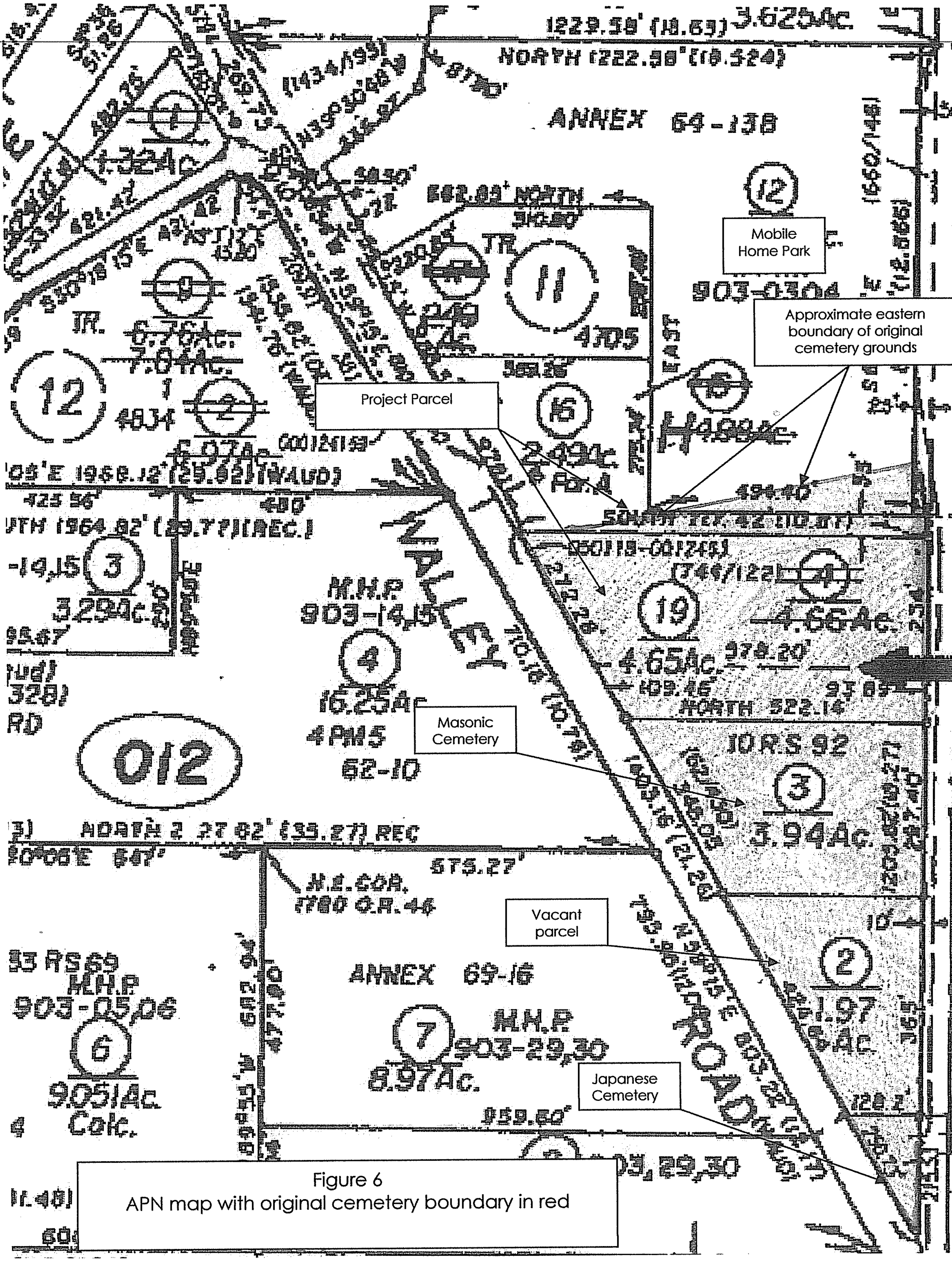


Figure 6
APN map with original cemetery boundary in red

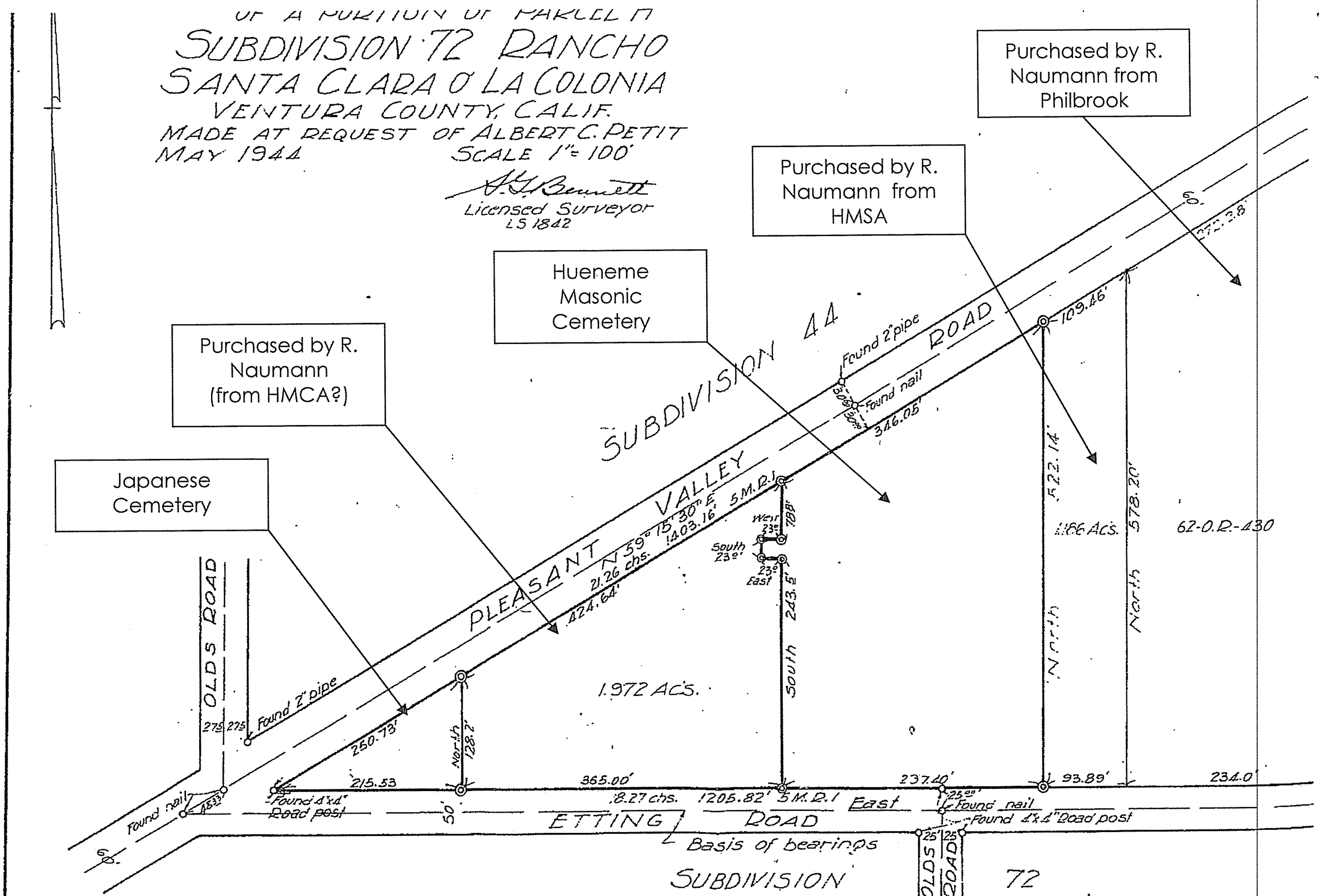


Figure 7

1944 Survey Map
(Museum of Ventura County, Hueneme Cemetery file)

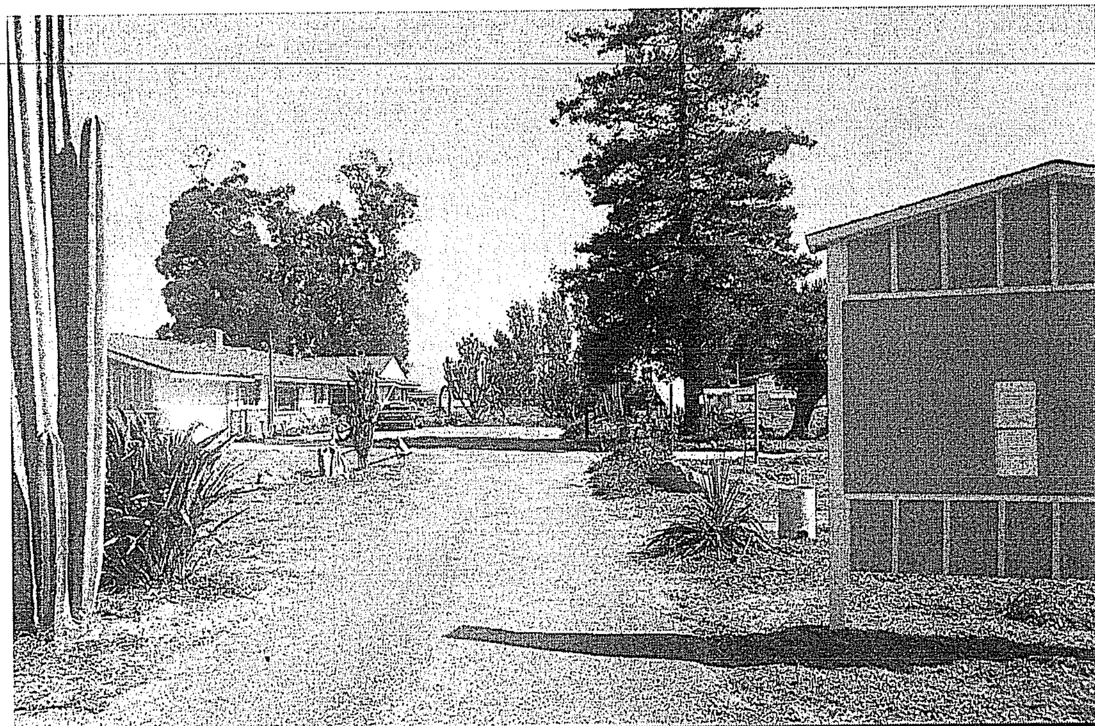


Figure 8
Entrance drive from Etting Road to the house
(looking north)

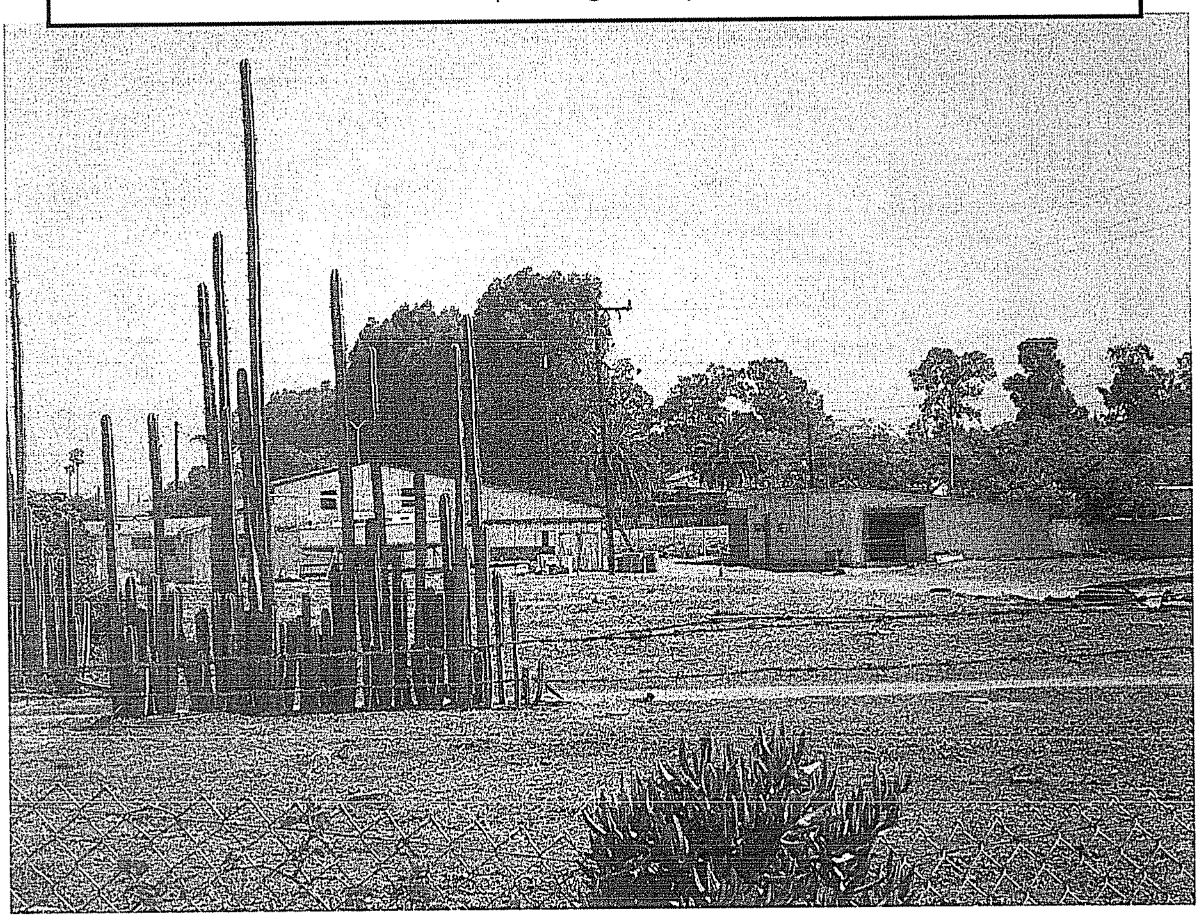


Figure 9
Complex of farm building as seen from Etting Road
(looking north)

Figure 10
Farm Yard and Service Road looking north to Pleasant Valley Road
(looking north)

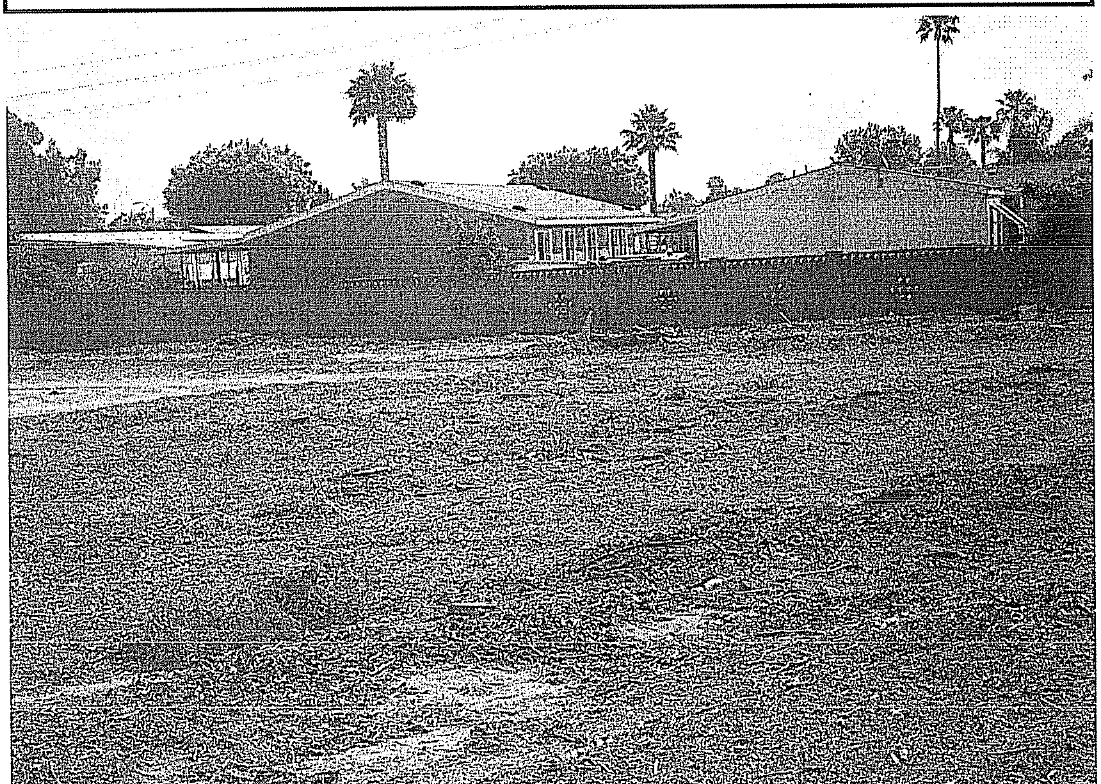


Figure 11
Concrete block wall between mobile home park and APN 225-0-014-165
(looking east)

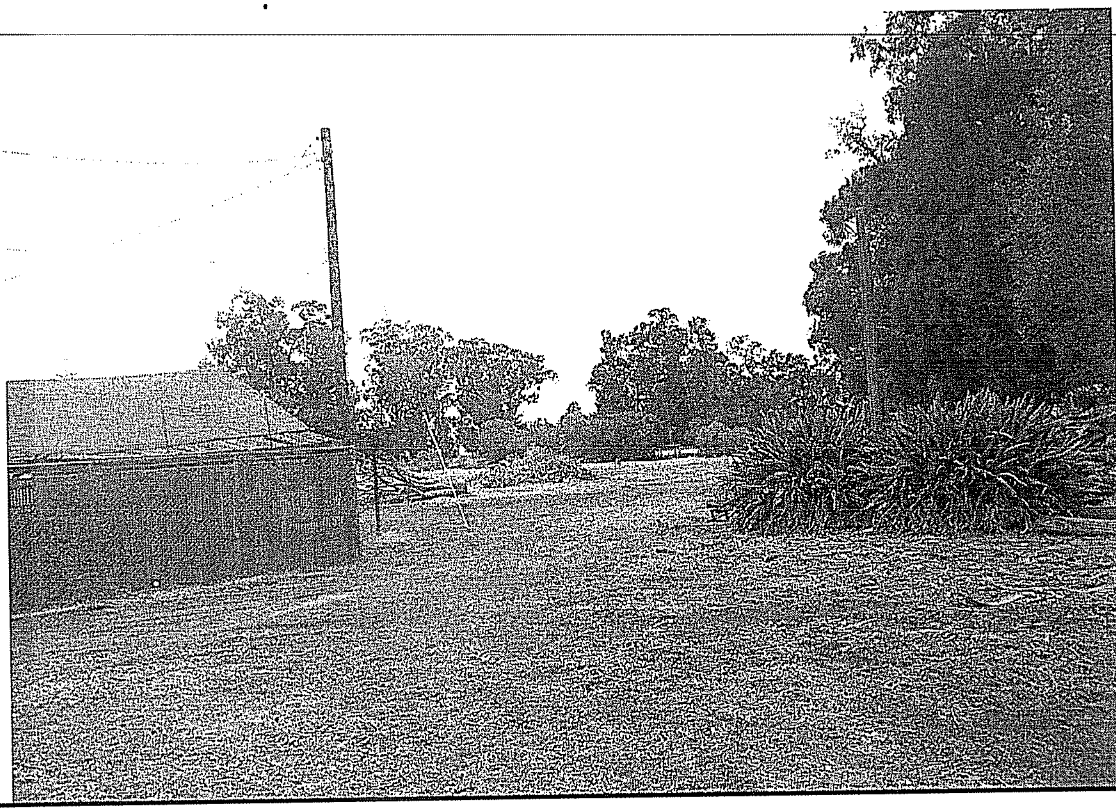


Figure 12
Farm Yard looking west to the Masonic Cemetery (looking west)

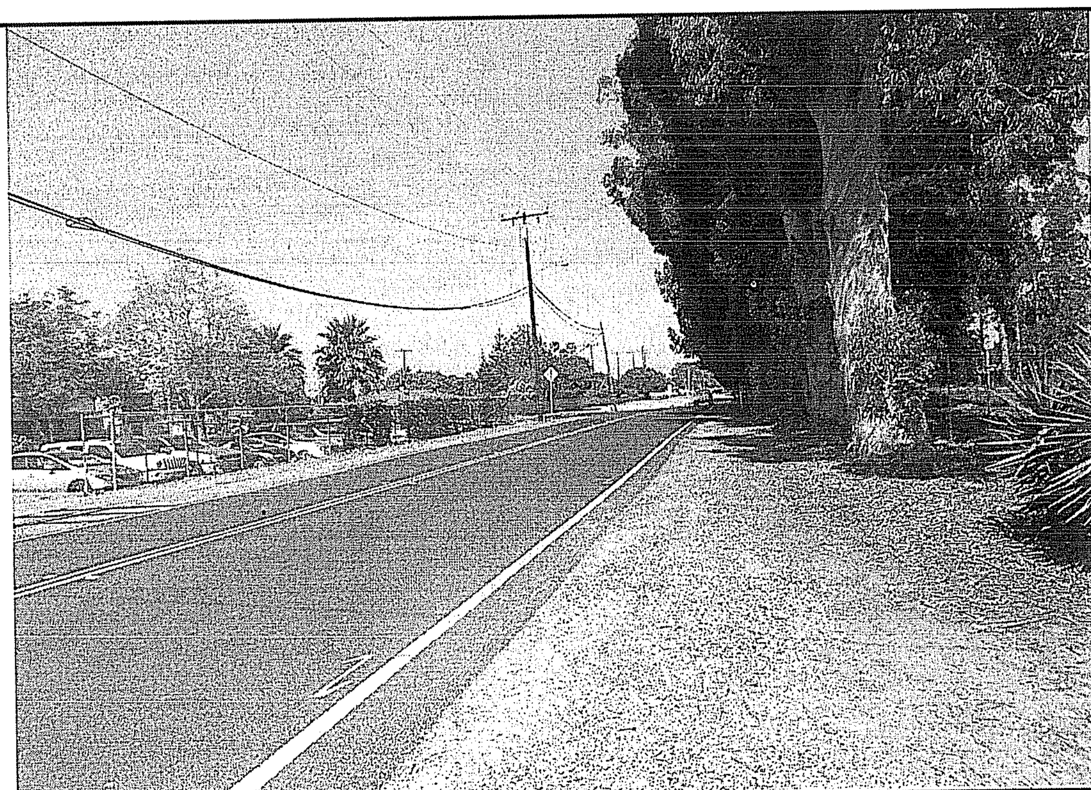


Figure 13
Windrow on Etting Road (mostly on Masonic Cemetery property)
(looking west)

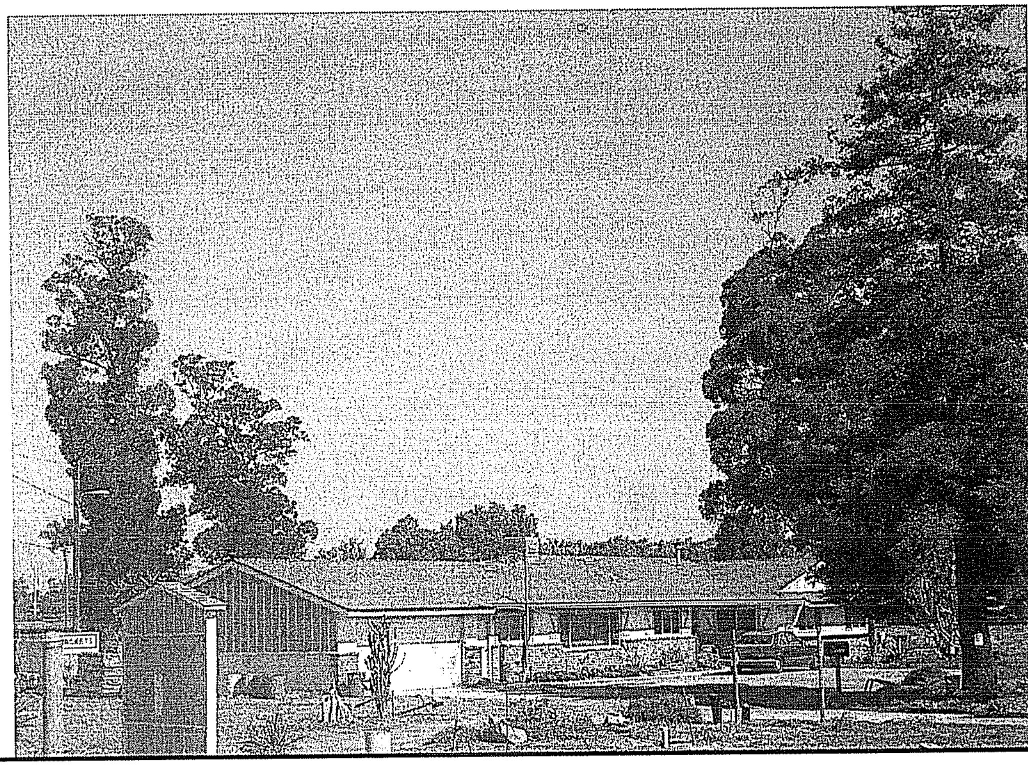


Figure 14
House, east and south elevations, (looking west)

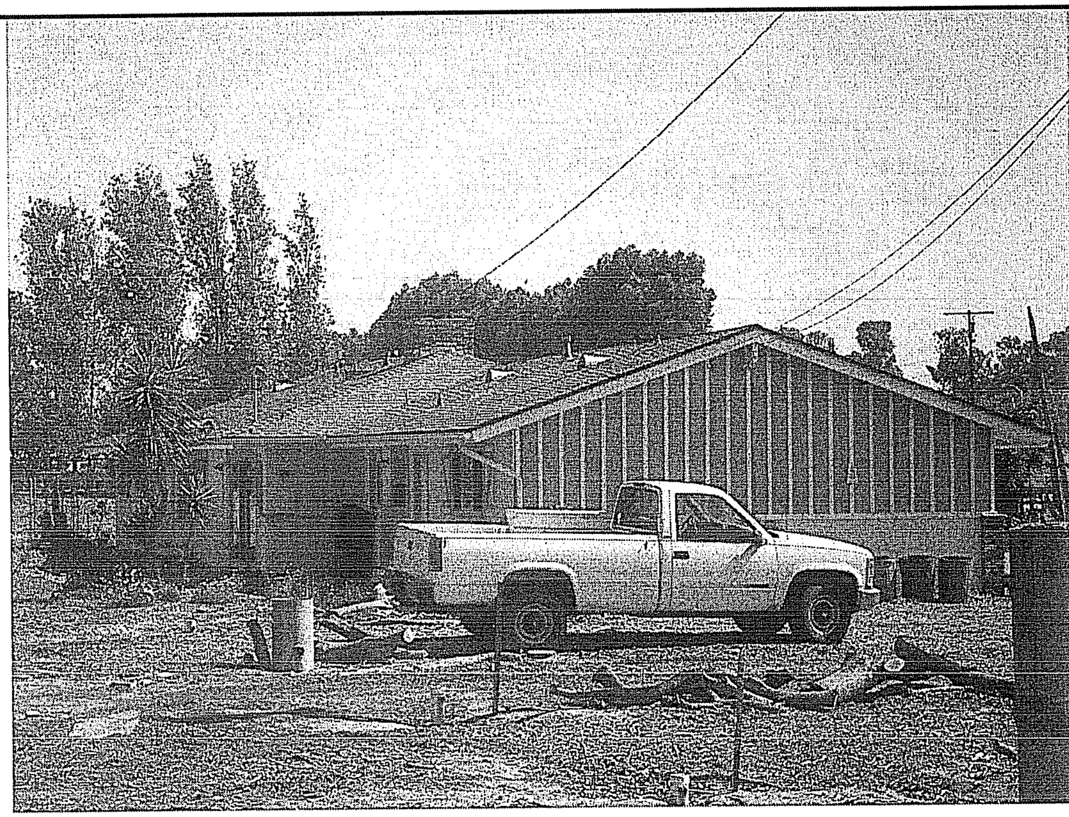


Figure 15
House, south and west elevations, (looking north)

Figure 16
House, north and east elevations, (looking southwest)

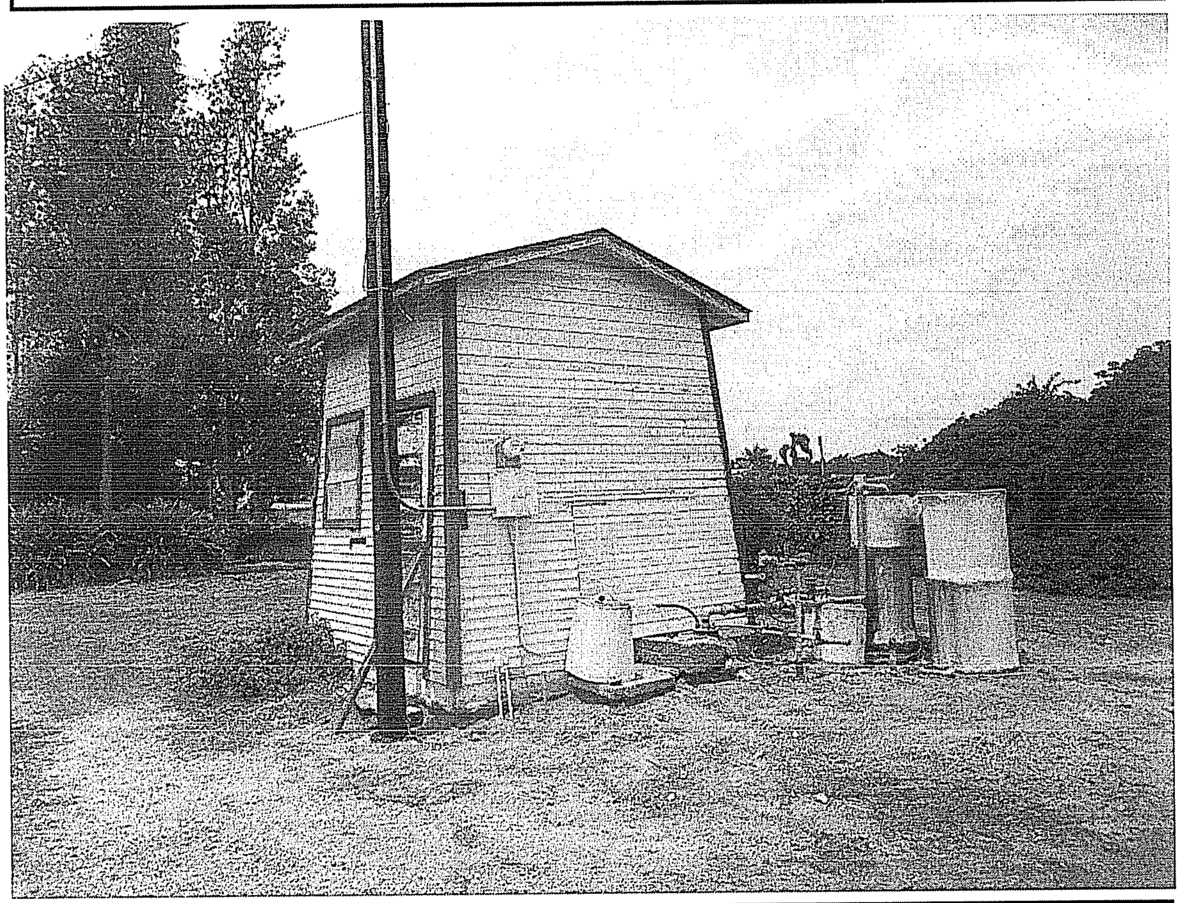


Figure 17
Pump House (looking west)

Figure 18
Interior of Pump House (looking north)

Figure 19
Shed/Equipment (looking east and north elevations)

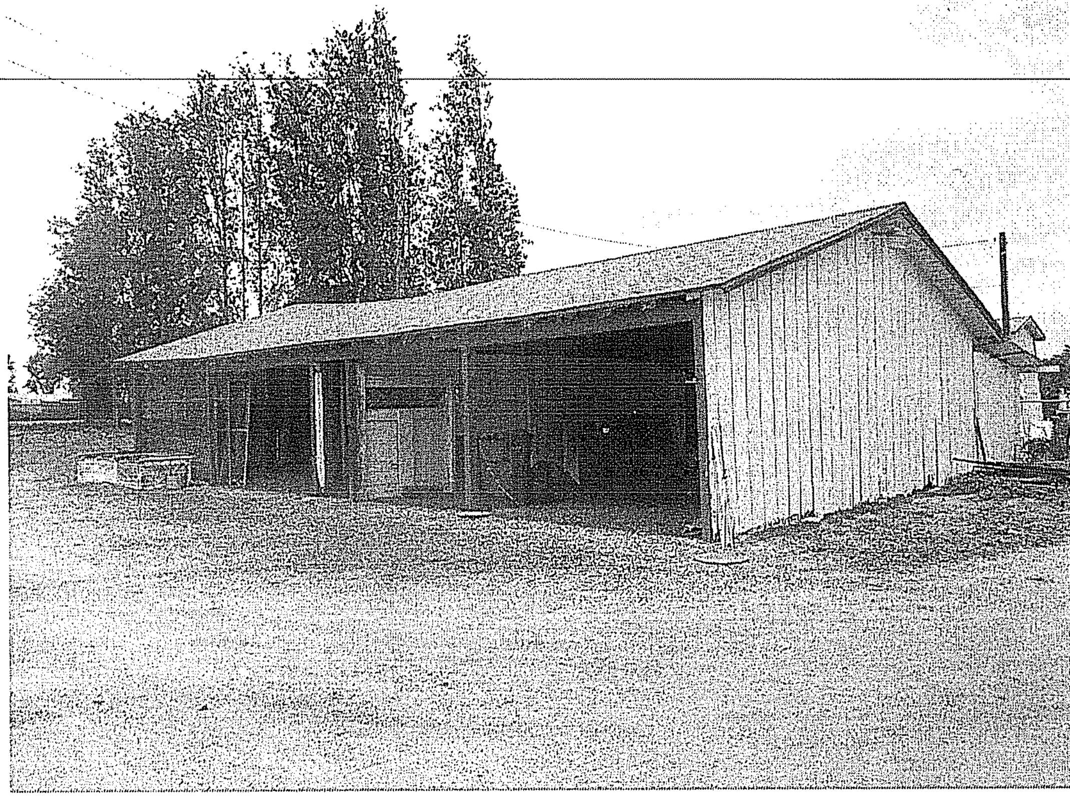


Figure 20
Shed/Equipment building, south and east elevations (looking northwest)

Figure 21
Shed/Equipment building, north elevation (looking south)

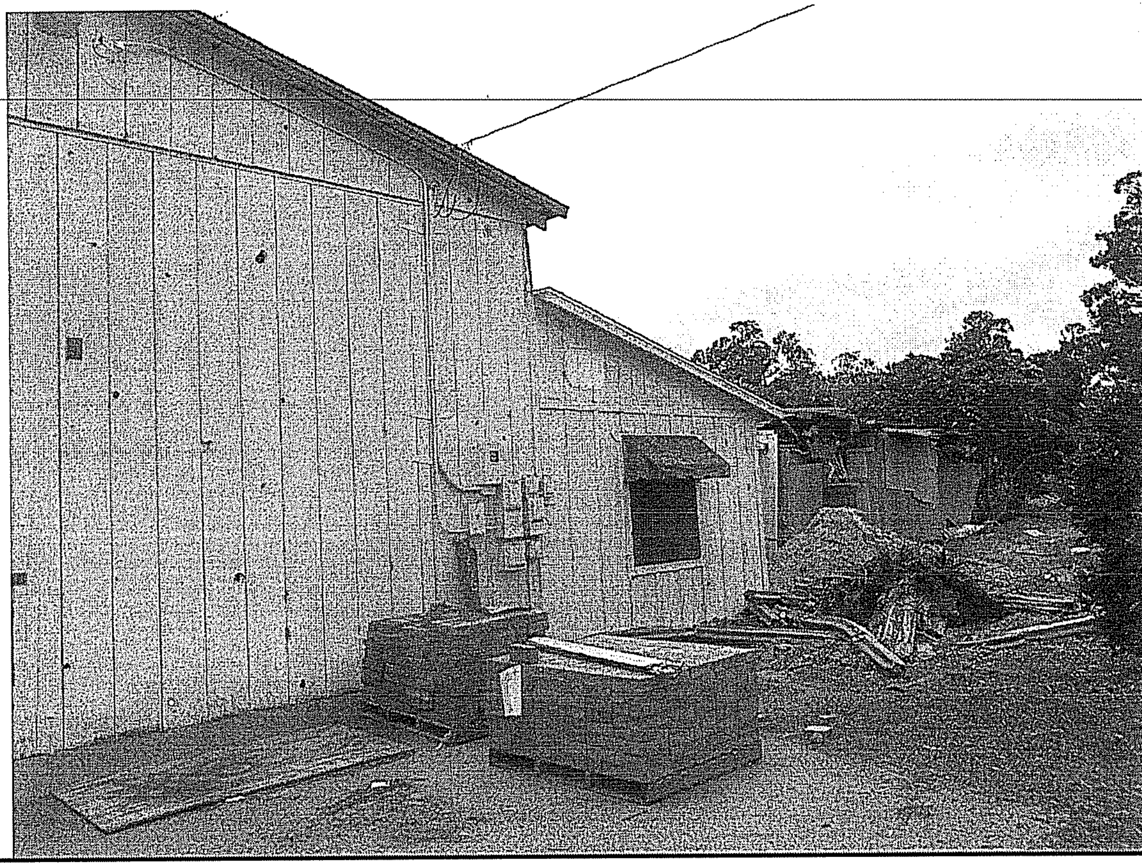


Figure 22
Barn/Living Quarters, west end of north elevation (looking southwest)

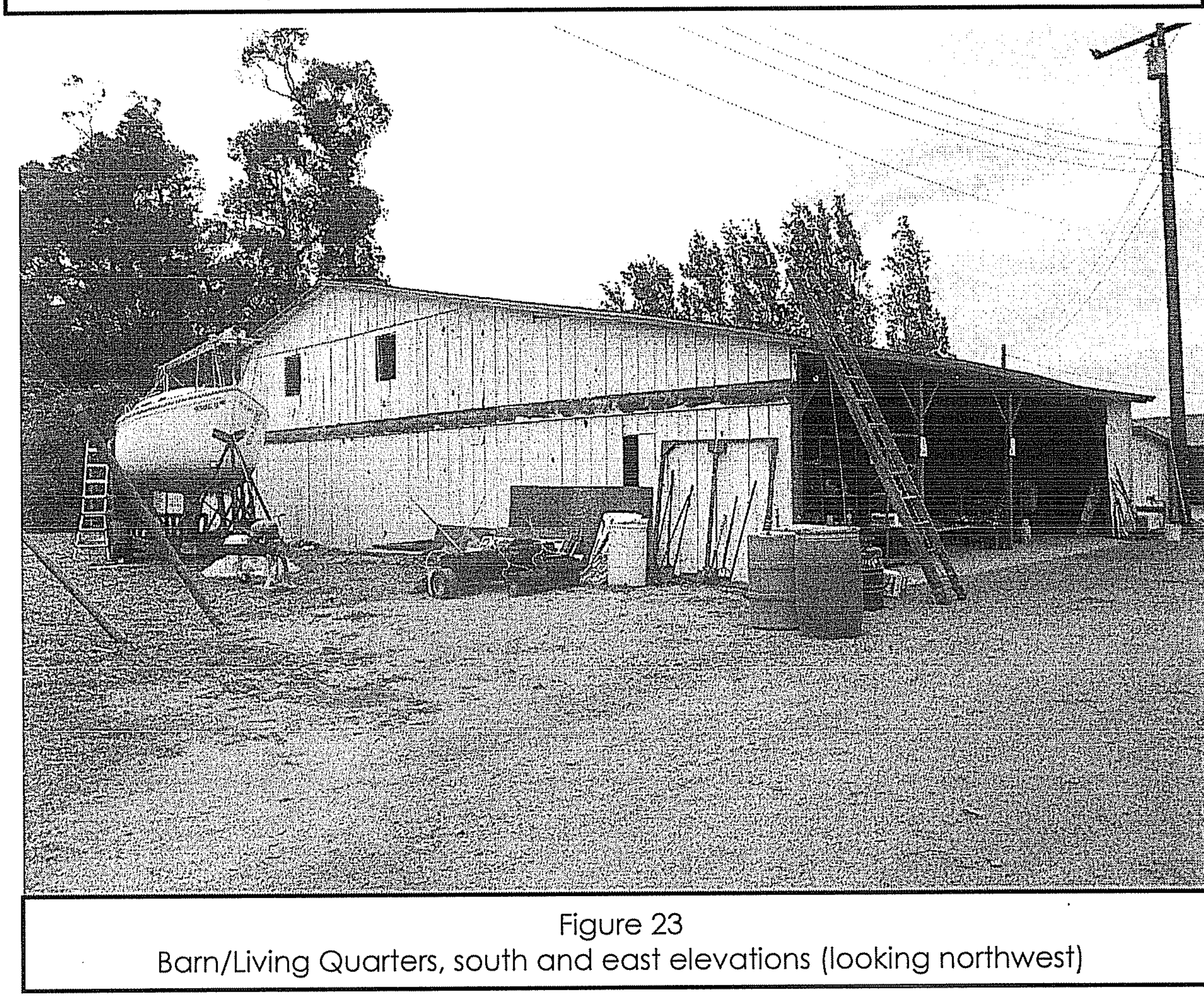


Figure 23
Barn/Living Quarters, south and east elevations (looking northwest)

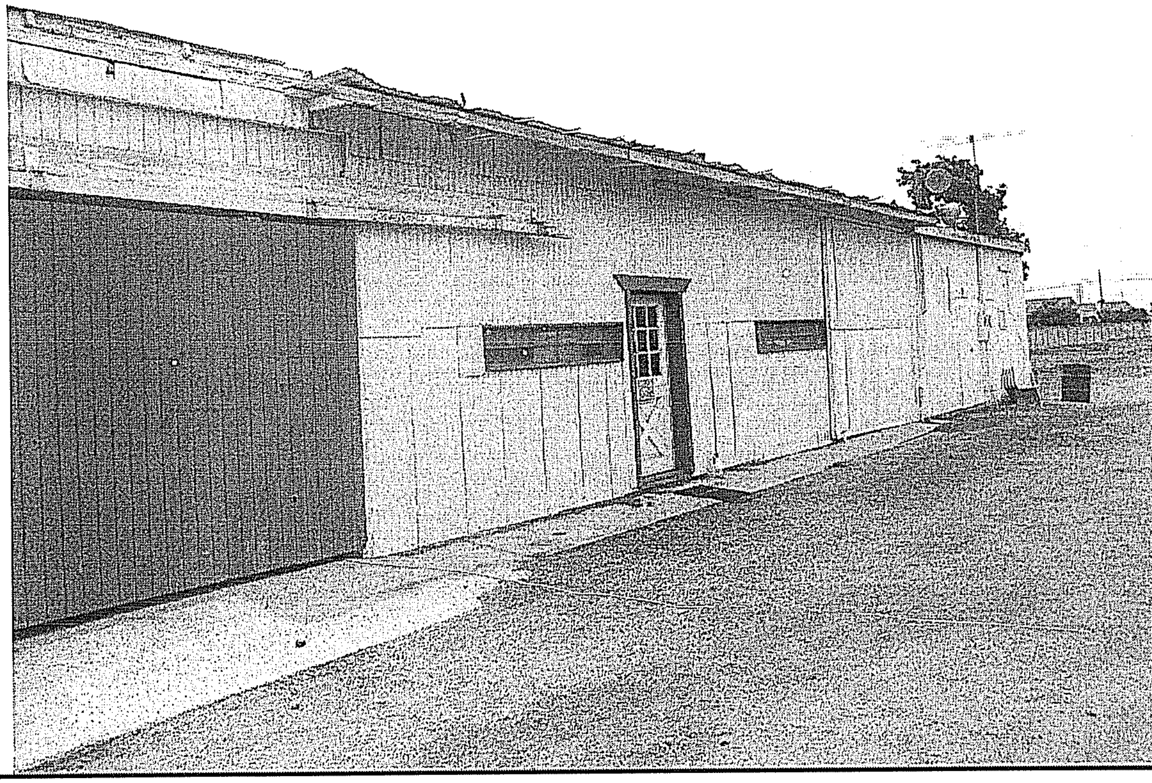


Figure 24
Shop/Equipment Storage Building, west elevation (looking south)

Figure 25
Shop/Equipment Storage Building, south elevation (looking east)

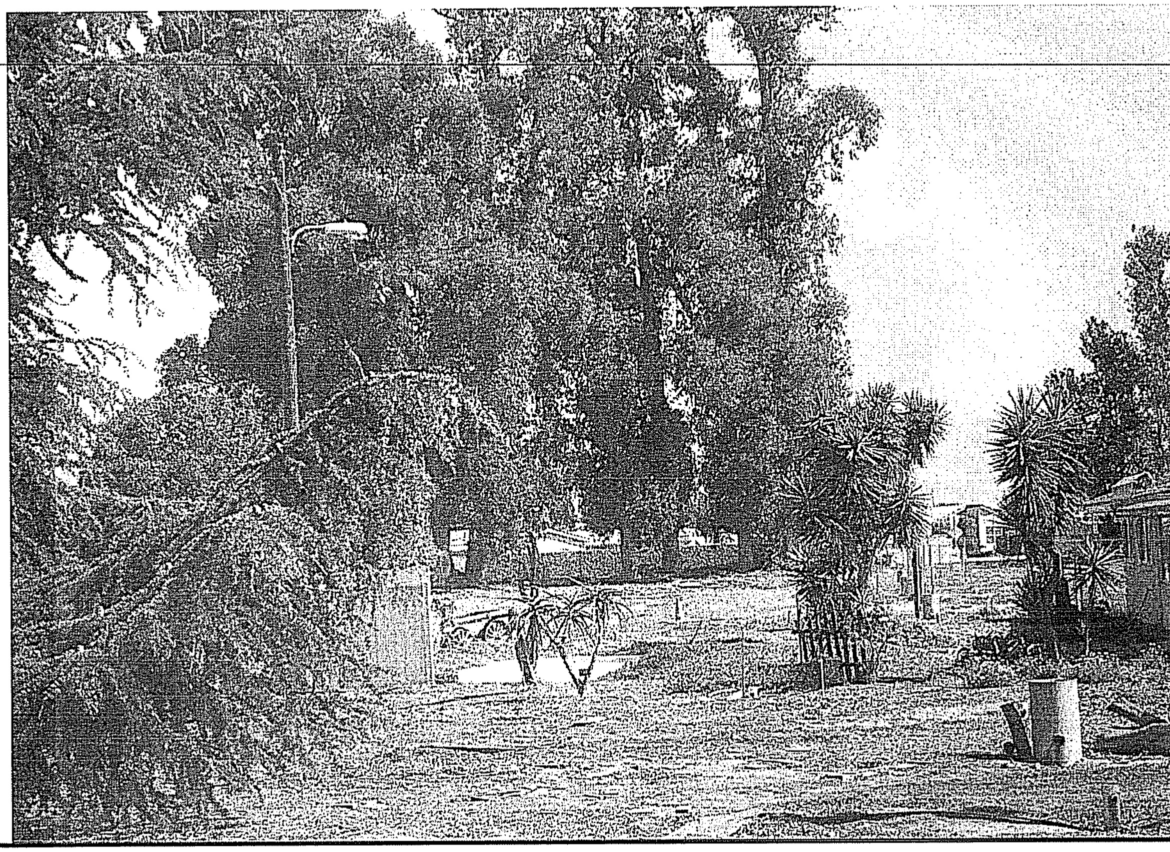


Figure 26
View across Naumann Property to Blue Gum windrows on East Pleasant Valley Road
(looking north)

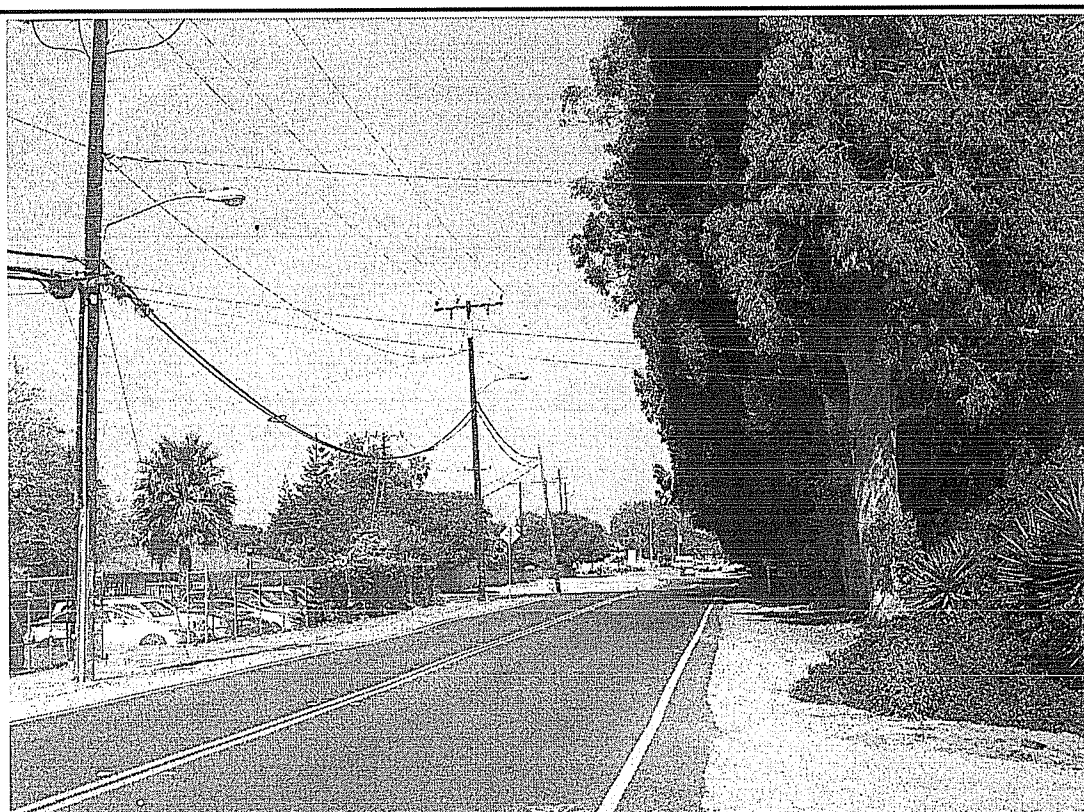


Figure 27
View looking west along Etting Road to the Blue Gum windrows
(looking north)

Figure 28
Hueneme Masonic Cemetery, looking south from East Pleasant Valley Road

Figure 29
Japanese Cemetery, looking East from the intersection of East Pleasant Valley Road and Etting Road

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # P-56-150023
HRI #
Trinomial
NRHP Status Code 6
Other Listings Ventura County Landmark #15
Review Code Reviewer Date

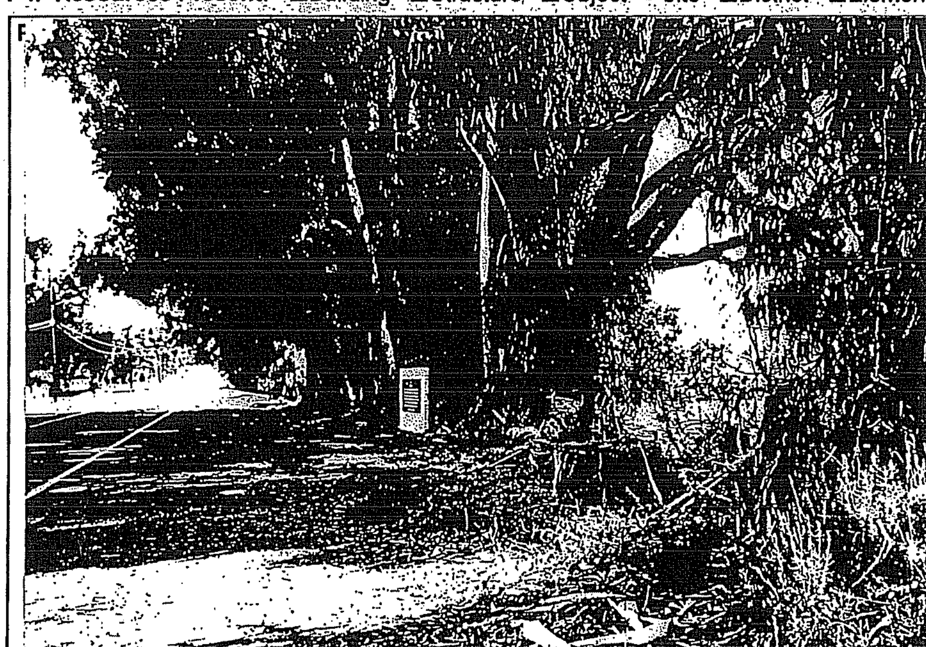
Caltrans ID, County/Route/Postmile/EA: 07-Ven-01, PM 15.0, 07-117040 **Map Ref. #** 6

P1. Resource name(s) or number: Naumann Blue Gum Grove
***P2. Location: *a. County:** Ventura
***c. Address:** Pleasant Valley Road **City:** Oxnard **Zip:** 93030
***e. Assessor's Parcel Number:** 225-0-14-030 and 225-0-14-040

***P3a. Description:**

The grove consists of rows of blue gum trees (eucalyptus) running along the cemetery boundaries and adjacent to Pleasant Valley Road and Etting Road. The trees were planted as windbreaks by the Hueneme Masonic Cemetery Association in about 1900 to shelter the cemetery from the winds sweeping across the Oxnard Plain. Besides serving as windbreaks, these trees provided firewood and a flower source for honeybees. Such windbreaks were once common throughout the Oxnard Plain, and lines of eucalyptus still mark a number of Ventura County fields. The grove has been designated a Ventura County Landmark because of the size of the trees. Some of the remaining trees are very large; the county landmark sign notes that the tallest tree was 147 feet tall at that time. A number of trees have been cut recently, and smaller trees have grown up among the larger ones.

***P3b. Resource Attributes:** HP30; trees/vegetation
***P4. Resources Present:** ☐Building ☐Structure ☐Object ■Site ☐District ☐Element of District ☐Other



P5b. Photo date: March 11, 1996

***P6. Date Constructed/Source:**
c. 1900

***P7. Owner and Address:**
Naumann Family Trust
2295 Etting Road
Oxnard, California 93030

***P8. Recorded by:**
Dorene Clement
Caltrans Environmental Program
1120 N Street
Sacramento, CA 95814
(Originally recorded by Ann Scheid)

***P9. Date Recorded:**
March 11, 1996
(Originally recorded Aug. 1995)

***P10. Survey Type:**
Historic Architectural Survey

***P11. Report Citation:**
Historic Architectural Survey Report, Pleasant Valley Rd./SR 1 Interchange, 07-Ven-01, 15.0, 07-117040

***Attachments:** NONE ☐Location Map ☐Sketch Map ■Continuation Sheet ■Building, Structure, and Object Record ☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record ☐Artifact Record ☐Photograph Record ☐ Other

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

Primary #: P-56-150023
HRI#:

BUILDING, STRUCTURE, AND OBJECT RECORD

*Resource Name or # Naumann Blue Gum Grove, Map ref. #6

B1. Historic name:
B2. Common name: Naumann Blue Gum Grove
B3. Original Use: windbreak B4. Present use: windbreak
*B5. Architectural Style: N/A
*B6. Construction History: The eucalyptus windbreak was planted circa 1900 by the Hueneme Masonic Cemetery Association.

*B7. Moved? ☒No ☐Yes ☐Unknown Date: Original Location:
*B8. Related Features:
The eucalyptus windbreak is adjacent to the Hueneme Masonic Cemetery and the Naumann farm.

B9a. Architect: N/A b. Builder: N/A
*B10. Significance: Theme Area
Period of Significance Property Type Applicable Criteria

The eucalyptus windbreak associated with the adjacent Naumann farm and the Hueneme Masonic Cemetery was designated a Ventura County landmark in 1971. Fourteen other trees or groups of trees have also been recognized as Ventura County landmarks, including two other groupings of eucalyptus trees (landmark numbers 3 and 110). Once common throughout the Oxnard Plain, tree rows planted as windbreaks are declining in number but remain important visual elements of the Oxnard agricultural landscape. Since being listed as a landmark, the Naumann Grove has suffered the loss of a number of large trees, and small trees have sprouted to fill some of the gaps. This grove does not appear intact enough to be eligible under Criterion C as a good example of such tree rows, nor does it appear to possess significance under any of the other criteria. The property does not appear eligible for either the California Register of Historical Resources or the National Register of Historic Places under any of the criteria, nor does there appear to be the potential for a historic district or historic landscape which might include this property.

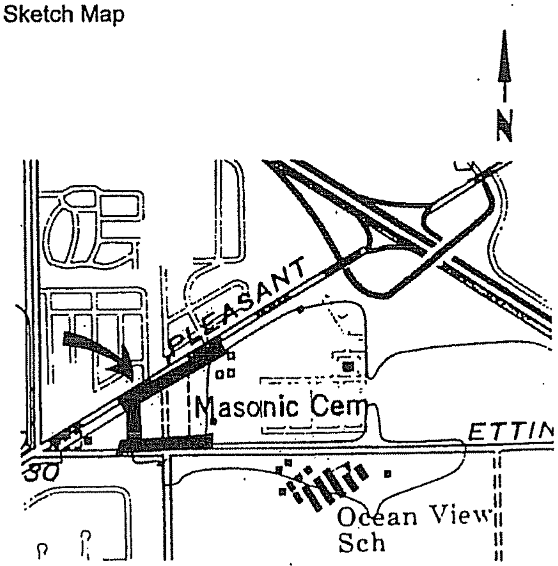
B11. Additional Resource Attributes:
*B12. References:
Ann Scheid, *Historic Architectural Survey Report, Pleasant Valley Rd./State Route 1 Interchange*, 07-Ven-01, 15.0, 07234-117040, Aug. 1995.
Ventura County Landmarks & Points of Interest, Nov. 1995.

B13. Remarks:
Originally evaluated in August 1995; current evaluation incorporates previous research and description, but conclusion differs.

*B14. Evaluator: Dorene Clement, Caltrans
*Date of Evaluation: March 1996

(This space reserved for official comments.)

Sketch Map



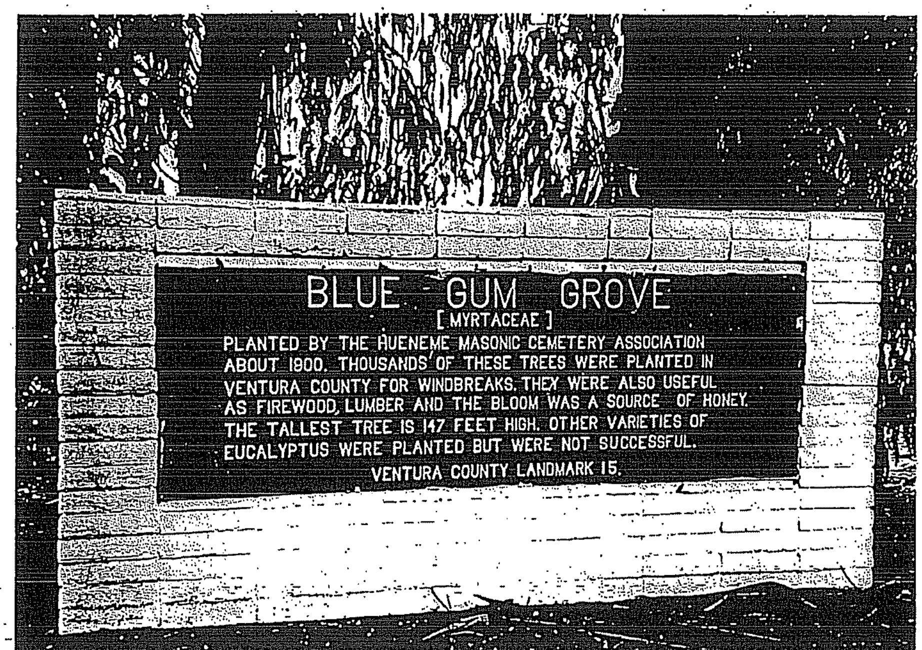
State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

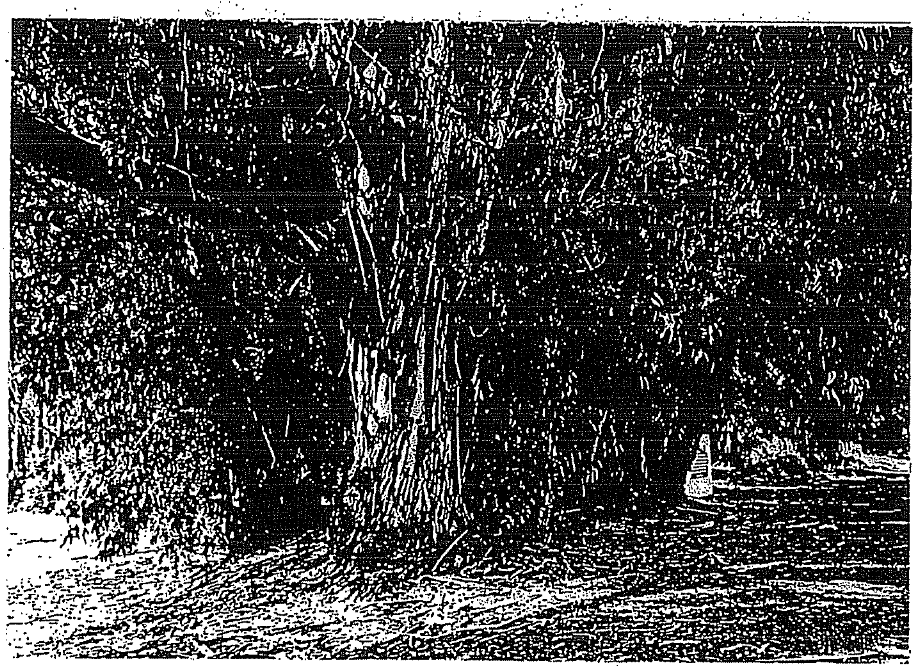
Primary # P-56-150023
HRI#
Trinomial

■ Continuation ☐ Update

Resource Name or # Naumann Blue Gum Grove, Map Ref. #6

P5a. Photo (continued):





Appendix D

Tree Reports

Tree Report for

Senior Living and Apartment Community

Pleasant Valley Road

Oxnard, California

Client:

Dansk Investment Group, Inc.

C/O Lauterbach & Associates, Architects, Inc.

300 Montgomery Avenue

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(805) 988-0912

Prepared in consultation with:

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LA Johnny

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March 31, 2014

Table of Contents

Summary

This report was prepared as part of the submittal process for the development of a former 7 acre avocado orchard on Pleasant Valley Road, Oxnard, California. The owners plan to build a Senior Living and Apartment Community on the site.

Excavation, re-compaction and grading will require the removal of all 72 landscape trees on the property. Relocation or preservation of these trees is not feasible. Using the industry standard Trunk Formula Method, the appraised value of the 72 trees is $45,070.

Mitigation (meaning compensation) for the lost trees is determined by laws, guidelines and policies established by the City of Oxnard. In my experience, the City has required owners to mitigated the value of lost trees by spending an amount equal to their value on landscaping in excess of the minimum required by the City landscape ordinance. Basically added more trees or planting larger container sizes.

Tracking of mitigation for lost trees is usually done in coordination with the owner's landscape architect and is accomplished by creating a mitigation table that shows how the mitigation funds have been spent on landscape trees in addition to the minimum required. The mitigation table is shown on the landscape plans and approved as part of the submittal process.

A safety risk is created for this property from seven eucalyptus trees growing on the adjacent property to the west. The site for the proposed development, especially the school path on the west side, are within the target zone of these seven trees.

Removing the eucalyptus on your lot will increase the risk posed by the seven remaining trees on your neighbor's lot. Without risk mitigation, these trees pose an unacceptably high risk for pedestrians and vehicles on Etting Road. The decision rests with the owner of those seven trees but I recommend removing the four nearest your lot and pruning three others.

Seventeen additional trees, planted on property to the east of this lot, have canopies that grow over the property line. The largest two of these are avocado trees and the roots of these 2 may be effected by excavation but they should recover in two or three years. The block wall and its foundation offers some protection for the avocado tree roots and the remaining 15 trees are too small to have their roots affected significantly by excavation.

All 17 of these off-site trees need to have their canopies protected during construction. Except for the two avocados, the trees extend 1 to 3 feet over the line. Pruning and care of these 17 trees is a joint responsibility between the property owners and should be coordinated between the parties. Any pruning done should conform to national standards and industry best management practices.

Introduction

I was retained by Jordan, Gilbert & Bain Landscape Architects, Inc. to provide an arborist report as part of the submittal process for a proposed development on Pleasant Valley Road in Oxnard. I met with Mike Gilbert and Mark Pettit of Lauterbach & Associates, Architects, Inc. on March 13, 2014 to review the site plan and discuss the project.

At that point we didn't have any specific written requirements for the report so we agreed to prepare a standard tree appraisal report because that is what the city normally requires. Mr. Pettit explained that the orchard trees were not included.

Appraising the value of mature landscape trees is done using a procedure that looks at the multiple ways trees contribute. This procedure is called the Trunk Formula Method as described in "*A Guide to the Methods and Procedures for Appraising Amenity Plants*" 9th edition and endorsed by the International Society of Arboriculture.

We need the following information about every landscape tree on the site:

- Map Location and ID Number
- Photo
- Species
- Size
- Condition (Health & Structural Integrity)
    - 1)Roots, 2)Trunk, 3)Scaffold Branches, 4)Smaller Branches, 5)Foliage
- Location composed of:
    - Site Rating
    - Contribution Rating
    - Location Rating

In addition to the appraisal the City of Oxnard has sometimes asked for the arborist to consider whether preservation of the trees is feasible. The entire site needs to be excavated, re-compacted and graded so no trees could be preserved in place. Preservation of any on-site trees would require relocating them. I considered this possibility.

In addition to the trees on the lot, there were several trees close enough to property line that they might be impacted by construction on the site.

Observations

I visited the site on March 20, 21, 22 and 28 and made observations.

Map

I used the engineer's site plan as a base and created three maps showing this 7.2 acre site at 1:75 scale on letter size pages.

I marked the trunk location of every tree on the site and every off-site tree close enough to be impacted by construction on-site.

I tagged the on-site trees with a metal tag showing the tree identification number.

Maps are shown in Appendix A to this report.

Photo

I made a photograph of each tree. Most of the trees are in windrows so that multiple trees are shown in some photos.

Species

A Guide to the Methods and Procedures for Appraising Amenity Plants, recognizes that not all species are of equal value. An invasive tree species is not as valuable as a native tree species for example. A Regional Plant Appraisal Committee assigns the regions tree species to 1 of 5 classifications: 90%, 70%, 50%, 30%, 10%. The arborist can add or subtract 10% from these ratings depending on the circumstances. I recorded the species of each tree.

Size

The Trunk Formula Method first uses tree size to establish a basic tree cost. Size is based on the trunk area 4.5 feet above natural grade. By measuring the circumference of the trunk you can calculate the area. That is the first step in appraising the tree.

I recorded the trunk size of all on-site trees.

I also measured the trunks of four off-site eucalyptus trees at the southwest corner of the lot along Etting Road. I could see that roots, trunks, and branches of those trees were entwined and that leaving those four trees might create a safety hazard. So I measured those four off-site trees too.

Canopy height and width do not affect the Trunk Formula but that information is helpful in other ways. It is a standard part of the arborist assessment and I estimated that information as shown in Table B.

Condition (Health & Structural Integrity)

Condition is what most people mean by health. Arborist include structural stability. Condition is one of the factors that modify (reduce) the basic tree cost which is based solely on size. Condition is measured by rating each tree using five factors. Each of the five factors are scored from 1 (Extreme problem) to 5 (No problem). The factors are 1) Roots, 2) Trunk, 3) Scaffold Branches, 4) Smaller Branches, 5) Foliage.

I looked at these five factors and gave each tree a preliminary score in the field.

Roots: the scores for each tree are recorded in Appendix C Tree Appraisal. Many trees had compacted root zones, most were beside roads or structures where there is both compaction and mechanical injury. Most trees showed problems with root anchorage, confinement because they are planted too close together to form natural root plates. The only oak on-site has grown up into the poplar windrow along Pleasant Valley Road and its roots are being strangled by the fast growing poplar. The area is wet not good for oak trees. The cedar had a shed in its root zone and compaction in the root zone from equipment and foot traffic. The redwood had compaction from a driveway and farm road. The orange trees had compacted roots from farm equipment roads.

Trunk: the scores for each tree are recorded in Appendix C Tree Appraisal. Problems with the root crown lead to trunk problems with the trees in windrows. The tightly spaced trees had little trunk flare and most leaned especially the eucalyptus. The trunks of four eucalyptus are entwined. Several poplars trees showed signs of decay. Most eucalyptus had mechanical damage to the trunk and large unhealed branch scars. The oak trunk leans dramatically in two direction. The Myoporum had mechanical damage to the trunks, probably from being cut back from the farm road. The cedar had mechanical damage. The redwood has signs attached to it and other signs of mechanical damage.

Scaffold Branches: the scores for each tree are recorded in Appendix C Tree Appraisal. Most trees had major problems because of being crowded into a windrow. This is especially true of the eucalyptus whose branches intertwine. Most of the eucalyptus have large dead scaffold branches. Most trees have been topped.

Smaller Branches and Twigs: the scores for each tree are recorded in Appendix C Tree Appraisal. The smaller branches are an indication of vigor and tip stunting or die-back indicates a problem. I found this to be true for all the poplars and several of the eucalyptus. Except for the cedar, redwood tree, yucca, and aloe trees, all the others had poor distribution of branches throughout the canopy. All trees exhibited weak or dead twigs.

Foliage: the scores for each tree are recorded in Appendix C Tree Appraisal. Most trees are mature or over mature and so have some dead. The Myoporum showed signs of thrips.

Location

In addition to health I assessed three other factors used to calculate the economic value. Together these three make up the **Location Percent:**

Site

The site is an old agricultural operation with avocado orchards, barns, sheds, farm roads, a house and driveways. The structures are old and run down. The orchards have been cut down. There is a great deal of old equipment and refuse on the site.

To the east is a large mobile home park Colony Mobile Homes. A block wall of various styles runs along the east side. To the north is a heavily travels 4 lane road, Pleasant Valley Road. Across the road is a dense housing area of modest homes. To the west is an historical cemetery that is poorly maintained. To the south is busy Etting Road. There is no sidewalk, pedestrians do use the gravel shoulder of Etting Road is a Junior High School complex with a tall mesh fence.

Contribution

This rating is unique for each tree and combines two scores: **Functional** and **Aesthetic**. I recorded scores for each tree in the field checklist using the factors listed in Table 7-1 of "*A Guide to the Methods and Procedures for Appraising Amenity Plants*". The scores for each tree are recorded in Appendix C Tree Appraisal.

Placement

The Placement rating is unique for each tree and considers factors such as proximity to power lines, buildings, sidewalks and lights. The scores for each tree are recorded in Appendix C Tree Appraisal.

Analysis

Map

Tree maps are required so that the reader can locate trees on the ground. That is done using a symbol to represent the tree location. I used a red dot to indicate trees on-site and a black dot to indicate trees off-site. The trees are numbered based on my field notes.

Most of the tree canopies come from the engineer's site survey plan. But I added a number of small trees not shown on the site survey. I expect that the engineer assumed those trees (Myoporum) were part of the agricultural operation because most were planted in rows right beside the orchards.

I also added the Ligustrum planted around the barn and the orange trees beside the carport. I added the giant aloe tree and the three large yucca trees.

I added off-site trees where needed. Off-site trees I distinguished by using an * after their identification number (ID). I added 7 eucalyptus trees numbers 73* through 79*. Four of those off-site eucalyptus are part of a larger windrow of 11 trees meaning their canopies are joined in such a way that removing the onsite part of the windrow will have a significant impact on the four remaining trees just off site.

There is a gap in the seven off-site eucalyptus such that the canopies of trees 76* and 77* do not touch. However, removing the windrow east of trees 77*, 78* and 79* may have an impact on those trees. That is why I mapped and numbered trees 73* through 79*.

In addition to the 7 eucalyptus I identified and mapped 17 more off-site trees with canopies that grow across the property line. All 17 are located along the east side of the site behind a 6 foot high masonry wall. There are two mature avocados in this group, a privet, two queen palms and the rest are small fruit trees. These are numbered 80* through 96* starting with the two queen palms in the northeast corner of the lot beside Pleasant Valley Road.

Using the engineer's site survey plan and my field notes, I created tree maps formatted to fit this report. To show the entire site at a reasonable scale I chose 1:75 which shows the entire site in three pages. I created a key map to show what part of the site is shown on each map 1 through 3. I also show a location map for readers unfamiliar with the site.

The tree location data is available in CAD format for use by other consultants.

Maps are shown in Appendix A to this report.

Photo

I made a photograph of each tree. Most of the trees are in windrows so that multiple trees are shown in some photos.

Species

A Guide to the Methods and Procedures for Appraising Amenity Plants, recognizes that not all species are of equal value. An invasive tree species is not as valuable as a native tree species for example. A Regional Plant Appraisal Committee assigns the regions tree species to 1 of 5 classifications: 90%, 70%, 50%, 30%, 10%. The arborist can add or subtract 10% from these ratings depending on the circumstances. I recorded the species of each tree.

There were 72 trees on-site and another 24 off-site trees were included a summary of the number of trees by species follows in Table A. The species rating for each species is also shown.

Table A: Species Lists

ON-SITE TREES SPECIES LIST AND SPECIES RATING

SPECIES	NAME	QUANITY	NATIVE	SPECIES RATING
Aloe barberae	aloe tree	1		10%
Cedrus deodara	deodar cedar	1		90%
Citrus sinensis	orange tree	3		30%
Eucalyptus camaldulensis	Red River gum	14		40%
Ligustrum japonicum	privit	13		30%
Myoporum laetum	myoporum	8		60%
Populus nigra 'Italica'	Lombardy poplar	27		10%
Quercus agrifolia	coast live oak	1	YES	90%
Sequoia sempervirens	coast redwood	1		80%
Yucca eliphantipies	giant yucca	3		10%

Total On-site Trees = 72
Total On-site Species = 10
Total On-site Native Trees = 1

OFF-SITE TREES SPECIES LIST AND SPECIES RATING

SPECIES	NAME	QUANITY	NATIVE	SPECIES RATING
Eucalyptus camaldulensis	Red River gum	7		40%
Citrus sinensis	orange	2		30%
Eriobotrya deflexa	bronze loquat	1		90%
Lighustrum t.	privet	1		30%
Persea sp.	avocado	2		50%
Prunus persica	peach	9		50%
Syagrus romanzofi- ana	queen palm	2		60%

Total Off-site Trees = 24
Total Off-site Species = 7
Total Off-site Native Trees = 0

Size

I calculated the area of each trunk using an excel data base to convert circumference into square inches for all 72 on-site trees and four off-site trees 73* through 76*.

I also recorded the height and width of each tree based on my field assessment.

Condition (Health & Structural Integrity)

I entered the 5 factor scores from my field notes and I calculated the condition rating percentage for all 72 on-site trees and four off-site trees 73* through 76*.

I separated the off-site trees so that if it is necessary to remove them the owners and the city will be able to separate that cost from the value of the trees on-site.

Using the attributes measured in the field and entered into the data base, I generated **Table B: Tree Size and Health (Condition)** shown on the next four pages.

Table B: Tree Size and Health (Condition) List:
On-site 1 through 25

SIZE						CONDITON						
ID	NAME	HIGH	WIDE	TRK DIA.	TRK AREA	HEALTH	ROOTS	TRUNK	BRANCHES	SM. BRANCH	FOILIAGE	DESCRIPTION
1	Lombardy poplar	45	5	14	147	40%	2	2	2	2	2	POOR
2	Lombardy poplar	35	5	10	77	44%	2	2	2	2	3	POOR
3	Lombardy poplar	25	5	7	35	44%	2	2	2	2	3	POOR
4	Lombardy poplar	25	5	14	147	44%	2	2	2	2	3	POOR
5	Lombardy poplar	35	5	10	77	44%	2	2	2	2	3	POOR
6	Lombardy poplar	50	5	7	35	40%	2	2	2	2	2	POOR
7	Lombardy poplar	65	5	14	147	40%	2	2	2	2	2	POOR
8	Lombardy poplar	65	5	10	77	44%	2	2	2	2	3	POOR
9	Lombardy poplar	60	5	7	35	40%	2	2	2	2	2	POOR
10	Lombardy poplar	55	5	14	147	44%	2	2	2	2	3	POOR
11	coast live oak	15	12	9	58	40%	2	2	2	2	2	POOR
12	Lombardy poplar	65	5	21	337	44%	2	2	2	2	3	POOR
13	Lombardy poplar	55	5	14	147	40%	2	2	2	2	2	POOR
14	Lombardy poplar	55	5	10	77	40%	2	2	2	2	2	POOR
15	Lombardy poplar	55	5	7	35	40%	2	2	2	2	2	POOR
16	Lombardy poplar	55	5	14	147	44%	2	2	2	2	3	POOR
17	Lombardy poplar	50	5	10	77	44%	2	2	2	2	3	POOR
18	Lombardy poplar	50	5	7	35	44%	2	2	2	2	3	POOR
19	Lombardy poplar	40	5	14	147	40%	2	2	2	2	2	POOR
20	Lombardy poplar	50	5	10	77	44%	2	2	2	2	3	POOR
21	Lombardy poplar	45	5	7	35	40%	2	2	2	2	2	POOR
22	Lombardy poplar	45	5	14	147	44%	2	2	2	2	3	POOR
23	Lombardy poplar	45	5	10	77	40%	2	2	2	2	2	POOR
24	Lombardy poplar	40	5	7	35	44%	2	2	2	2	3	POOR
25	Lombardy poplar	40	5	14	147	44%	2	2	2	2	3	POOR

Tree Size and Health (Condition) List continued on next page

Table B: Tree Size and Health (Condition) List

On-site: 26 through 50

SIZE / **CONDITON**

ID	NAME	HIGH	WIDE	TRK DIA.	TRK AREA	HEALTH	ROOTS	TRUNK	BRANCHES	SM. BRANCH	FOILIAGE	DESCRIPTION
26	Lombardy poplar	40	5	10	77	44%	2	2	2	2	3	POOR
27	Lombardy poplar	35	5	7	35	40%	2	2	2	2	2	POOR
28	Lombardy poplar	35	5	9	67	40%	2	2	2	2	2	POOR
29	Red River gum	100	17	36	1,018	36%	1	2	1	2	3	POOR
30	Red River gum	90	17	24	452	32%	1	2	1	2	2	POOR
31	Red River gum	85	17	24	452	32%	1	2	1	2	2	POOR
32	Red River gum	85	17	36	1,018	32%	1	2	1	2	2	POOR
33	Red River gum	85	17	28	616	28%	1	1	1	2	2	POOR
34	Red River gum	90	17	42	1,385	32%	1	2	1	2	2	POOR
35	Red River gum	90	45	96	7,238	36%	1	2	1	2	3	POOR
36	Myoporum	15	15	9	62	36%	2	2	2	2	1	POOR
37	Myoporum	15	15	11	103	36%	2	2	2	2	1	POOR
38	Myoporum	15	15	12	113	36%	2	2	2	2	1	POOR
39	Myoporum	15	15	11	87	36%	2	2	2	2	1	POOR
40	Myoporum	20	15	9	61	36%	2	2	2	2	1	POOR
41	Myoporum	20	15	6	27	36%	2	2	2	2	1	POOR
42	Myoporum	25	15	12	104	36%	2	2	2	2	1	POOR
43	giant yucca	12	7	12	113	60%	3	3	3	3	3	FAIR
44	deodar cedar	45	25	40	645	48%	2	3	2	2	3	FAIR
45	Red River gum	90	20	36	1,018	36%	1	2	1	2	3	POOR
46	Red River gum	90	20	42	1,385	36%	1	2	1	2	3	POOR
47	Red River gum	90	20	48	1,810	32%	1	2	1	2	2	POOR
48	Red River gum	90	20	36	1,018	32%	1	2	1	2	2	POOR
49	Red River gum	80	20	40	1,257	36%	1	2	1	2	3	POOR
50	Red River gum	70	20	36	1,018	36%	1	2	1	2	3	POOR

Tree Size and Health (Condition) List continued on next page

Table B: Tree Size and Health (Condition) List:

On-site 51 through 72

SIZE						CONDITION						
ID	NAME	HIGH	WIDE	TRK DIA.	TRK AREA	HEALTH	ROOTS	TRUNK	BRANCHES	SM. BRANCH	FOILIAGE	DESCRIPTION
51	coast redwood	70	30	27	562	32%	2	2	2	1	1	POOR
52	giant yucca	15	12	13	133	60%	3	3	3	3	3	FAIR
53	giant yucca	15	12	11	95	60%	3	3	3	3	3	FAIR
54	aloe tree	15	12	16	201	60%	3	3	3	3	3	FAIR
55	orange	25	25	7	39	52%	3	3	2	2	3	FAIR
56	orange	25	25	7	39	52%	3	3	2	2	3	FAIR
57	orange	25	25	7	39	52%	3	3	2	2	3	FAIR
58	privit	20	5	7	33	40%	2	2	2	2	2	POOR
59	privit	21	6	7	33	40%	2	2	2	2	2	POOR
60	privit	22	7	7	33	40%	2	2	2	2	2	POOR
61	privit	23	8	7	33	40%	2	2	2	2	2	POOR
62	privit	24	9	7	33	40%	2	2	2	2	2	POOR
63	privit	25	10	7	33	40%	2	2	2	2	2	POOR
64	privit	26	11	7	33	40%	2	2	2	2	2	POOR
65	privit	27	12	7	33	40%	2	2	2	2	2	POOR
66	privit	28	13	7	33	40%	2	2	2	2	2	POOR
67	privit	29	14	7	33	40%	2	2	2	2	2	POOR
68	privit	30	15	7	33	40%	2	2	2	2	2	POOR
69	privit	31	16	7	33	40%	2	2	2	2	2	POOR
70	privit	32	17	7	33	40%	2	2	2	2	2	POOR
71	Myoporum	12	12	6	24	32%	2	1	1	2	2	POOR
72	Red River gum	60	20	42	1,385	36%	1	2	1	2	3	POOR

End of On-site Tree Size and Health (Condition) List

Off-site Tree Size and Health (Condition) List continued on next page

Table B: Tree Size and Health (Condition) List:

Off-site 73 through 76

Four off-site trees that raise safety concerns and were appraised for possible removal.

SIZE						CONDITION						
ID	NAME	HIGH	WIDE	TRK DIA.	TRK AREA	HEALTH	ROOTS	TRUNK	BRANCHES	SM. BRANCH	FOILIAGE	DESCRIPTION
73*	Red River gum	60	15	36	1,188	36%	1	2	1	2	3	POOR
74*	Red River gum	55	15	40	1,319	36%	1	2	1	2	3	POOR
75*	Red River gum	50	15	36	1,188	36%	1	2	1	2	3	POOR
76*	Red River gum	50	15	14	462	36%	1	2	1	2	3	POOR

End of* Table B: *Off-site Tree Size and Health (Condition) List

Location

The Location rating is the average of three scores: Site, Contributions and Placement.

Site: I rated the relative value of the site as very low and assigned it a value of 33%.

Contribution: I accessed the contribution of each tree in the field based on the functional and aesthetic contributions of that tree as described in the *Guide for Plant Appraisal* (p.52, 53)

Among the factors considered was the risk posed by dead trunks and branches which were common among the poplars and eucalyptus. I also considered how much useful life remained for each tree. The short lived poplars, Ligustrum and Myoporum are clearly in decline. The eucalyptus are expected to live 50 to 150 years in their natural environment but the difficult conditions these trees are growing in means they are near the end of their useful life. The orange trees are also over-mature or declining.

Placement: I accessed the placement of each tree in the field based on the guidelines described in the *Guide for Plant Appraisal* (p.53, 55)

Using the attributes measured in the field and entered into the data base, I generated **Table C: Tree Location Rating List**. See Table C on the following 4 pages.

Preservation (On-site)

First I considered whether it would be possible to relocate the tree without killing it. The answer was no for 69 of 72 trees on the site. The trees in windrows like the poplars, eucalyptus, Myoporum and Ligustrum would severely damaged by digging and would be too unstable to replant. The cedar and redwood would probably die if relocated. The orange trees are in decline and too old to move successfully. The large aloe tree would be too damaged to survive.

It would be possible to relocate the three giant yucca trees but expense is not justified for such a common plant. The cost to dig, box, transport, store and plant the yuccas would be prohibitive. Preserving these three yuccas is not feasible. Based on my analysis I created **Table C: Tree Preservation List.** See Table C on the following 4 pages.

Table C: Location Rating and Preservation List:

On-site Trees 1 through 25

LOCATION RATING						PRESERVATION	
ID	NAME	LOCATION	SITE	CONTRIBUT.	PLACEMENT	POSSIBLE	FEASIBLE
1	Lombardy poplar	24%	33%	25%	15%	NO	
2	Lombardy poplar	24%	33%	25%	15%	NO	
3	Lombardy poplar	24%	33%	25%	15%	NO	
4	Lombardy poplar	24%	33%	25%	15%	NO	
5	Lombardy poplar	24%	33%	25%	15%	NO	
6	Lombardy poplar	24%	33%	25%	15%	NO	
7	Lombardy poplar	24%	33%	25%	15%	NO	
8	Lombardy poplar	24%	33%	25%	15%	NO	
9	Lombardy poplar	24%	33%	25%	15%	NO	
10	Lombardy poplar	24%	33%	25%	15%	NO	
11	coast live oak	26%	33%	30%	15%	NO	
12	Lombardy poplar	24%	33%	25%	15%	NO	
13	Lombardy poplar	24%	33%	25%	15%	NO	
14	Lombardy poplar	24%	33%	25%	15%	NO	
15	Lombardy poplar	24%	33%	25%	15%	NO	
16	Lombardy poplar	24%	33%	25%	15%	NO	
17	Lombardy poplar	24%	33%	25%	15%	NO	
18	Lombardy poplar	24%	33%	25%	15%	NO	
19	Lombardy poplar	24%	33%	25%	15%	NO	
20	Lombardy poplar	24%	33%	25%	15%	NO	
21	Lombardy poplar	24%	33%	25%	15%	NO	
22	Lombardy poplar	24%	33%	25%	15%	NO	
23	Lombardy poplar	24%	33%	25%	15%	NO	
24	Lombardy poplar	24%	33%	25%	15%	NO	
25	Lombardy poplar	24%	33%	25%	15%	NO	

Table C Location Rating and Preservation List continued on next page

Table C: Location Rating and Preservation List:

On-site Tree 26 through 50

LOCATION RATING						PRESERVATION	
ID	NAME	LOCATION	SITE	CONTRIBUT.	PLACEMENT	POSSIBLE	FEASIBLE
26	Lombardy poplar	24%	33%	25%	15%	NO	
27	Lombardy poplar	24%	33%	25%	15%	NO	
28	Lombardy poplar	24%	33%	25%	15%	NO	
29	Red River gum	18%	33%	10%	10%	NO	
30	Red River gum	18%	33%	10%	10%	NO	
31	Red River gum	18%	33%	10%	10%	NO	
32	Red River gum	18%	33%	10%	10%	NO	
33	Red River gum	18%	33%	10%	10%	NO	
34	Red River gum	18%	33%	10%	10%	NO	
35	Red River gum	18%	33%	10%	10%	NO	
36	Myoporum	21%	33%	15%	15%	NO	
37	Myoporum	21%	33%	15%	15%	NO	
38	Myoporum	21%	33%	15%	15%	NO	
39	Myoporum	21%	33%	15%	15%	NO	
40	Myoporum	21%	33%	15%	15%	NO	
41	Myoporum	21%	33%	15%	15%	NO	
42	Myoporum	21%	33%	15%	15%	NO	
43	giant yucca	28%	33%	25%	25%	YES	?
44	deodar cedar	26%	33%	20%	25%	NO	
45	Red River gum	18%	33%	10%	10%	NO	
46	Red River gum	18%	33%	10%	10%	NO	
47	Red River gum	18%	33%	10%	10%	NO	
48	Red River gum	18%	33%	10%	10%	NO	
49	Red River gum	18%	33%	10%	10%	NO	
50	Red River gum	18%	33%	10%	10%	NO	

Table C Location Rating and Preservation List continued on next page

Table C: Location Rating and Preservation List:

On-site Tree 51 through 72

LOCATION						PRESERVATION	
ID	NAME	LOCATION	SITE	CONTRIBUT.	PLACEMENT	POSSIBLE	FEASIBLE
51	coast redwood	28%	33%	25%	25%	NO	
52	giant yucca	26%	33%	20%	25%	YES	?
53	giant yucca	26%	33%	20%	25%	YES	?
54	aloe tree	26%	33%	20%	25%	NO	
55	orange	26%	33%	20%	25%	NO	
56	orange	26%	33%	20%	25%	NO	
57	orange	26%	33%	20%	25%	NO	
58	privit	23%	33%	20%	15%	NO	
59	privit	23%	33%	20%	15%	NO	
60	privit	23%	33%	20%	15%	NO	
61	privit	23%	33%	20%	15%	NO	
62	privit	23%	33%	20%	15%	NO	
63	privit	23%	33%	20%	15%	NO	
64	privit	23%	33%	20%	15%	NO	
65	privit	23%	33%	20%	15%	NO	
66	privit	23%	33%	20%	15%	NO	
67	privit	23%	33%	20%	15%	NO	
68	privit	23%	33%	20%	15%	NO	
69	privit	23%	33%	20%	15%	NO	
70	privit	23%	33%	20%	15%	NO	
71	Myoporum	18%	33%	10%	10%	NO	
72	Red River gum	18%	33%	10%	10%	NO	

End of On-site Tree Location Rating and Preservation List

Off-site trees shown on next page

Table C: Location Rating and Preservation List:

Off-site Tree 73 through 76

Four off-site trees that raise safety concerns and were appraised for possible removal.

ID	NAME	LOCATION	SITE	CONTRIBUT.	PLACEMENT	POSSIBLE	FEASIBLE
TOTAL							
73*	Red River gum	18%	33%	10%	10%	?	NO
74*	Red River gum	18%	33%	10%	10%	?	NO
75*	Red River gum	16%	33%	5%	10%	?	NO
76*	Red River gum	16%	33%	5%	10%	?	NO

(LOCATION: ID through PLACEMENT; PRESERVATION: POSSIBLE, FEASIBLE)

End of Table C: Off-site Tree Location Rating and Preservation List

Preservation (off-site)

First I did a general assessment of the tree and assigned it a condition rating. Next I considered whether construction would have an impact on the 24 trees adjacent this lot. The answer was yes for 21 of 24 trees. Next I made note of what the impact would be.

This information is presented in **Table D: Off-site Tree List: Health and Construction Impact** shown on the next page.

Table D: Off-site Tree List: Health and Construction Impact:

Of f-site: 73* through 96*

OFF-SITE TREE LIST: NAME, HEALTH, CONSTRUCTION IMPACT, NOTE

ID	NAME	CONDITION	CONSTRUCT. IMPACT	NOTE
73*	Red River gum	POOR	YES	Roots, trunk, canopy damaged, wind loads changed
74*	Red River gum	POOR	YES	Wind loads changed
75*	Red River gum	POOR	YES	Wind loads changed
76*	Red River gum	POOR	YES	Wind loads changed
77*	Red River gum	POOR	YES	Wind loads might be changed
78*	Red River gum	POOR	YES	Wind loads might be changed
79*	Red River gum	POOR	YES	Wind loads might be changed
80*	queen palm	GOOD	YES	Canopy extends over prop. line
81*	queen palm	GOOD	YES	Canopy extends over prop. line
82*	avocado	FAIR	YES	Canopy and rootzone extend over prop. line
83*	peach	POOR	YES	Canopy extends over prop. line
84*	peach	POOR	YES	Canopy extends over prop. line
85*	peach	POOR	YES	Canopy extends over prop. line
86*	peach	POOR	YES	Canopy extends over prop. line
87*	peach	POOR	YES	Canopy extends over prop. line
88*	peach	POOR	YES	Canopy extends over prop. line
89*	peach	POOR	YES	Canopy extends over prop. line
90*	peach	POOR	YES	Canopy extends over prop. line
91*	avocado	FAIR	YES	Canopy and rootzone extend over prop. Line
92*	peach	POOR	YES	Canopy extends over prop. line
93*	bronze loquat	FAIR	YES	Canopy extends over prop. line
94*	orange	FAIR	NO	
95*	orange	FAIR	NO	
96*	privet	FAIR	NO	Canopy extends over prop. line

End of Off-site Tree List: Name, Health, Construction impact, Note: 73 through 96**

Discussion

Map Location and ID Number

The survey identified 72 trees on site and 24 trees off-site. Maps showing each tree can be found in Appendix A to this report.

Photo

Photos of all 96 trees can be seen in Appendix B to this report.

Species

The Species of each tree appraised was used to look up the Species Rating which reduced each trees' Basic Tree Cost which is based on size alone. The 96 trees surveyed included 10 species. The species and species rating are summarized in Table A: Species List found in the Analysis section of this report.

Size

Size (area of the trunk in inches at 4.5 feet above grade.) was used to calculate the Basic Tree Cost for each tree appraised. The size of each tree appraised can be found in **Table B: Tree Size and Health (Condition)** found in the Analysis section of this report.

Condition (Health & Structural Integrity)

A Condition Rating was calculated for each tree appraised. Condition Rating is a measure of the tree's health and structural integrity. The Condition Rating of each tree appraised can be found in **Table B: Tree Size and Health (Condition)** found in the Analysis section of this report. For specific information about each tree see can be found in **Table B: Tree Size and Health (Condition)** found in the Analysis section of this report and Appendix C Tree Appraisal Worksheet.

Location

A Location Rating was calculated for each tree appraised. Location Rating is a combined measure of three factors: Site, Contribution, and Placement. The Location Rating of each tree appraised can be found in **Table C: On-site Tree Location Rating and Preservation List:** found in the Analysis section of this report and Appendix C Tree Appraisal Worksheet.

Preservation

Of the 72 trees on-site none can be preserved in place. Preservation information about each tree appraised can be found in **Table C: Tree Location Rating and Preservation List:** found in the Analysis section of this report and Appendix C Tree Appraisal Worksheet.

Appraised Value

The information gathered about each tree was used to calculate the appraised value of each tree. The value of each tree is shown in the Conclusion section of this report in Table F Tree Appraised Value List

Mitigation

Mitigation for lost trees is found in the conclusions section of this report.

Mitigation of the safety risk posed by off-site trees is addressed in the conclusions and Recommendation section of this report.

Conclusions

Map Location and ID Number

The survey identified 72 trees on site and 24 trees off-site. Maps showing each tree can be found in Appendix A to this report.

Photo

Photos of all 96 trees can be seen in Appendix B to this report.

Species

The Species of each tree appraised was used to look up the Species Rating which reduced each trees' Basic Tree Cost which is based on size alone. The 96 trees surveyed included 10 species. The species and species rating are summarized in **Table A: Species List** found in the Analysis section of this report.

Size

Size (area of the trunk in inches at 4.5 feet above grade.) was used to calculate the Basic Tree Cost for each tree appraised. The size of each tree appraised can be found in **Table B: Tree Size and Health (Condition)** found in the Analysis section of this report.

Most off-site trees were not appraised because it is clear that those trees will not need to be removed. I made an exception for off-site trees 73*, 74*, 75* and 76*. I appraised those four eucalyptus trees only to provide information on their value to the owners of both lots. The owner of those trees is responsible for deciding whether to remove them.

The other 20 off-site trees will not need to be removed so their size was not measured.

Condition (Health & Structural Integrity)

A Condition Rating was calculated for each tree appraised. Condition Rating is a measure of the tree's health and structural integrity. Like a trees Species Rating, the Condition Rating may reduce the Basic Tree Cost which is based on size alone. The Condition Rating of each tree appraised can be found in **Table B: Tree Size and Health (Condition)** found in the Analysis section of this report.

The health of the 20 off-site trees was assessed as a record of their condition prior to construction. A summary of their condition can be seen in **Table D: Off-site Tree List: Name, Health, Construction Impact, Note: 73* through 96*** in the Analysis section of this report.

Location

A Location Rating was calculated for each tree appraised. Location Rating is a combined measure of three factors: Site, Contribution, and Placement. Like a trees Species Rating and Condition Rating, the Location Rating may reduce the Basic Tree Cost which is based on size alone. The Location Rating of each tree appraised can be found in **Table C: On-site Tree Location Rating and Preservation List:** found in the Analysis section of this report.

Preservation

Of the 72 trees on-site none can be preserved in place. It would not be possible to successfully relocate 69 of the trees. Only the three giant yucca trees could be moved but moving them is not feasible because it would cost more to dig, box, transport, store and plant them than the trees are worth. Given the value of the yuccas as measured by the Trunk Formula Method it is not feasible to preserve them.

None of the on-site trees should be preserved.

Of the 24 off-site trees four eucalyptus should be considered for removal because removing the adjacent eucalyptus trees will probably make them unstable. The trees are trees 73* and 74* may experience direct mechanical damage as a result of removing on-site tree 72. Trees 75* and 76* have large dead branches and trunks so they are already at a high risk of failure. Removing the adjacent windrow will introduce new wind loads to these four trees that they may not be adapted to handle. The result can be failure of large branches, dead trunks or the entire tree.

To preserve off-site eucalyptus trees 77*, 78* and 79* the trees need to be pruned to reduce risk. Removing the adjacent windrow will introduce new wind loads and it may take a few years for the canopies to adjust and strengthen. Tree 79* has large over extended branches that should be reduced to reduce the risk of failure. There is a lot of dead wood and dangerous hanging branches that need to be removed from these three trees. They are right over a path for school children. Decisions about the pruning of these trees must be made by the owners of the trees.

The other 17 off-site trees can be easily preserved. Routine care and pruning should be coordinated with the owners of those trees as is needed. For a list of tasks needed to preserve the off-site trees, see Table E: Off-site- Tree Preservation List on the next page.

Table E: Off-site- Tree Preservation List:

Off-site Trees 73* - 96*

OFF-SITE TREE LIST: REMOVE, PRESERVE, PROTECT

ID	NAME	REMOVE	PROTECT	POST SIGN	PRUNE TO CLEAN	REDUCE BRANCHES	FOLLOW-UP RISK INSPEC.	REMARKS
73*	Red River gum	YES						MAJOR CHANGES TO WIND LOADS
74*	Red River gum	YES						MAJOR CHANGES TO WIND LOADS
75*	Red River gum	YES						MAJOR CHANGES TO WIND LOADS
76*	Red River gum	YES						MAJOR CHANGES TO WIND LOADS
77*	Red River gum		YES	YES	YES		YES	MINOR CHANGES TO WIND LOADS
78*	Red River gum		YES	YES	YES		YES	MINOR CHANGES TO WIND LOADS
79*	Red River gum		YES	YES	YES	YES	YES	MINOR CHANGES TO WIND LOADS, PRUNE
80*	queen palm		YES	YES				
81*	queen palm		YES	YES				
82*	avocado		YES	YES			YES	MAY LOSE UP TO 25% OF ITS FEEDER ROOTS
83*	peach		YES	YES				CANOPY MAY EXTEND OVER P/L , AVOID CONTACT
84*	peach		YES	YES				CANOPY MAY EXTEND OVER P/L , AVOID CONTACT
85*	peach		YES	YES				CANOPY MAY EXTEND OVER P/L , AVOID CONTACT
86*	peach		YES	YES				CANOPY MAY EXTEND OVER P/L , AVOID CONTACT
87*	peach		YES	YES				CANOPY MAY EXTEND OVER P/L , AVOID CONTACT
88*	peach		YES	YES				CANOPY MAY EXTEND OVER P/L , AVOID CONTACT
89*	peach		YES	YES				CANOPY MAY EXTEND OVER P/L , AVOID CONTACT
90*	peach		YES	YES				CANOPY MAY EXTEND OVER P/L , AVOID CONTACT
91*	avocado		YES	YES			YES	MAY LOSE UP TO 25% OF ITS FEEDER ROOTS
92*	peach		YES	YES				CANOPY MAY EXTEND OVER P/L , AVOID CONTACT
93*	bronze loquat		YES	YES				CANOPY MAY EXTEND OVER P/L , AVOID CONTACT
94*	orange		YES	YES				AVOID CONTACT
95*	orange		YES	YES				AVOID CONTACT
96*	privet		YES	YES				OK TO SHEAR TO P/L

Appraised Value

Appraised Value of the on-site trees slated for removal is $45,070.

Appraised Value of the four off-site trees recommended for removal is $6,410.

The Appraised Value of each tree is shown in Table F Tree Appraised Value List starting on the next page.

Table F: Tree Appraised Value List:

On-site Trees 1 - 25

APPRAISED VALUE: TRUNK FORMULA METHOD | **PRESERVATION**

ID	NAME	TRK AREA	SPECIES RATING	HEALTH	LOCATION	VALUE	POSSIBLE	FEASIBLE
1	Lombardy poplar	147	10%	40%	24%	$ 70	NO	NO
2	Lombardy poplar	77	10%	44%	24%	$ 50	NO	NO
3	Lombardy poplar	35	10%	44%	24%	$ 30	NO	NO
4	Lombardy poplar	147	10%	44%	24%	$ 80	NO	NO
5	Lombardy poplar	77	10%	44%	24%	$ 50	NO	NO
6	Lombardy poplar	35	10%	40%	24%	$ 20	NO	NO
7	Lombardy poplar	147	10%	40%	24%	$ 70	NO	NO
8	Lombardy poplar	77	10%	44%	24%	$ 50	NO	NO
9	Lombardy poplar	35	10%	40%	24%	$ 20	NO	NO
10	Lombardy poplar	147	10%	44%	24%	$ 80	NO	NO
11	coast live oak	58	90%	40%	26%	$ 450	NO	NO
12	Lombardy poplar	337	10%	44%	24%	$ 170	NO	NO
13	Lombardy poplar	147	10%	40%	24%	$ 70	NO	NO
14	Lombardy poplar	77	10%	40%	24%	$ 40	NO	NO
15	Lombardy poplar	35	10%	40%	24%	$ 20	NO	NO
16	Lombardy poplar	147	10%	44%	24%	$ 80	NO	NO
17	Lombardy poplar	77	10%	44%	24%	$ 50	NO	NO
18	Lombardy poplar	35	10%	44%	24%	$ 30	NO	NO
19	Lombardy poplar	147	10%	40%	24%	$ 70	NO	NO
20	Lombardy poplar	77	10%	44%	24%	$ 50	NO	NO
21	Lombardy poplar	35	10%	40%	24%	$ 20	NO	NO
22	Lombardy poplar	147	10%	44%	24%	$ 80	NO	NO
23	Lombardy poplar	77	10%	40%	24%	$ 40	NO	NO
24	Lombardy poplar	35	10%	44%	24%	$ 30	NO	NO
25	Lombardy poplar	147	10%	44%	24%	$ 80	NO	NO

Tree Appraised Value List continued on next page

Table F: Tree Appraised Value List:

On-site Trees 26 - 50

APPRAISED VALUE: TRUNK FORMULA METHOD | **PRESERVATION**

ID	NAME	TRK AREA	SPECIES RATING	HEALTH	LOCATION	VALUE	POSSIBLE	FEASIBLE
26	Lombardy poplar	77	10%	44%	24%	$ 50	NO	NO
27	Lombardy poplar	35	10%	40%	24%	$ 20	NO	NO
28	Lombardy poplar	67	10%	40%	24%	$ 40	NO	NO
29	Red River gum	1,018	40%	36%	18%	$ 1,630	NO	NO
30	Red River gum	452	40%	32%	18%	$ 660	NO	NO
31	Red River gum	452	40%	32%	18%	$ 660	NO	NO
32	Red River gum	1,018	40%	32%	18%	$ 1,450	NO	NO
33	Red River gum	616	40%	28%	18%	$ 780	NO	NO
34	Red River gum	1,385	40%	32%	18%	$ 1,970	NO	NO
35	Red River gum	7,238	40%	36%	18%	$ 11,450	NO	NO
36	Myoporum	62	60%	36%	21%	$ 230	NO	NO
37	Myoporum	103	60%	36%	21%	$ 340	NO	NO
38	Myoporum	113	60%	36%	21%	$ 370	NO	NO
39	Myoporum	87	60%	36%	21%	$ 300	NO	NO
40	Myoporum	61	60%	36%	21%	$ 230	NO	NO
41	Myoporum	27	60%	36%	21%	$ 130	NO	NO
42	Myoporum	104	60%	36%	21%	$ 350	NO	NO
43	giant yucca	113	10%	60%	28%	$ 130	YES	NO
44	deodar cedar	645	90%	48%	26%	$ 4,640	NO	NO
45	Red River gum	1,018	40%	36%	18%	$ 1,630	NO	NO
46	Red River gum	1,385	40%	36%	18%	$ 2,210	NO	NO
47	Red River gum	1,810	40%	32%	18%	$ 2,560	NO	NO
48	Red River gum	1,018	40%	32%	18%	$ 1,450	NO	NO
49	Red River gum	1,257	40%	36%	18%	$ 2,010	NO	NO
50	Red River gum	1,018	40%	36%	18%	$ 1,630	NO	NO

Tree Appraised Value List continued on next page

Table F: Tree Appraised Value List:

On-site Trees 51 - 72

APPRAISED VALUE: TRUNK FORMULA METHOD | **PRESERVATION**

ID	NAME	TRK AREA	SPECIES RATING	HEALTH	LOCATION	VALUE	POSSIBLE	FEASIBLE
51	coast redwood	562	80%	32%	28%	$ 1,880	NO	NO
52	giant yucca	133	10%	60%	26%	$ 140	YES	NO
53	giant yucca	95	10%	60%	26%	$ 110	YES	NO
54	aloe tree	201	10%	60%	26%	$ 210	NO	NO
55	orange	39	30%	52%	26%	$ 180	NO	NO
56	orange	39	30%	52%	26%	$ 180	NO	NO
57	orange	39	30%	52%	26%	$ 180	NO	NO
58	privit	33	30%	40%	23%	$ 90	NO	NO
59	privit	33	30%	40%	23%	$ 90	NO	NO
60	privit	33	30%	40%	23%	$ 90	NO	NO
61	privit	33	30%	40%	23%	$ 90	NO	NO
62	privit	33	30%	40%	23%	$ 90	NO	NO
63	privit	33	30%	40%	23%	$ 90	NO	NO
64	privit	33	30%	40%	23%	$ 90	NO	NO
65	privit	33	30%	40%	23%	$ 90	NO	NO
66	privit	33	30%	40%	23%	$ 90	NO	NO
67	privit	33	30%	40%	23%	$ 90	NO	NO
68	privit	33	30%	40%	23%	$ 90	NO	NO
69	privit	33	30%	40%	23%	$ 90	NO	NO
70	privit	33	30%	40%	23%	$ 90	NO	NO
71	Myoporum	24	60%	32%	18%	$ 90	NO	NO
72	Red River gum	1,385	40%	36%	18%	$ 2,210	NO	NO
TOTAL ON-SITE TREE VALUE						**$ 45,070**		

End of On-site Tree Appraised Value List Off-site-site Tree Appraised Value List on next page

Table F: Tree Appraised Value List:

Off-site Trees: 73 through 76

APPRAISED VALUE: TRUNK FORMULA METHOD / **PRESERVATION**

ID	NAME	TRK AREA	SPECIES RATING	HEALTH	LOCATION	VALUE		POSSIBLE	FEASIBLE
73*	Red River gum	1,188	40%	36%	18%	$	1,900	?	NO
74*	Red River gum	1,319	40%	36%	18%	$	2,110	?	NO
75*	Red River gum	1,188	40%	36%	16%	$	1,720	?	NO
76*	Red River gum	462	40%	36%	16%	$	680	?	NO
TOTAL OFF-SITE						**$**	**6,410**		

End of **Table F: Tree Appraised Value List:**

Table G: Tree Value by Species List

On-Site: 1 to 72

ON-SITE TREES APPRAISED VALUE BY SPECIES LIST

SPECIES	NAME	QUANITY	NATIVE	TOTAL VALUE FOR SPECIES
Aloe barberae	aloe tree	1		$ 210
Cedrus deodara	deodar cedar	1		$ 4,640
Citrus sinensis	orange tree	3		$ 540
Eucalyptus camaldulensis	Red River gum	14		$ 32,300
Ligustrum japonicum	privit	13		$ 1,170
Myoporum laetum	myoporum	8		$ 2,040
Populus nigra 'Italica'	Lombardy poplar	27		$ 1,460
Quercus agrifolia	coast live oak	1	YES	$ 450
Sequoia sempervirens	coast redwood	1		$ 1,880
Yucca eliphantipies	giant yucca	3		$ 380
		Total Appraised Value		**$ 45,070**

Total On-site Trees = 72

Total On-site Species = 10

Total On-site Native Trees = 1

Table G: Tree Value by Species List

Off-Site: 73*, 74*, 75*, 76*

OFF-SITE TREES APPRAISED VALUE BY SPECIES LIST

SPECIES	NAME	QUANITY	NATIVE	TOTAL VALUE FOR SPECIES
Eucalyptus camaldulensis		4		$ 6,410
		Total Appraised Value		**$ 6,410**

Total Off-site Trees = 4

Total Off-site Species = 1

Total Off-site Native Trees = 0

Mitigation

Mitigation to compensate for the loss of trees is a policy decision by the city so the owner should consult with city authorities. In the past, the City of Oxnard has required the owner to mitigate the loss of trees by providing more trees and larger trees than are required by the landscape ordinance. The value of the larger trees and additional trees is equal to the appraised value of the lost trees in this case: $45,070.

The city landscape ordinance dictates a minimum number of trees based on the site plan. That number is calculated by the landscape architect and reviewed by the city. The standard size is a 24” box.

When you use a larger tree size at planting the difference between the cost of a 24” box and the larger tree is considered mitigation. A 24” box tree costs $275 installed. A 36” box costs $675. The difference of $400 is mitigation.

The landscape architects normally creates a table on the planting plans that track mitigation. The following installed cost should be used to develop a mitigation table:

15-gallon: $100
24” box:.................$275
36” box $675
48” box................$1600
60” box................$3000
72” box..............$5,500

Money is also needed to mitigate the hazard posed by 7 eucalyptus trees on the adjacent lot: 73* through 79*. Perhaps the city would consider allowing some of the mitigation funds to be used to reduce the risks posed by the remnant of the eucalyptus windrow on the adjacent lot. That’s just my suggestion, not city policy.

Reducing the risk of the remaining eucalyptus along Etting Road to the west of this lot needs to be agreed to by the owner of those trees. Trees the size and condition of the remaining pose a risk to the walk way for school children proposed along the west property line. I recommend a careful risk assessment of all the eucalyptus along Etting that are within 150 feet of your lot. An ISA Level II Risk Assessment will identify faults and make recommendations as appropriate. Most of those eucalyptus will need pruned to clean dead branches and pruned to reduce over extended scaffold branches.

Recommendations

1. 72 trees on the site of this proposed development should be removed.
2. Preservation or relocation of these 72 trees is not feasible.
3. The appraised value of the trees to be removed is $45,070.
4. The owner should coordinate with the City of Oxnard about the procedure to mitigate (or compensate) for the loss of 72 trees worth $45,070. In the past, the City has required owners to mitigate the loss by spending an equal amount on new trees in addition to the minimum landscaping requirements set by law.
5. The owner should coordinate with the City and the project landscape architect to develop a procedure to track and verify mitigation compensation. In the past this has been accomplished with a "Mitigation Table" shown on the landscape plans.
6. The following installed cost should be used to develop a mitigation table:

15-gallon:	$100
24" box:	$275
36" box	$675
48" box	$1600
60" box	$3000
72" box	$5,500

7. The owner should confer with the owners of the lot to the west of this property about how to best mitigate the safety risk posed by four eucalyptus trees numbers 73*, 74*, 75* and 76*. Dead branches and trunks in those four trees pose a safety risk for both properties and the risk of failure will be increased by removing the eucalyptus windrow

to the east of these four trees. I recommend removing these four trees. Make sure all parties have agreed in writing before doing anything to affect these four trees.

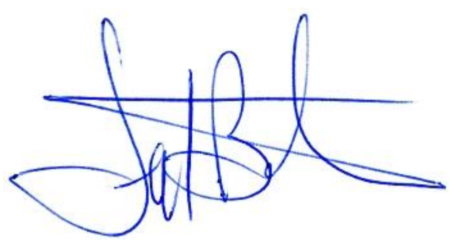
8. The owner should confer with the owners of the lot to the west of this property about how to mitigate the safety risk posed by three eucalyptus trees numbers 77*, 78* and 79*. Dead branches and over extended branches in those three trees pose a safety risk for both properties and the risk of failure will be increased by removing the eucalyptus windrow to the east of these three trees. I recommend doing an ISA Level II Risk Assessment of these three trees to determine the best ways to mitigate the risk. Based on my limited assessment, these trees will need to be pruned to clean the dead wood and reduce their overextended scaffold branches. Make sure all parties have agreed in writing before doing anything to affect these three trees.
9. Preserve 17 off-site trees numbers 80* through 96* located along the east side of the property. Post a warning sign on the masonry wall or fence in front of each tree. Signs should be in both English and Spanish and conform to the size and wording described in Appendix D Warning Signs.
10. Coordinate ongoing maintenance and care of trees 80* through 96* with the owners of the properties where the trees are planted. Pruning should be agreed to in writing by both parties. Pruning should follow national standards as described in ANSI A300(Part 1)-2008 Pruning and the ISA companion publication “Best Management Practices Tree Pruning (Revised 2008).
11. Any work done to remove or prune trees should be done in accordance with ANSI Z133.1 safety standard.

Certification

PREMISES: Senior Living and Apartment Community Pleasant Valley Road Oxnard, California

I, John Burke, CERTIFY to the best of my knowledge and belief:

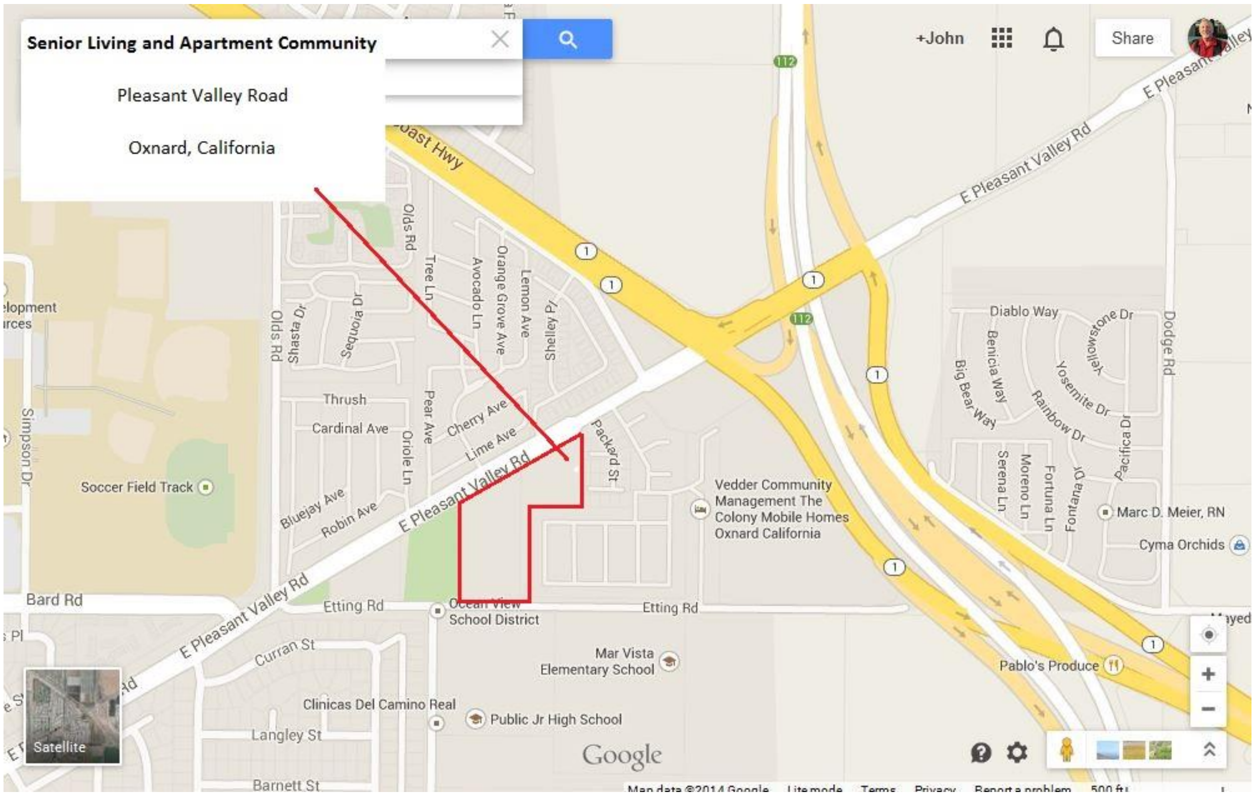
1. That the statements of fact contained in this plant appraisal are true and correct.
2. That the appraisal analysis, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and that they are my personal, unbiased professional analysis, opinions and conclusions.
3. That I have no present of prospective interest in the plants that are the subject of this appraisal, and that I have no personal interest or bias with respect to the parties involved.
4. That my compensation is not contingent upon predetermined value or direction in value that favors the cause of the client, the amount of the value estimate, the attainment of a stipulated result, or the occurrence of a subsequent event.



Date: 3-31-14

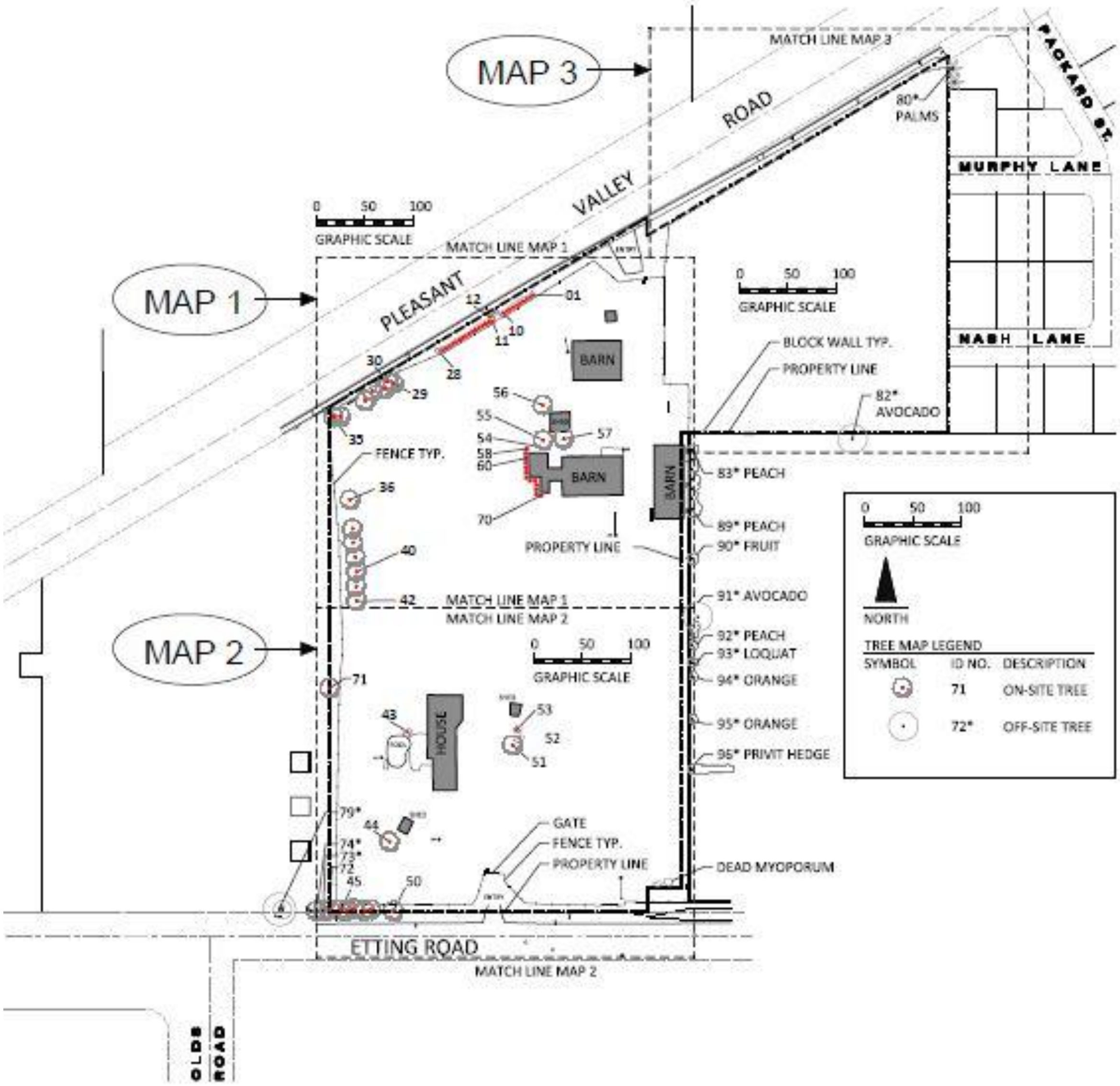
John Burke
Landscape Architect 5251
ISA Certified Arborist WE-8327A

Location Map (Oriented with north at top)



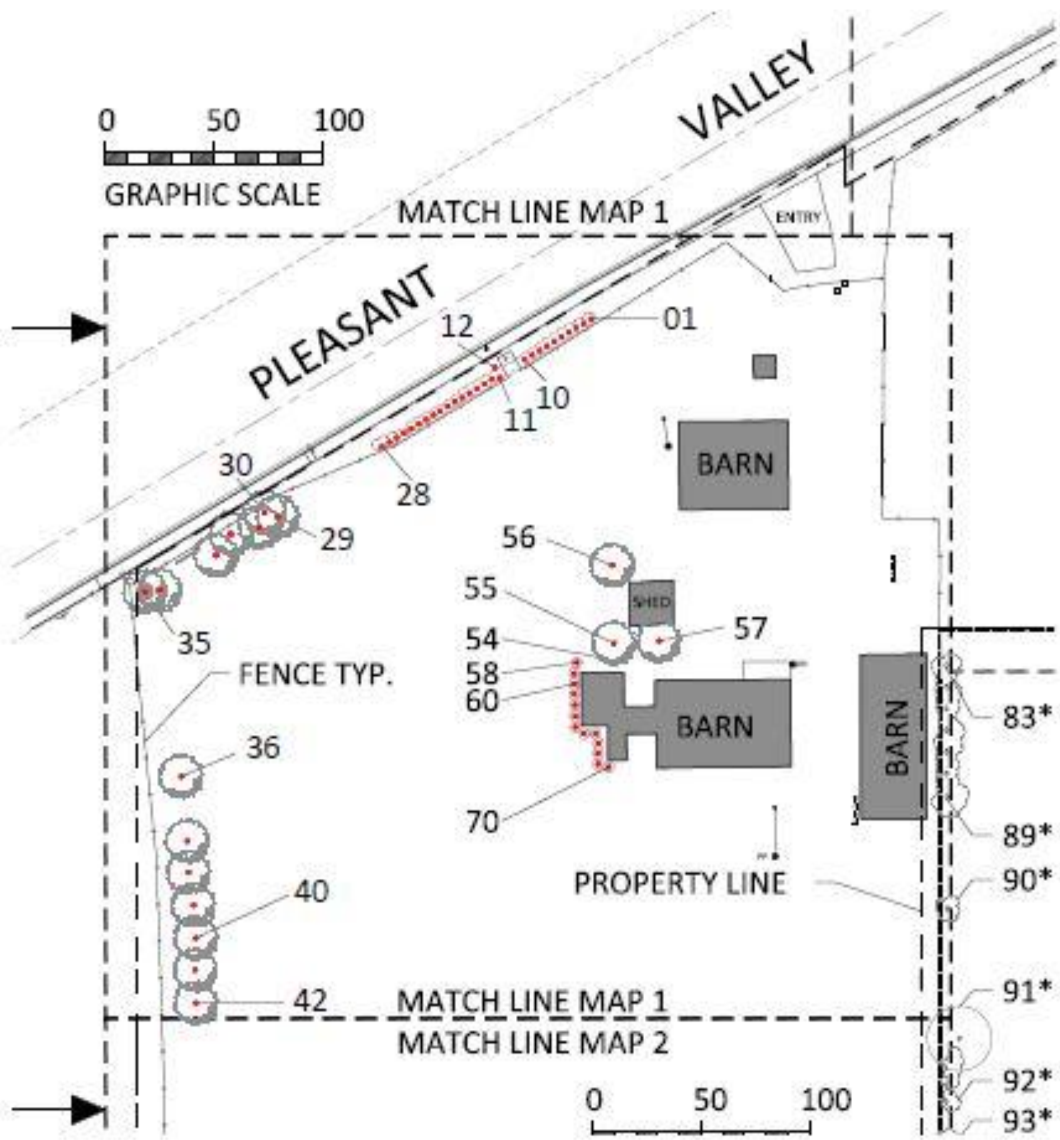
Tree Key Map

(Oriented with north at top)



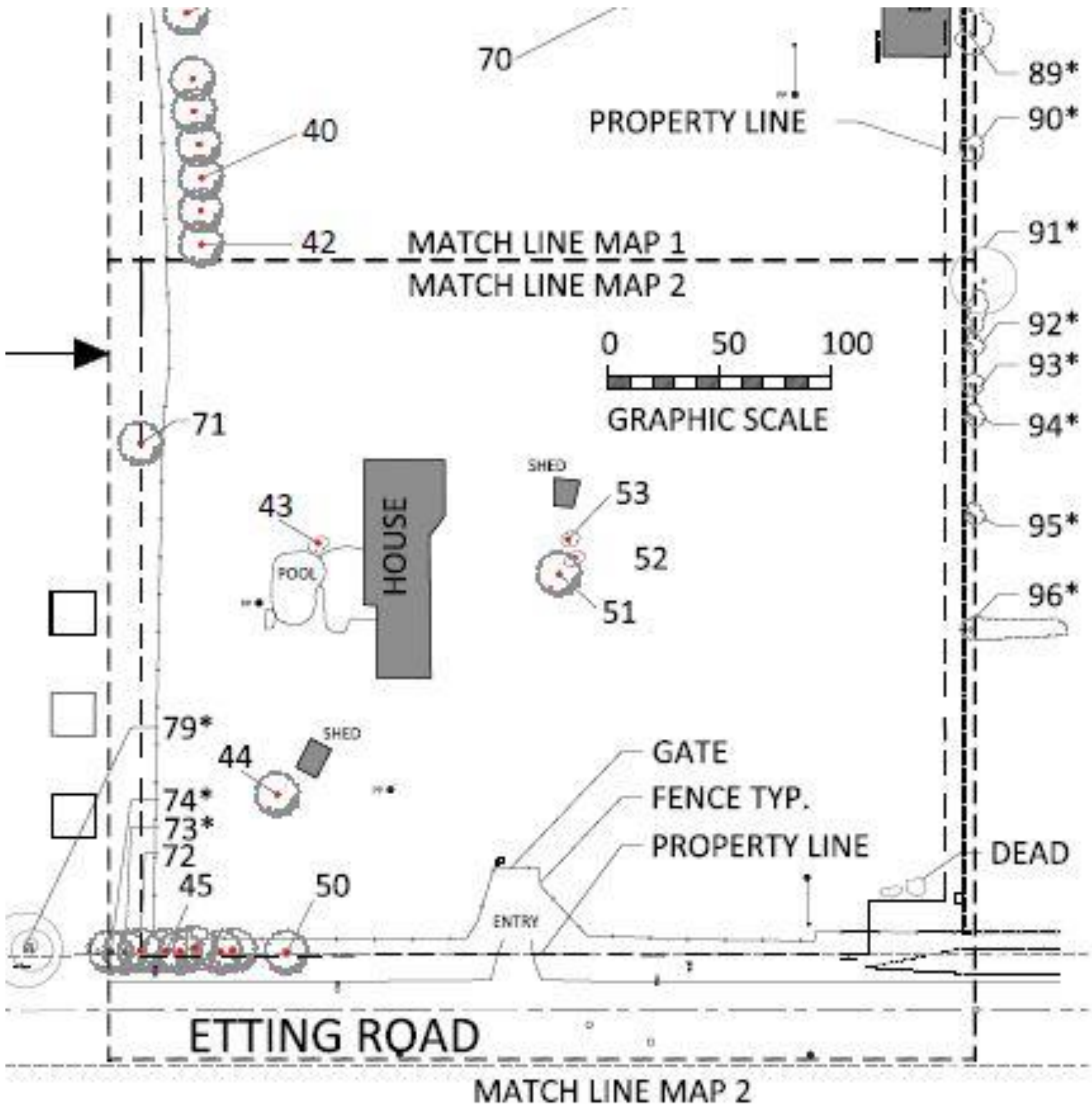
Tree Map 1

(Oriented with north at top)



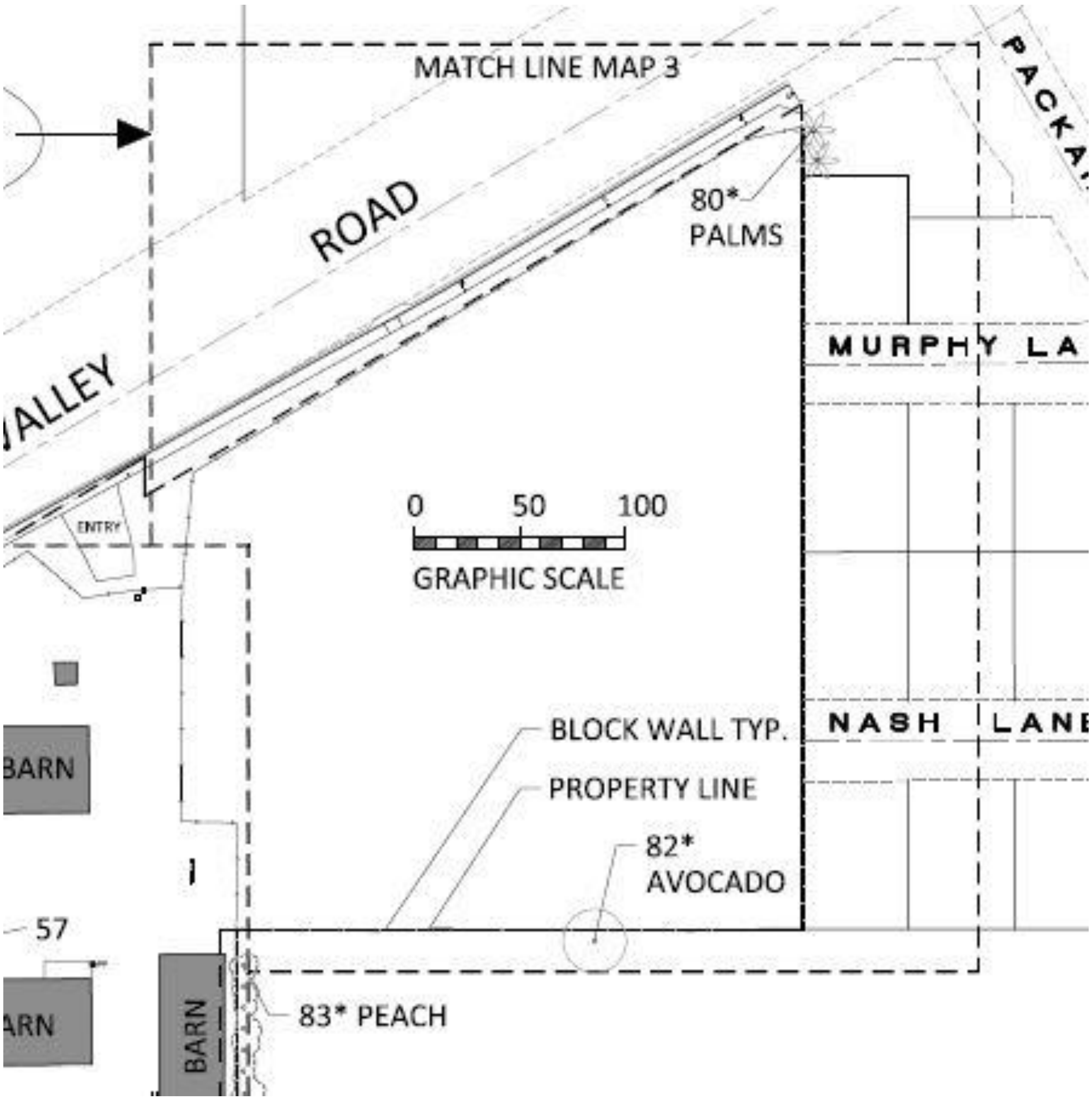
Tree Map 2

(Oriented with north at top)

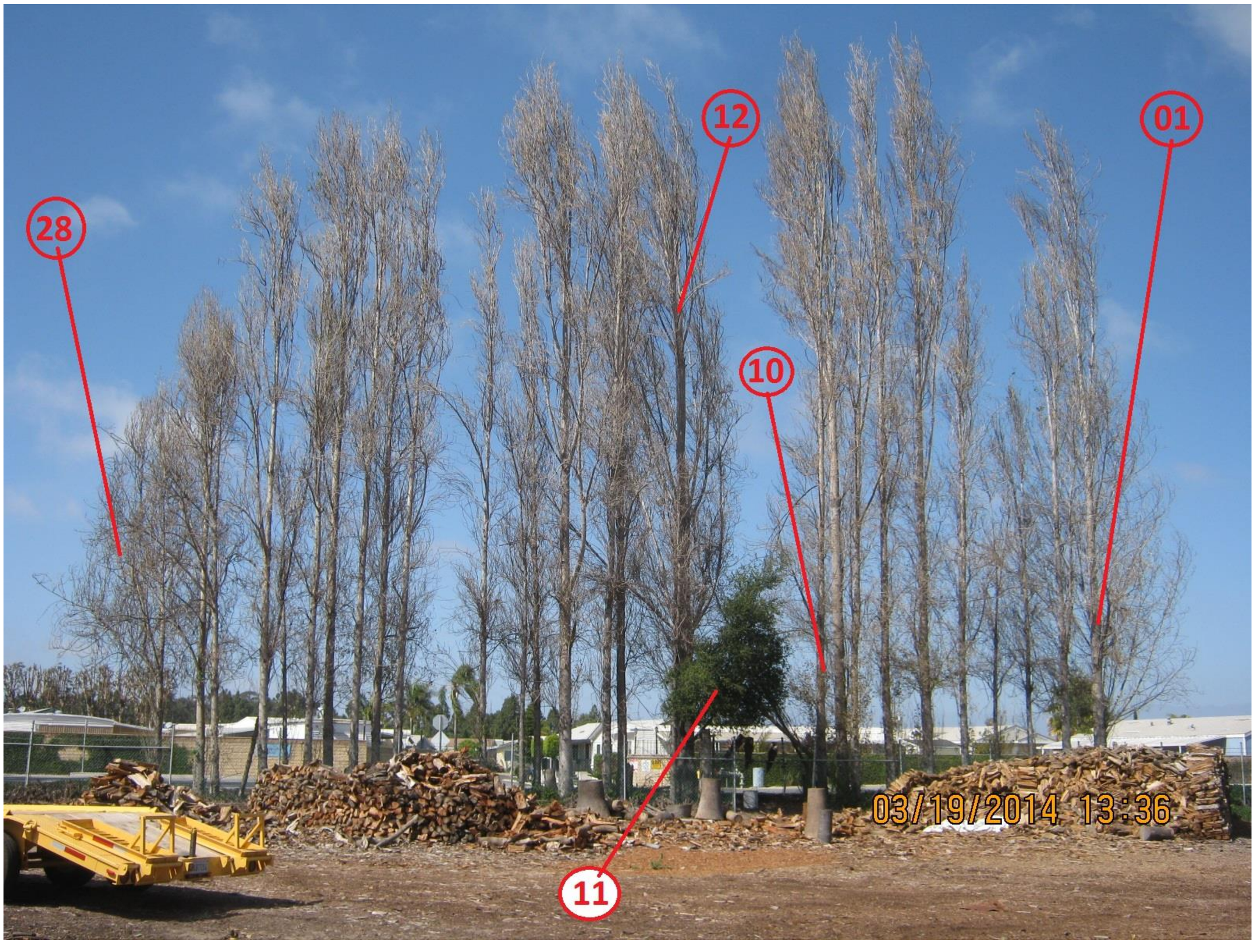


Tree Map 3

(Oriented with north at top)



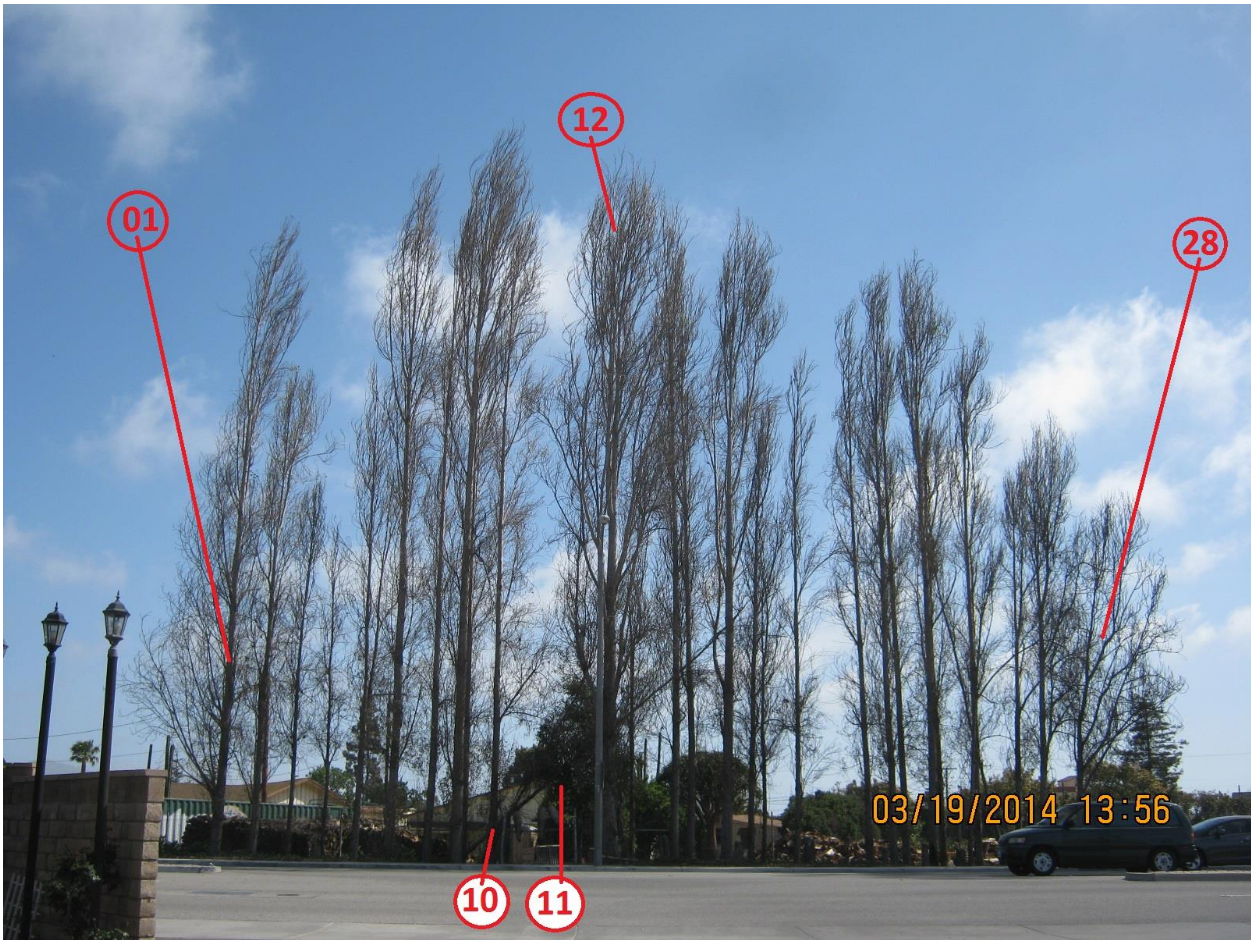
TREE IMAGE 1



Above: looking north at windrow of Lombardy poplars and evergreen live oak #11

Tree Numbers 01 - 28

TREE IMAGE 2



Above: looking south at windrow of Lombardy poplars and evergreen live oak #11

Tree Numbers 01 - 28

TREE IMAGE 3

Above: looking north at windrow of *Eucalyptus c*. (Red River gum)

Tree Numbers 29 - 35

TREE IMAGE 4

Above: looking south at windrow of *Eucalyptus c*. (Red River gum) beside Pleasant Valley Road

Tree Numbers 29 - 35

TREE IMAGE 5

Above: looking south at hedgerow of Myoporum

Tree Numbers 36 - 37

TREE IMAGE 6

Above: looking south at hedgerow of Myoporum

Tree Numbers 37 - 40

TREE IMAGE 7

Above: looking north at hedgerow of Myoporum

Tree Numbers 40- 42

TREE IMAGE 8

Above: looking east at yucca tree

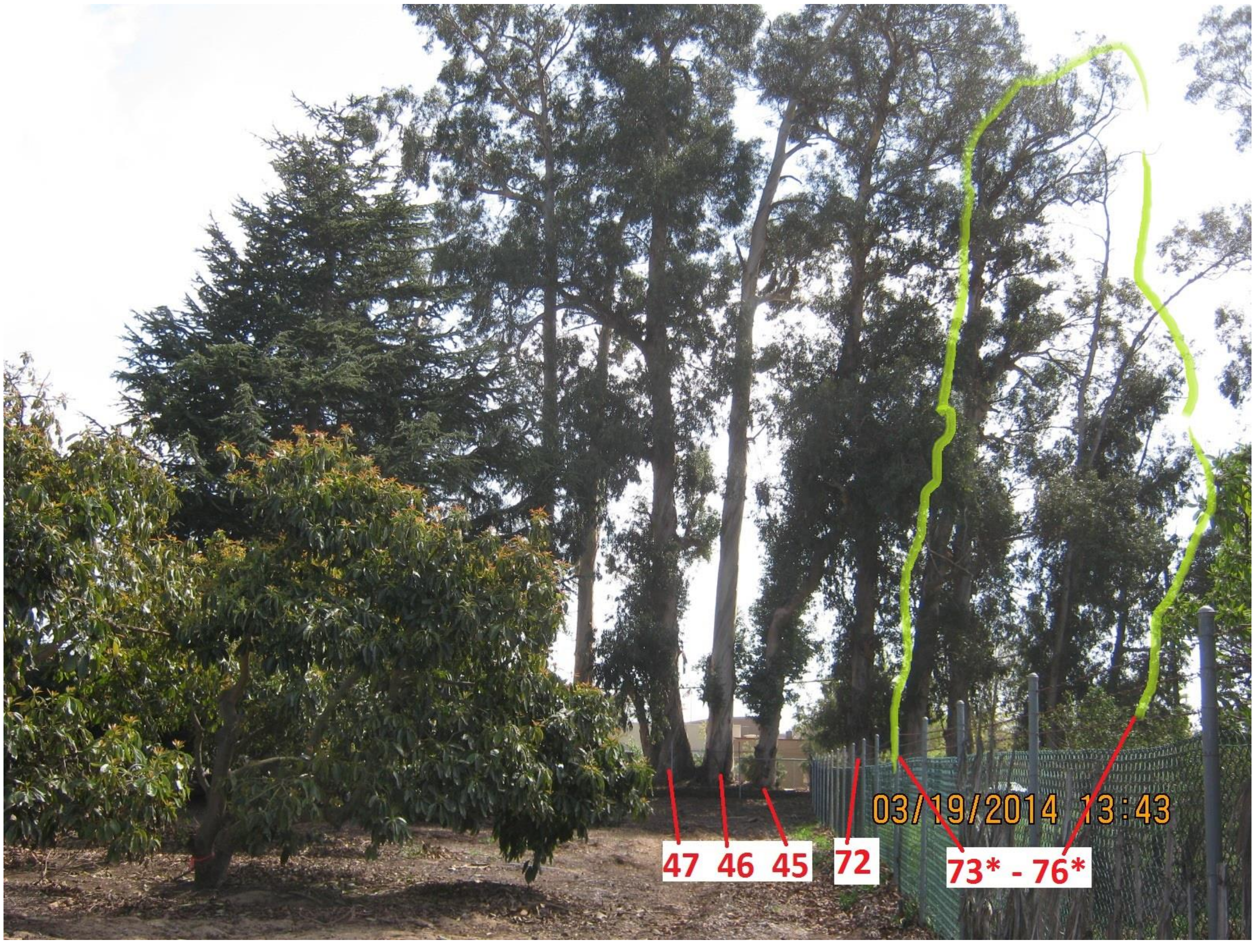
Tree Number 43

TREE IMAGE 9

Above: looking northwest at Deodar cedar

Tree Number 44

TREE IMAGE 10



Above: looking south at windrow of *Eucalyptus c*. (Red River gum) beside Etting Road

Tree Numbers 45 – 47, 72, 73* - 76*

TREE IMAGE 11

Above: looking south at windrow of *Eucalyptus c*. (Red River gum) beside Etting Road

Tree Numbers 45 - 50

TREE IMAGE 12

Above: looking north at coast redwood #51

Tree Numbers 51

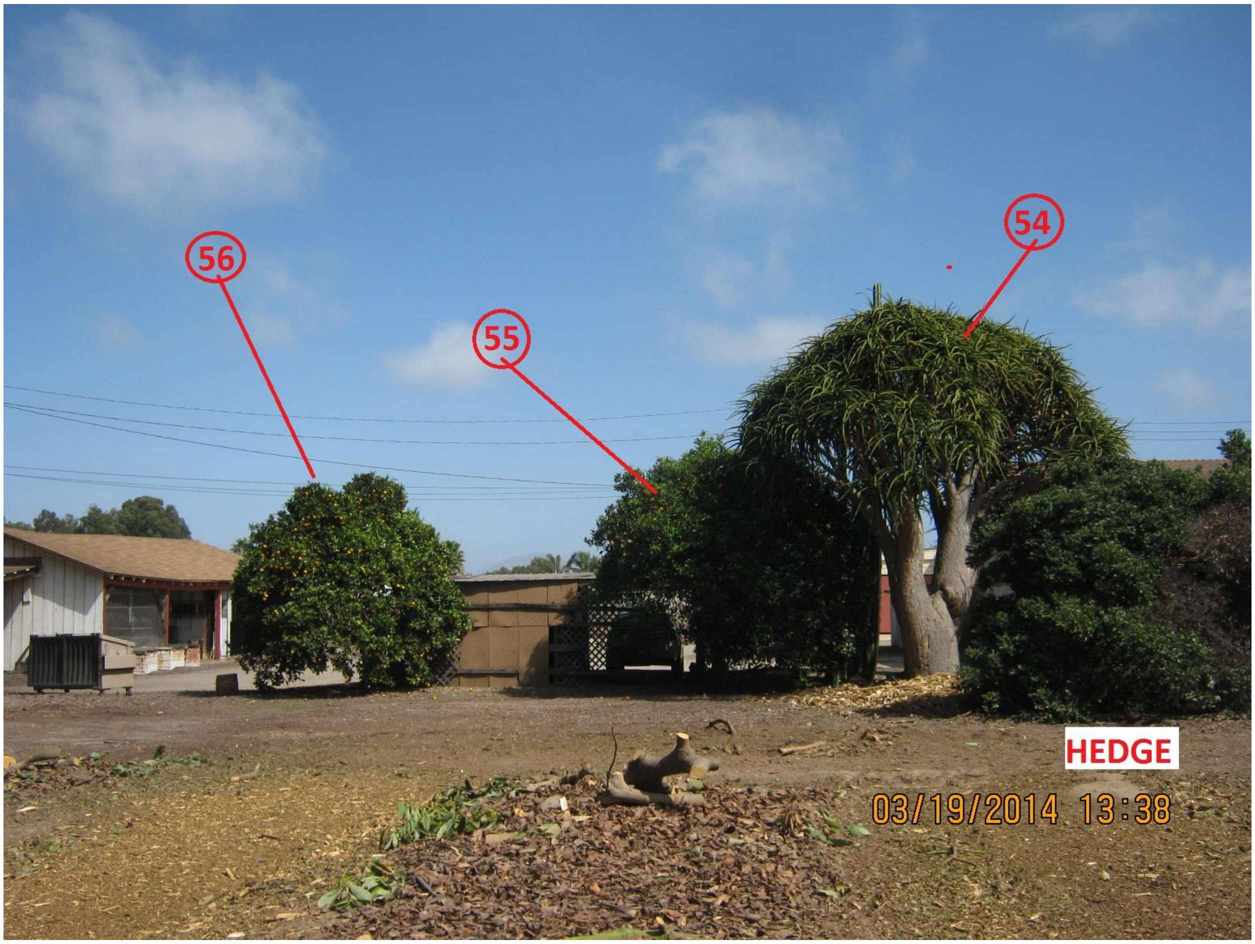
TREE IMAGE 13

Above: looking east at yucca trees below coast redwood

Tree Numbers 52 - 53

Senior Living and Apartment Community, Pleasant Valley Road, Oxnard, California

TREE IMAGE 14



Above: looking east at orange trees and giant aloe tree

Tree Numbers 54 - 56

TREE IMAGE 15

Above: looking west at orange trees and giant aloe tree

Tree Numbers 54 - 57

TREE IMAGE 16

Above: looking east at Ligustrum hedge

Tree Numbers 58 - 70

TREE IMAGE 17

Above: looking west at Myoporum 71

Tree Numbers 71

TREE IMAGE 18

Above: looking south at Red River gum trees

Tree Numbers 72, 73* - 79*

TREE IMAGE 19

Above: looking south at off-site Red River gum trees

Tree Numbers 73* - 79*

TREE IMAGE 20

Above: looking north at queen palms off-site

Tree Numbers 80* - 81*

TREE IMAGE 21

Above: looking east at avocado tree off-site

Tree Numbers 82*

TREE IMAGE 22

Above: looking south at peach trees off-site

Tree Numbers 83* - 89*

TREE IMAGE 23

Above: looking north at peach trees off-site

Tree Numbers 83* - 89*

TREE IMAGE 24

Above: looking south at fruit tree and avocado off-site

Tree Numbers 90*, 91*

TREE IMAGE 25

Above: looking northeast at peach tree off-site

Tree Numbers 92*

TREE IMAGE 26

Above: looking south at bronze loquat tree off-site

Tree Numbers 93*

TREE IMAGE 27

Above: looking south at orange tree off-site

Tree Numbers 94*

TREE IMAGE 28

Above: looking east at orange tree off-site

Tree Numbers 95*

TREE IMAGE 29

Above: looking east at privet hedge off-site

Tree Numbers 96*

LAST TREE IN STUDY

Tree Appraisal Worksheet Trees: 1 - 7

FIELD OBSERVATION ID NUMBER	1	2	3	4	5	6	7
HEIGHT	45	35	25	25	35	50	65
WIDTH	5	5	5	5	5	5	5
1 SPECIES	*Populus nigra 'Italica'*	*Populus nigra 'Italica'*	*Populus nigra 'Italica'*	*Populus nigra 'Italica'*	*Populus nigra 'Italica'*	*Populus nigra 'Italica'*	*Populus nigra 'Italica'*
	Lombardy poplar	Lombardy poplar	Lombardy poplar	Lombardy poplar	Lombardy poplar	Lombardy poplar	Lombardy poplar
NOTE							
NUMBER OF TRUNKS	1	1	1	1	1	1	1
2 TRUNK DIAMETER	13.7	9.9	6.7	13.7	9.9	6.7	13.7
MULTI TRUNK DBH							
MULTI TRUNK EQUIVALENT DBH							
MULTI PALM TRUNK HEIGHTS							
PALM - FEET OF BROWN TRUNK							
3 CONDITON PERCENTAGE	40%	44%	44%	44%	44%	40%	40%
ROOTS	2	2	2	2	2	2	2
TRUNK	2	2	2	2	2	2	2
SCAFFOLD BRANCHES	2	2	2	2	2	2	2
SMALL BRANCHES	2	2	2	2	2	2	2
FOILIAGE	2	3	3	3	3	2	2
CONDITON DESCRIPTION	POOR	POOR	POOR	POOR	POOR	POOR	POOR
4 LOCATION PERCENTAGE	24%	24%	24%	24%	24%	24%	24%
SITE	33%	33%	33%	33%	33%	33%	33%
CONTRIBUTION	25%	25%	25%	25%	25%	25%	25%
PLACEMENT	15%	15%	15%	15%	15%	15%	15%
REGIONAL PLANT COMMITTEE INPUT							
5 SPECIES RATING	10%	10%	10%	10%	10%	10%	10%
NURSERY GROUP	4	4	4	4	4	4	4
6 REPLACEMENT TREE TRK. AREA	33.17	33.17	33.17	33.17	33.17	33.17	33.17
7 REPLACEMENT TREE COST	$ 1,482	$ 1,482	$ 1,482	$ 1,482	$ 1,482	$ 1,482	$ 1,482
8 INSTALLATION COST	$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ 1,300
9 INSTALLED COST (#7 + #8)	$ 2,782	$ 2,782	$ 2,782	$ 2,782	$ 2,782	$ 2,782	$ 2,782
10 UNIT TREE / PALM COST	$ 45	$ 45	$ 45	$ 45	$ 45	$ 45	$ 45
CALCULATION FROM APPRAISAL HANDBOOK							
11 APPRAISED TRUNK AREA	147	77	35	147	77	35	147
12 APPRAISED TRUNK INCREASE (#11 - #6)	114	43	2	114	43	2	114
13 BASIC TREE COST(#12 x #10 + #9)	$ 7,917	$ 4,734	$ 2,870	$ 7,917	$ 4,734	$ 2,870	$ 7,917
14 APPRAISED VALUE (#13 x #5 x #3 x #4)	$ 70	$ 50	$ 30	$ 80	$ 50	$ 20	$ 70
GRAND TOTAL: $ 45,070							

Tree Appraisal Worksheet continued on next page:

Tree Appraisal Worksheet Trees: 8 - 14

FIELD OBSERVATION	ID NUMBER	8	9	10	11	12	13	14
	HEIGHT	65	60	55	15	65	55	55
	WIDTH	5	5	5	12	5	5	5
1	SPECIES	*Populus nigra 'Italica'*	*Populus nigra 'Italica'*	*Populus nigra 'Italica'*	*Quercus agrifolia*	*Populus nigra 'Italica'*	*Populus nigra 'Italica'*	*Populus nigra 'Italica'*
		Lombardy poplar	Lombardy poplar	Lombardy poplar	coast live oak	Lombardy poplar	Lombardy poplar	Lombardy poplar
	NOTE							
	NUMBER OF TRUNKS	1	1	1	1	1	1	1
2	TRUNK DIAMETER	9.9	6.7	13.7	8.6	20.7	13.7	9.9
	MULTI TRUNK DBH							
	MULTI TRUNK EQUIVALENT DBH							
	MULTI PALM TRUNK HEIGHTS							
	PALM - FEET OF BROWN TRUNK							
3	CONDITON PERCENTAGE	44%	40%	44%	40%	44%	40%	40%
	ROOTS	2	2	2	2	2	2	2
	TRUNK	2	2	2	2	2	2	2
	SCAFFOLD BRANCHES	2	2	2	2	2	2	2
	SMALL BRANCHES	2	2	2	2	2	2	2
	FOILIAGE	3	2	3	2	3	2	2
	CONDITON DESCRIPTION	POOR	POOR	POOR	POOR	POOR	POOR	POOR
4	LOCATION PERCENTAGE	24%	24%	24%	26%	24%	24%	24%
	SITE	33%	33%	33%	33%	33%	33%	33%
	CONTRIBUTION	25%	25%	25%	30%	25%	25%	25%
	PLACEMENT	15%	15%	15%	15%	15%	15%	15%
REGIONAL PLANT COMMITTEE INPUT								
5	SPECIES RATING	10%	10%	10%	90%	10%	10%	10%
	NURSERY GROUP	4	4	4	3	4	4	4
6	REPLACEMENT TREE TRK. AREA	33.17	33.17	33.17	23.75	33.17	33.17	33.17
7	REPLACEMENT TREE COST	$ 1,482	$ 1,482	$ 1,482	$ 1,482	$ 1,482	$ 1,482	$ 1,482
8	INSTALLATION COST	$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ 1,300
9	INSTALLED COST (#7 + #8)	$ 2,782	$ 2,782	$ 2,782	$ 2,782	$ 2,782	$ 2,782	$ 2,782
10	UNIT TREE / PALM COST	$ 45	$ 45	$ 45	$ 62	$ 45	$ 45	$ 45
CALCULATION FROM APPRAISAL HANDBOOK								
11	APPRAISED TRUNK AREA	77	35	147	58	337	147	77
12	APPRAISED TRUNK INCREASE (#11 - #6)	43	2	114	34	303	114	43
13	BASIC TREE COST(#12 x #10 + #9)	$ 4,734	$ 2,870	$ 7,917	$ 4,910	$ 16,434	$ 7,917	$ 4,734
14	APPRAISED VALUE (#13 x #5 x #3 x #4)	$ 50	$ 20	$ 80	$ 450	$ 170	$ 70	$ 40
	GRAND TOTAL: $ 45,070							

Tree Appraisal Worksheet continued on next page:

Tree Appraisal Worksheet Trees: 15 - 21

FIELD OBSERVATION	ID NUMBER	15	16	17	18	19	20	21
	HEIGHT	55	55	50	50	40	50	45
	WIDTH	5	5	5	5	5	5	5
1	SPECIES	*Populus nigra 'Italica'*	*Populus nigra 'Italica'*	*Populus nigra 'Italica'*	*Populus nigra 'Italica'*	*Populus nigra 'Italica'*	*Populus nigra 'Italica'*	*Populus nigra 'Italica'*
		Lombardy poplar	Lombardy poplar	Lombardy poplar	Lombardy poplar	Lombardy poplar	Lombardy poplar	Lombardy poplar
	NOTE							
	NUMBER OF TRUNKS	1	1	1	1	1	1	1
2	TRUNK DIAMETER	6.7	13.7	9.9	6.7	13.7	9.9	6.7
	MULTI TRUNK DBH							
	MULTI TRUNK EQUIVALENT DBH							
	MULTI PALM TRUNK HEIGHTS							
	PALM - FEET OF BROWN TRUNK							
3	CONDITON PERCENTAGE	40%	44%	44%	44%	40%	44%	40%
	ROOTS	2	2	2	2	2	2	2
	TRUNK	2	2	2	2	2	2	2
	SCAFFOLD BRANCHES	2	2	2	2	2	2	2
	SMALL BRANCHES	2	2	2	2	2	2	2
	FOILIAGE	2	3	3	3	2	3	2
	CONDITON DESCRIPTION	POOR	POOR	POOR	POOR	POOR	POOR	POOR
4	LOCATION PERCENTAGE	24%	24%	24%	24%	24%	24%	24%
	SITE	33%	33%	33%	33%	33%	33%	33%
	CONTRIBUTION	25%	25%	25%	25%	25%	25%	25%
	PLACEMENT	15%	15%	15%	15%	15%	15%	15%
REGIONAL PLANT COMMITTEE INPUT								
5	SPECIES RATING	10%	10%	10%	10%	10%	10%	10%
	NURSERY GROUP	4	4	4	4	4	4	4
6	REPLACEMENT TREE TRK. AREA	33.17	33.17	33.17	33.17	33.17	33.17	33.17
7	REPLACEMENT TREE COST	$ 1,482	$ 1,482	$ 1,482	$ 1,482	$ 1,482	$ 1,482	$ 1,482
8	INSTALLATION COST	$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ 1,300
9	INSTALLED COST (#7 + #8)	$ 2,782	$ 2,782	$ 2,782	$ 2,782	$ 2,782	$ 2,782	$ 2,782
10	UNIT TREE / PALM COST	$ 45	$ 45	$ 45	$ 45	$ 45	$ 45	$ 45
CALCULATION FROM APPRAISAL HANDBOOK								
11	APPRAISED TRUNK AREA	35	147	77	35	147	77	35
12	APPRAISED TRUNK INCREASE (#11 - #6)	2	114	43	2	114	43	2
13	BASIC TREE COST(#12 x #10 + #9)	$ 2,870	$ 7,917	$ 4,734	$ 2,870	$ 7,917	$ 4,734	$ 2,870
14	APPRAISED VALUE (#13 x #5 x #3 x #4)	$ 20	$ 80	$ 50	$ 30	$ 70	$ 50	$ 20
	GRAND TOTAL: $ 45,070							

Tree Appraisal Worksheet continued on next page:

Tree Appraisal Worksheet Trees: 22 - 28

FIELD OBSERVATION	ID NUMBER	22	23	24	25	26	27	28
	HEIGHT	45	45	40	40	40	35	35
	WIDTH	5	5	5	5	5	5	5
1 SPECIES		*Populus nigra 'Italica'*	*Populus nigra 'Italica'*	*Populus nigra 'Italica'*	*Populus nigra 'Italica'*	*Populus nigra 'Italica'*	*Populus nigra 'Italica'*	*Populus nigra 'Italica'*
		Lombardy poplar	Lombardy poplar	Lombardy poplar	Lombardy poplar	Lombardy poplar	Lombardy poplar	Lombardy poplar
	NOTE							
	NUMBER OF TRUNKS	1	1	1	1	1	1	1
2 TRUNK DIAMETER		13.7	9.9	6.7	13.7	9.9	6.7	9.2
	MULTI TRUNK DBH							
	MULTI TRUNK EQUIVALENT DBH							
	MULTI PALM TRUNK HEIGHTS							
	PALM - FEET OF BROWN TRUNK							
3 CONDITON PERCENTAGE		44%	40%	44%	44%	44%	40%	40%
	ROOTS	2	2	2	2	2	2	2
	TRUNK	2	2	2	2	2	2	2
	SCAFFOLD BRANCHES	2	2	2	2	2	2	2
	SMALL BRANCHES	2	2	2	2	2	2	2
	FOILIAGE	3	2	3	3	3	2	2
	CONDITON DESCRIPTION	POOR	POOR	POOR	POOR	POOR	POOR	POOR
4 LOCATION PERCENTAGE		24%	24%	24%	24%	24%	24%	24%
	SITE	33%	33%	33%	33%	33%	33%	33%
	CONTRIBUTION	25%	25%	25%	25%	25%	25%	25%
	PLACEMENT	15%	15%	15%	15%	15%	15%	15%
REGIONAL PLANT COMMITTEE INPUT								
5 SPECIES RATING		10%	10%	10%	10%	10%	10%	10%
	NURSERY GROUP	4	4	4	4	4	4	4
6 REPLACEMENT TREE TRK. AREA		33.17	33.17	33.17	33.17	33.17	33.17	33.17
7 REPLACEMENT TREE COST		$ 1,482	$ 1,482	$ 1,482	$ 1,482	$ 1,482	$ 1,482	$ 1,482
8 INSTALLATION COST		$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ 1,300
9 INSTALLED COST (#7 + #8)		$ 2,782	$ 2,782	$ 2,782	$ 2,782	$ 2,782	$ 2,782	$ 2,782
10 UNIT TREE / PALM COST		$ 45	$ 45	$ 45	$ 45	$ 45	$ 45	$ 45
CALCULATION FROM APPRAISAL HANDBOOK								
11 APPRAISED TRUNK AREA		147	77	35	147	77	35	67
12 APPRAISED TRUNK INCREASE (#11 - #6)		114	43	2	114	43	2	34
13 BASIC TREE COST(#12 x #10 + #9)		$ 7,917	$ 4,734	$ 2,870	$ 7,917	$ 4,734	$ 2,870	$ 4,304
14 APPRAISED VALUE (#13 x #5 x #3 x #4)		$ 80	$ 40	$ 30	$ 80	$ 50	$ 20	$ 40
GRAND TOTAL: $	**45,070**							

Tree Appraisal Worksheet continued on next page:

Tree Appraisal Worksheet Trees: 29 - 35

FIELD OBSERVATION		ID NUMBER	29	30	31	32	33	34	35
		HEIGHT	100	90	85	85	85	90	90
		WIDTH	17	17	17	17	17	17	45
1	SPECIES		*Eucalyptus camaldulen- sis*	*Eucalyptus camaldulen- sis*	*Eucalyptus camaldulen- sis*	*Eucalyptus camaldulen- sis*	*Eucalyptus camaldulen- sis*	*Eucalyptus camaldulen- sis*	*Eucalyptus camaldulen- sis*
			Red River gum	Red River gum	Red River gum	Red River gum	Red River gum	Red River gum	Red River gum
		NOTE							
		NUMBER OF TRUNKS	1	2	3	4	5	6	7
2	TRUNK DIAMETER		36.0	24.0	24.0	36.0	28.0	42.0	96.0
		MULTI TRUNK DBH							
		MULTI TRUNK EQUIVALENT DBH							
		MULTI PALM TRUNK HEIGHTS							
		PALM - FEET OF BROWN TRUNK							
3	CONDITON PERCENTAGE		36%	32%	32%	32%	28%	32%	36%
		ROOTS	1	1	1	1	1	1	1
		TRUNK	2	2	2	2	1	2	2
		SCAFFOLD BRANCHES	1	1	1	1	1	1	1
		SMALL BRANCHES	2	2	2	2	2	2	2
		FOILIAGE	3	2	2	2	2	2	3
		CONDITON DESCRIPTION	POOR	POOR	POOR	POOR	POOR	POOR	POOR
4	LOCATION PERCENTAGE		18%	18%	18%	18%	18%	18%	18%
		SITE	33%	33%	33%	33%	33%	33%	33%
		CONTRIBUTION	10%	10%	10%	10%	10%	10%	10%
		PLACEMENT	10%	10%	10%	10%	10%	10%	10%
REGIONAL PLANT COMMITTEE INPUT									
5	SPECIES RATING		40%	40%	40%	40%	40%	40%	40%
		NURSERY GROUP	3	3	3	3	3	3	3
6	REPLACEMENT TREE TRK. AREA		23.75	23.75	23.75	23.75	23.75	23.75	23.75
7	REPLACEMENT TREE COST		$ 1,482	$ 1,482	$ 1,482	$ 1,482	$ 1,482	$ 1,482	$ 1,482
8	INSTALLATION COST		$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ 1,300
9	INSTALLED COST (#7 + #8)		$ 2,782	$ 2,782	$ 2,782	$ 2,782	$ 2,782	$ 2,782	$ 2,782
10	UNIT TREE / PALM COST		$ 62	$ 62	$ 62	$ 62	$ 62	$ 62	$ 62
CALCULATION FROM APPRAISAL HANDBOOK									
11	APPRAISED TRUNK AREA		1018	452	452	1018	616	1385	7238
12	APPRAISED TRUNK INCREASE (#11 - #6)		994	429	429	994	592	1362	7214
13	BASIC TREE COST(#12 x #10 + #9)		$ 64,418	$ 29,358	$ 29,358	$ 64,418	$ 39,486	$ 87,207	$ 450,080
14	APPRAISED VALUE (#13 x #5 x #3 x #4)		$ 1,630	$ 660	$ 660	$ 1,450	$ 780	$ 1,970	$ 11,450
	GRAND TOTAL: $	45,070							

Tree Appraisal Worksheet continued on next page:

Tree Appraisal Worksheet Trees: 36 - 42

FIELD OBSERVATION ID NUMBER	36	37	38	39	40	41	42
HEIGHT	15	15	15	15	20	20	25
WIDTH	15	15	15	15	15	15	15
1 SPECIES	*Myoporum laetum*	*Myoporum laetum*	*Myoporum laetum*	*Myoporum laetum*	*Myoporum laetum*	*Myoporum laetum*	*Myoporum laetum*
	Myoporum	Myoporum	Myoporum	Myoporum	Myoporum	Myoporum	Myoporum
NOTE							
NUMBER OF TRUNKS	1	1	2		3		2
2 TRUNK DIAMETER	8.9	11.5	12.0	10.5	8.8	5.9	11.5
MULTI TRUNK DBH			6, 10		5, 6, 4		8, 8
MULTI TRUNK EQUIVALENT DBH			12		9		
MULTI PALM TRUNK HEIGHTS							
PALM - FEET OF BROWN TRUNK							
3 CONDITON PERCENTAGE	36%	36%	36%	36%	36%	36%	36%
ROOTS	2	2	2	2	2	2	2
TRUNK	2	2	2	2	2	2	2
SCAFFOLD BRANCHES	2	2	2	2	2	2	2
SMALL BRANCHES	2	2	2	2	2	2	2
FOILIAGE	1	1	1	1	1	1	1
CONDITON DESCRIPTION	POOR	POOR	POOR	POOR	POOR	POOR	POOR
4 LOCATION PERCENTAGE	21%	21%	21%	21%	21%	21%	21%
SITE	33%	33%	33%	33%	33%	33%	33%
CONTRIBUTION	15%	15%	15%	15%	15%	15%	15%
PLACEMENT	15%	15%	15%	15%	15%	15%	15%
REGIONAL PLANT COMMITTEE INPUT							
5 SPECIES RATING	60%	60%	60%	60%	60%	60%	60%
NURSERY GROUP	3	3	3	3	3	3	3
6 REPLACEMENT TREE TRK. AREA	23.75	23.75	23.75	23.75	23.75	23.75	23.75
7 REPLACEMENT TREE COST	$ 1,482	$ 1,482	$ 1,482	$ 1,482	$ 1,482	$ 1,482	$ 1,482
8 INSTALLATION COST	$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ 1,300
9 INSTALLED COST (#7 + #8)	$ 2,782	$ 2,782	$ 2,782	$ 2,782	$ 2,782	$ 2,782	$ 2,782
10 UNIT TREE / PALM COST	$ 62	$ 62	$ 62	$ 62	$ 62	$ 62	$ 62
CALCULATION FROM APPRAISAL HANDBOOK							
11 APPRAISED TRUNK AREA	62	103	113	87	61	27	104
12 APPRAISED TRUNK INCREASE (#11 - #6)	39	79	89	63	37	4	80
13 BASIC TREE COST(#12 x #10 + #9)	$ 5,182	$ 7,710	$ 8,322	$ 6,688	$ 5,080	$ 3,000	$ 7,749
14 APPRAISED VALUE (#13 x #5 x #3 x #4)	$ 230	$ 340	$ 370	$ 300	$ 230	$ 130	$ 350
GRAND TOTAL: $ 45,070							

Tree Appraisal Worksheet continued on next page:

Tree Appraisal Worksheet Trees: 43 - 49

FIELD OBSERVATION	ID NUMBER	43	44	45	46	47	48	49
	HEIGHT	12	45	90	100	90	90	80
	WIDTH	7	25	20	20	20	20	20
1	SPECIES	*Yucca eliphant- ipies*	*Cedrus deodara*	*Eucalyptus camaldulen- sis*	*Eucalyptus camaldulen- sis*	*Eucalyptus camaldulen- sis*	*Eucalyptus camaldulen- sis*	*Eucalyptus camaldulen- sis*
		giant yucca	deodar cedar	Red River gum	Red River gum	Red River gum	Red River gum	Red River gum
	NOTE							
	NUMBER OF TRUNKS	1	1	1	1	1	1	1
2	TRUNK DIAMETER	12.0	28.7	36.0	42.0	48.0	36.0	40.0
	MULTI TRUNK DBH							
	MULTI TRUNK EQUIVALENT DBH							
	MULTI PALM TRUNK HEIGHTS							
	PALM - FEET OF BROWN TRUNK							
3	CONDITON PERCENTAGE	60%	48%	36%	36%	32%	32%	36%
	ROOTS	3	2	1	1	1	1	1
	TRUNK	3	3	2	2	2	2	2
	SCAFFOLD BRANCHES	3	2	1	1	1	1	1
	SMALL BRANCHES	3	2	2	2	2	2	2
	FOILIAGE	3	3	3	3	2	2	3
	CONDITON DESCRIPTION	FAIR	FAIR	POOR	POOR	POOR	POOR	POOR
4	LOCATION PERCENTAGE	28%	26%	18%	18%	18%	18%	18%
	SITE	33%	33%	33%	33%	33%	33%	33%
	CONTRIBUTION	25%	20%	10%	10%	10%	10%	10%
	PLACEMENT	25%	25%	10%	10%	10%	10%	10%
REGIONAL PLANT COMMITTEE INPUT								
5	SPECIES RATING	10%	90%	40%	40%	40%	40%	40%
	NURSERY GROUP	3	3	3	3	3	3	3
6	REPLACEMENT TREE TRK. AREA	23.75	23.75	23.75	23.75	23.75	23.75	23.75
7	REPLACEMENT TREE COST	$ 1,482	$ 1,482	$ 1,482	$ 1,482	$ 1,482	$ 1,482	$ 1,482
8	INSTALLATION COST	$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ 1,300
9	INSTALLED COST (#7 + #8)	$ 2,782	$ 2,782	$ 2,782	$ 2,782	$ 2,782	$ 2,782	$ 2,782
10	UNIT TREE / PALM COST	$ 62	$ 62	$ 62	$ 62	$ 62	$ 62	$ 62
CALCULATION FROM APPRAISAL HANDBOOK								
11	APPRAISED TRUNK AREA	113	645	1018	1385	1810	1018	1257
12	APPRAISED TRUNK INCREASE (#11 - #6)	89	621	994	1362	1786	994	1233
13	BASIC TREE COST(#12 x #10 + #9)	$ 8,322	$ 41,314	$ 64,418	$ 87,207	$ 113,502	$ 64,418	$ 79,221
14	APPRAISED VALUE (#13 x #5 x #3 x #4)	$ 130	$ 4,640	$ 1,630	$ 2,210	$ 2,560	$ 1,450	$ 2,010
	GRAND TOTAL: $ 45,070							

Tree Appraisal Worksheet continued on next page:

Tree Appraisal Worksheet Trees: 50 - 56

FIELD OBSERVATION	ID NUMBER	50	51	52	53	54	55	56
	HEIGHT	70	70	15	15	15	25	25
	WIDTH	20	30	12	12	12	25	25
1 SPECIES		*Eucalyptus camaldulen- sis*	*Sequoia semper- virens*	*Yucca eliphant- ipies*	*Yucca eliphant- ipies*	*Aloe barberae*	*Citrus sinensis*	*Citrus sinensis*
		Red River gum	coast redwood	giant yucca	giant yucca	aloe tree	orange	orange
	NOTE							
	NUMBER OF TRUNKS	1	1	3	2	3	1	1
2 TRUNK DIAMETER		36.0	26.8	13.0	11.0	16.0	7.0	7.0
	MULTI TRUNK DBH			4, 9, 8	7, 8	8, 6, 12		
	MULTI TRUNK EQUIVALENT DBH			13	11	16		
	MULTI PALM TRUNK HEIGHTS							
	PALM - FEET OF BROWN TRUNK							
3 CONDITON PERCENTAGE		36%	32%	60%	60%	60%	52%	52%
	ROOTS	1	2	3	3	3	3	3
	TRUNK	2	2	3	3	3	3	3
	SCAFFOLD BRANCHES	1	2	3	3	3	2	2
	SMALL BRANCHES	2	1	3	3	3	2	2
	FOILIAGE	3	1	3	3	3	3	3
	CONDITON DESCRIPTION	POOR	POOR	FAIR	FAIR	FAIR	FAIR	FAIR
4 LOCATION PERCENTAGE		18%	28%	26%	26%	26%	26%	26%
	SITE	33%	33%	33%	33%	33%	33%	33%
	CONTRIBUTION	10%	25%	20%	20%	20%	20%	20%
	PLACEMENT	10%	25%	25%	25%	25%	25%	25%
REGIONAL PLANT COMMITTEE INPUT								
5 SPECIES RATING		40%	80%	10%	10%	10%	30%	30%
	NURSERY GROUP	3	4	3	3	3	2	2
6 REPLACEMENT TREE TRK. AREA		23.75	33.17	23.75	23.75	23.75	17.71	17.71
7 REPLACEMENT TREE COST		$ 1,482	$ 1,482	$ 1,482	$ 1,482	$ 1,482	$ 1,482	$ 1,482
8 INSTALLATION COST		$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ 1,300
9 INSTALLED COST (#7 + #8)		$ 2,782	$ 2,782	$ 2,782	$ 2,782	$ 2,782	$ 2,782	$ 2,782
10 UNIT TREE / PALM COST		$ 62	$ 45	$ 62	$ 62	$ 62	$ 84	$ 84
CALCULATION FROM APPRAISAL HANDBOOK								
11 APPRAISED TRUNK AREA		1018	562	133	95	201	39	39
12 APPRAISED TRUNK INCREASE (#11 - #6)		994	529	109	71	177	21	21
13 BASIC TREE COST(#12 x #10 + #9)		$ 64,418	$ 26,582	$ 9,539	$ 7,202	$ 13,775	$ 4,533	$ 4,533
14 APPRAISED VALUE (#13 x #5 x #3 x #4)		$ 1,630	$ 1,880	$ 140	$ 110	$ 210	$ 180	$ 180
GRAND TOTAL: $ 45,070								

Tree Appraisal Worksheet continued on next page:

Tree Appraisal Worksheet Trees: 57 - 63

FIELD OBSERVATION	ID NUMBER	57	58	59	60	61	62	63
	HEIGHT	25	20	21	22	23	24	25
	WIDTH	25	5	6	7	8	9	10
1 SPECIES		*Citrus sinensis*	*Ligustrum japonicum*	*Ligustrum japonicum*	*Ligustrum japonicum*	*Ligustrum japonicum*	*Ligustrum japonicum*	*Ligustrum japonicum*
		orange	privit	privit	privit	privit	privit	privit
	NOTE							
	NUMBER OF TRUNKS	1	5	5	5	5	5	5
2 TRUNK DIAMETER		7.0	6.5	6.5	6.5	6.5	6.5	6.5
	MULTI TRUNK DBH		2.5 x 5	2.5 x 5	2.5 x 5	2.5 x 5	2.5 x 5	2.5 x 5
	MULTI TRUNK EQUIVALENT DBH		6.5	6.5	6.5	6.5	6.5	6.5
	MULTI PALM TRUNK HEIGHTS							
	PALM - FEET OF BROWN TRUNK							
3 CONDITON PERCENTAGE		52%	40%	40%	40%	40%	40%	40%
	ROOTS	3	2	2	2	2	2	2
	TRUNK	3	2	2	2	2	2	2
	SCAFFOLD BRANCHES	2	2	2	2	2	2	2
	SMALL BRANCHES	2	2	2	2	2	2	2
	FOILIAGE	3	2	2	2	2	2	2
	CONDITON DESCRIPTION	FAIR	POOR	POOR	POOR	POOR	POOR	POOR
4 LOCATION PERCENTAGE		26%	23%	23%	23%	23%	23%	23%
	SITE	33%	33%	33%	33%	33%	33%	33%
	CONTRIBUTION	20%	20%	20%	20%	20%	20%	20%
	PLACEMENT	25%	15%	15%	15%	15%	15%	15%
REGIONAL PLANT COMMITTEE INPUT								
5 SPECIES RATING		30%	30%	30%	30%	30%	30%	30%
	NURSERY GROUP	2	3	3	3	3	3	3
6 REPLACEMENT TREE TRK. AREA		17.71	23.75	23.75	23.75	23.75	23.75	23.75
7 REPLACEMENT TREE COST		$ 1,482	$ 1,482	$ 1,482	$ 1,482	$ 1,482	$ 1,482	$ 1,482
8 INSTALLATION COST		$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ 1,300
9 INSTALLED COST (#7 + #8)		$ 2,782	$ 2,782	$ 2,782	$ 2,782	$ 2,782	$ 2,782	$ 2,782
10 UNIT TREE / PALM COST		$ 84	$ 62	$ 62	$ 62	$ 62	$ 62	$ 62
CALCULATION FROM APPRAISAL HANDBOOK								
11 APPRAISED TRUNK AREA		39	33	33	33	33	33	33
12 APPRAISED TRUNK INCREASE (#11 - #6)		21	9	9	9	9	9	9
13 BASIC TREE COST(#12 x #10 + #9)		$ 4,533	$ 3,367	$ 3,367	$ 3,367	$ 3,367	$ 3,367	$ 3,367
14 APPRAISED VALUE (#13 x #5 x #3 x #4)		$ 180	$ 90	$ 90	$ 90	$ 90	$ 90	$ 90
GRAND TOTAL: $	**45,070**							

Tree Appraisal Worksheet continued on next page:

Tree Appraisal Worksheet Trees: 64 - 70

FIELD OBSERVATION	ID NUMBER	64	65	66	67	68	69	70
	HEIGHT	26	27	28	29	30	31	32
	WIDTH	11	12	13	14	15	16	17
1	SPECIES	*Ligustrum japonicum*	*Ligustrum japonicum*	*Ligustrum japonicum*	*Ligustrum japonicum*	*Ligustrum japonicum*	*Ligustrum japonicum*	*Ligustrum japonicum*
		privit	privit	privit	privit	privit	privit	privit
	NOTE							
	NUMBER OF TRUNKS	5	5	5	5	5	5	5
2	TRUNK DIAMETER	6.5	6.5	6.5	6.5	6.5	6.5	6.5
	MULTI TRUNK DBH	2.5 x 5	2.5 x 5	2.5 x 5	2.5 x 5	2.5 x 5	2.5 x 5	2.5 x 5
	MULTI TRUNK EQUIVALENT DBH	6.5	6.5	6.5	6.5	6.5	6.5	6.5
	MULTI PALM TRUNK HEIGHTS							
	PALM - FEET OF BROWN TRUNK							
3	CONDITON PERCENTAGE	40%	40%	40%	40%	40%	40%	40%
	ROOTS	2	2	2	2	2	2	2
	TRUNK	2	2	2	2	2	2	2
	SCAFFOLD BRANCHES	2	2	2	2	2	2	2
	SMALL BRANCHES	2	2	2	2	2	2	2
	FOILIAGE	2	2	2	2	2	2	2
	CONDITON DESCRIPTION	POOR	POOR	POOR	POOR	POOR	POOR	POOR
4	LOCATION PERCENTAGE	23%	23%	23%	23%	23%	23%	23%
	SITE	33%	33%	33%	33%	33%	33%	33%
	CONTRIBUTION	20%	20%	20%	20%	20%	20%	20%
	PLACEMENT	15%	15%	15%	15%	15%	15%	15%
REGIONAL PLANT COMMITTEE INPUT								
5	SPECIES RATING	30%	30%	30%	30%	30%	30%	30%
	NURSERY GROUP	3	3	3	3	3	3	3
6	REPLACEMENT TREE TRK. AREA	23.75	23.75	23.75	23.75	23.75	23.75	23.75
7	REPLACEMENT TREE COST	$ 1,482	$ 1,482	$ 1,482	$ 1,482	$ 1,482	$ 1,482	$ 1,482
8	INSTALLATION COST	$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ 1,300
9	INSTALLED COST (#7 + #8)	$ 2,782	$ 2,782	$ 2,782	$ 2,782	$ 2,782	$ 2,782	$ 2,782
10	UNIT TREE / PALM COST	$ 62	$ 62	$ 62	$ 62	$ 62	$ 62	$ 62
CALCULATION FROM APPRAISAL HANDBOOK								
11	APPRAISED TRUNK AREA	33	33	33	33	33	33	33
12	APPRAISED TRUNK INCREASE (#11 - #6)	9	9	9	9	9	9	9
13	BASIC TREE COST(#12 x #10 + #9)	$ 3,367	$ 3,367	$ 3,367	$ 3,367	$ 3,367	$ 3,367	$ 3,367
14	APPRAISED VALUE (#13 x #5 x #3 x #4)	$ 90	$ 90	$ 90	$ 90	$ 90	$ 90	$ 90
	GRAND TOTAL: $ 45,070							

Tree Appraisal Worksheet continued on next page:

Tree Appraisal Worksheet Trees: 71 - 72

FIELD OBSERVATION	ID NUMBER	71	72
	HEIGHT	12	60
	WIDTH	12	20
1	SPECIES	*Myoporum laetum*	*Eucalyptus camaldulen- sis*
		Myoporum	Red River gum
	NOTE		
	NUMBER OF TRUNKS	2	1
2	TRUNK DIAMETER	5.5	42.0
	MULTI TRUNK DBH	3, 3,3	
	MULTI TRUNK EQUIVALENT DBH	6	
	MULTI PALM TRUNK HEIGHTS		
	PALM - FEET OF BROWN TRUNK		
3	CONDITON PERCENTAGE	32%	36%
	ROOTS	2	1
	TRUNK	1	2
	SCAFFOLD BRANCHES	1	1
	SMALL BRANCHES	2	2
	FOILIAGE	2	3
	CONDITON DESCRIPTION	POOR	POOR
4	LOCATION PERCENTAGE	18%	18%
	SITE	33%	33%
	CONTRIBUTION	10%	10%
	PLACEMENT	10%	10%
REGIONAL PLANT COMMITTEE INPUT			
5	SPECIES RATING	60%	40%
	NURSERY GROUP	3	3
6	REPLACEMENT TREE TRK. AREA	23.75	23.75
7	REPLACEMENT TREE COST	$ 1,482	$ 1,482
8	INSTALLATION COST	$ 1,300	$ 1,300
9	INSTALLED COST (#7 + #8)	$ 2,782	$ 2,782
10	UNIT TREE / PALM COST	$ 62	$ 62
CALCULATION FROM APPRAISAL HANDBOOK			
11	APPRAISED TRUNK AREA	24	1385
12	APPRAISED TRUNK INCREASE (#11 - #6)	0	1362
13	BASIC TREE COST(#12 x #10 + #9)	$ 2,783	$ 87,207
14	APPRAISED VALUE (#13 x #5 x #3 x #4)	$ 90	$ 2,210
	GRAND TOTAL: $ 45,070		

End of On-Site Tree Appraisal Worksheet:

Off-Site Tree Appraisal Worksheet continued on next page:

Tree Appraisal Worksheet Off-Site Trees: 73* - 76*

FIELD OBSERVATION	ID NUMBER	73*	74*	75*	76*
	HEIGHT	60	55	50	50
	WIDTH	15	15	15	15
1 SPECIES		*Eucalyptus camaldulen- sis*	*Eucalyptus camaldulen- sis*	*Eucalyptus camaldulen- sis*	*Eucalyptus camaldulen- sis*
		Red River gum	Red River gum	Red River gum	Red River gum
	NOTE				
	NUMBER OF TRUNKS	1	1	1	1
2 TRUNK DIAMETER		36.0	40.0	36.0	14.0
	MULTI TRUNK DBH				
	MULTI TRUNK EQUIVALENT DBH				
	MULTI PALM TRUNK HEIGHTS				
	PALM - FEET OF BROWN TRUNK				
3 CONDITON PERCENTAGE		36%	36%	36%	36%
	ROOTS	1	1	1	1
	TRUNK	2	2	2	2
	SCAFFOLD BRANCHES	1	1	1	1
	SMALL BRANCHES	2	2	2	2
	FOILIAGE	3	3	3	3
	CONDITON DESCRIPTION	POOR	POOR	POOR	POOR
4 LOCATION PERCENTAGE		18%	18%	16%	16%
	SITE	33%	33%	33%	33%
	CONTRIBUTION	10%	10%	5%	5%
	PLACEMENT	10%	10%	10%	10%
REGIONAL PLANT COMMITTEE INPUT					
5 SPECIES RATING		40%	40%	40%	40%
	NURSERY GROUP	3	3	3	3
6 REPLACEMENT TREE TRK. AREA		23.75	23.75	23.75	23.75
7 REPLACEMENT TREE COST		$ 1,482	$ 1,482	$ 1,482	$ 1,482
8 INSTALLATION COST		$ 1,300	$ 1,300	$ 1,300	$ 1,300
9 INSTALLED COST (#7 + #8)		$ 2,782	$ 2,782	$ 2,782	$ 2,782
10 UNIT TREE / PALM COST		$ 62	$ 62	$ 62	$ 62
CALCULATION FROM APPRAISAL HANDBOOK					
11 APPRAISED TRUNK AREA		1188	1319	1188	462
12 APPRAISED TRUNK INCREASE (#11 - #6)		1164	1296	1164	438
13 BASIC TREE COST(#12 x #10 + #9)		$ 74,936	$ 83,117	$ 74,936	$ 29,942
14 APPRAISED VALUE (#13 x #5 x #3 x #4)		$ 1,900	$ 2,110	$ 1,720	$ 680
				OFF-SITE TOTAL	**$ 6,410**

End of Tree Appraisal Worksheets

Warning Signs

One English language and one Spanish language, readily-visible, durable, waterproof sign shall be installed on the wall in front of each tree or a group of trees should have 1 sign every 10 feet.

The size of each sign must be a minimum of 16 inches wide and must contain the wording below. The lettering in the word "WARNING" (and Spanish equivalent) must be in capital letters at least 2 inches in height; the phrase “TREE PROTECTION ZONE” must be in capital letters at least 1 inch; size; all other lettering must be at least ½ inch in size.

WARNING

TREE PROTECTION ZONE

Entry prohibited throughout the entire construction period

Do not dump liquids

Do not store equipment

Do not damage or prune branches

MEMO

PLANNING DIVISION

Attn: Kathleen Mallory, MA, AICP
LEED Green Associate / Principal Planner

214 South C Street
Oxnard, CA 93030
(805) 385-7858
(805) 385-7417 fax

September 11, 2014

Subject: *Arborist's Report* (3/31/2014) *for* PZ 14-500-04 and PZ 14-535-01

Project address:
Senior Living and Apartment Community
Ettinger Road and Pleasant Valley Road
Oxnard, CA

By: Brian D. Brodersen, Landscape Architect, CA #4880, Phone 805.201.5614

I have reviewed the arborist's tree report provided for the above project and offer the following corrections and comments.

Site Visit – A site visit was conducted with BA Arborist on September 8, 2014. We found that the site has been graded and cleared. Trees proposed to be removed were not present. A subsequent site meeting was attended on September 11, 2014.

Arborist's Report

1. Predominant Eucalyptus on site is Blue Gum, Eucalyptus globulus. Revise report accordingly.
2. The rating for the Deodar Cedar and Aloe tree appears to be low, given the documented size and pictures provided.
3. Tree protection notes for remaining trees are limited. Arborist to add tree protection requirements with specific measures to protect the canopy of the trees as well as root systems where applicable. (Such as fencing at critical root zone and hand pruning for roots greater than a designated caliper).

4. The overall approach for estimating tree value is acceptable.
5. Update report with addendum to document current conditions and information regarding each tree previously proposed for preservation, including the Deodar Cedar. Information to include whether tree was relocated or demolished.
6. Revised report to include a long term management plan for the Blue Gum trees. Risk assessment and maintenance at regular intervals is suggested.

In reviewing photographs and aerial data, it appears that there are a few trees that may have warranted consideration for incorporation into the proposed project design.

Addendum 1

Reply to Planners Comments dated September 11, 2014

Tree Report for

Senior Living and Apartment Community

Pleasant Valley Road

Oxnard, California

Client:

Dansk Investment Group, Inc.

C/O Lauterbach & Associates, Architects, Inc.

300 Montgomery Avenue

Oxnard, CA 93036

(805) 988-0912

Prepared in consultation with:

Jordan Gilbert & Bain Landscape Architects, Inc.

3350 Loma Vista Rd

Ventura, CA 93003

(805) 642-3641

Consulting Arborist:

LA Johnny

John Burke

10880 Del Norte Street #27

Ventura, California

805-754-9393

September 21, 2014

Summary

This addendum 1 was prepared in response to issues raised in the Planners Comments dated September 11, 2014. To maintain the integrity of the public record I felt it best to address the issues in an addendum to the original report.

Introduction

Planner's Comments are part of the normal plan check procedure for the City of Oxnard. The memorandum can been seen in its entirety in Appendix A to this Addendum. The memo raises seven points. Each issue or bullet point is repeated below in the Discussion section and my reply follows each in order. The planner's comments are in ***bold italics.***

Observations

See Discussion below.

Analysis

See Discussion below.

Discussion

1. Predominant Eucalyptus on site is Blue Gum, Eucalyptus globulus. Revise report accordingly.

Evidence to support this conclusion was not provided. If that data is forthcoming I will include it in all future studies of these trees. This observation might be correct, the blue gum and the Red River gum are very hard to tell apart using simple visual identification. The lowest leaves are 20 or 30 feet high. On the day of my observations I looked for the subtle difference and identified these gum trees as *Eucalyptus camaldulensis* based on overall size, leaf shape and color. I am sure Mr. Brodersen's opinion is well considered and I will pay particular attention to the visual cues when I conduct the risk assessment of eucalyptus windrows. In the meantime we can stipulate to the gum trees being *Eucalyptus globulus*.

2. The rating for the Deodar Cedar and Aloe tree appears to be low, given the documented size and pictures provided.

I wasn't sure which rating this refers too? I rechecked both trees and as I certified in my report, "to the best of my knowledge and belief the statements of fact contained in this plant appraisal are true and correct." I'll review any new information that might change my assessment.

The pictures are only included to help locate the trees on the ground. They can be deceptive. The cedar tree in particular photographs much better than it looks in person. Below is another picture I took but didn't include in my report.

In this picture you can see the compacted farm road and large fruit stand in the critical rootzone. You can make out the many branch scars, topped branches, and dead hanging branches.

3. Tree protection notes for remaining trees are limited. Arborist to add tree protection requirements with specific measures to protect the canopy of the trees as well as root systems where applicable. (Such as fencing at critical root zone and hand pruning for roots greater than a designated caliper).

Tree protection notes were limited in the original report because the original site plan required removing all the trees. The only measures shown were to protect the trees growing on the other side of a six foot masonry wall. Most of those are small fruit trees or large shrubs. Are there any other protective measures you suggest for offsite trees 80 through 96?

The owner has prepared a revised site plan with the hope of saving both eucalyptus windrows. I have been asked to prepare a risk assessment of the trees along with a tree protection plan. I will certainly include these recommendations along with the other requirements of ANSI standard.

4. The overall approach for estimating tree value is acceptable.

5. Update report with addendum to document current conditions and information regarding each tree previously proposed for preservation, including the Deodar Cedar.

As stated in my report on pages 2, 5 and 6 none of the trees were to be preserved including the cedar. It's not clear to me which trees you want looked at and what information you want. Is this information regarding the appraisal?

The owner has prepared a revised site plan with the hope of saving both eucalyptus windrows. I have been asked to prepare a risk assessment of the trees along with a tree protection plan. If you can be more specific I'll see if I can incorporate the information you seek.

Information to include whether tree was relocated or demolished.

This isn't really an arboriculture question. I'm not sure how to tell the difference between a tree that has been demolished and one that was relocated. Please clarify if possible.

6. Revised report to include a long term management plan for the Blue Gum trees. Risk assessment and maintenance at regular intervals is suggested.

Arborist appraisal reports are certified forensic reports of a specific study and like all evidentiary documents they cannot be revised only added to. To maintain the integrity of the public record, I will prepare a second addendum that will include a Level II risk assessment of the eucalyptus windrows done according to ANSI A300 (Part 9)-2011 Tree Risk Assessment.

Addendum II will also include a tree protection plan as described in ANSI A300 Construction Management Standard – Part 5.

In reviewing photographs and aerial data, it appears that there are a few trees that may have warranted consideration for incorporation into the proposed project design.

This isn't an arboriculture question. The reviewer should provide the tree numbers of these few trees to the landscape architect and owner for their consideration.

Conclusions

1. Stipulate that the gum trees are *Eucalyptus globulus* pending further investigation.
2. Clarified ratings for cedar and aloe.
3. Addendum II will contain a tree protection plan meeting the requirements of the national standards.
4. Concur
5. Not an arboriculture question, please clarify the information sought.
6. Addendum II will include a tree risk assessment and a tree protection plan as described in the national standards.
7. Please consult with the landscape architect and owner for their guidance on the specific trees to be considered.

Recommendations

1. This Addendum I dated 6-21-2014 and the original report dated March 31, 2014 form the complete report.
2. A second addendum should be prepared to reflect the revised site plan and should specifically include a level II risk assessment of the eucalyptus windrows and a tree protection plan with the goal of saving the blue gums.
3. Concerning issue 3, are there any additional protective measures you suggest for offsite trees 80 through 96?
4. Request clarification of the information requested in planners comment 5.

Certification

PREMISES: Senior Living and Apartment Community Pleasant Valley Road Oxnard, California

I, John Burke, CERTIFY to the best of my knowledge and belief:

1. That the statements of fact contained in this plant appraisal are true and correct.
2. That the appraisal analysis, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and that they are my personal, unbiased professional analysis, opinions and conclusions.
3. That I have no present of prospective interest in the plants that are the subject of this appraisal, and that I have no personal interest or bias with respect to the parties involved.
4. That my compensation is not contingent upon predetermined value or direction in value that favors the cause of the client, the amount of the value estimate, the attainment of a stipulated result, or the occurrence of a subsequent event.

Date: 9-21-14

John Burke

Landscape Architect 5251

ISA Certified Arborist WE-8327A

MEMO

PLANNING DIVISION

Attn: Kathleen Mallory, MA, AICP
LEED Green Associate / Principal Planner

214 South C Street
Oxnard, CA 93030
(805) 385-7858
(805) 385-7417 fax

September 11, 2014

Subject: *Arborist's Report* (3/31/2014) *for* PZ 14-500-04 and PZ 14-535-01

Project address:
Senior Living and Apartment Community
Ettinger Road and Pleasant Valley Road
Oxnard, CA

By: Brian D. Brodersen, Landscape Architect, CA #4880, Phone 805.201.5614

I have reviewed the arborist's tree report provided for the above project and offer the following corrections and comments.

Site Visit – A site visit was conducted with BA Arborist on September 8, 2014. We found that the site has been graded and cleared. Trees proposed to be removed were not present. A subsequent site meeting was attended on September 11, 2014.

Arborist's Report

1. Predominant Eucalyptus on site is Blue Gum, Eucalyptus globulus. Revise report accordingly.

2. The rating for the Deodar Cedar and Aloe tree appears to be low, given the documented size and pictures provided.

3. Tree protection notes for remaining trees are limited. Arborist to add tree protection requirements with specific measures to protect the canopy of the trees as well as root systems where applicable. (Such as fencing at critical root zone and hand pruning for roots greater than a designated caliper).

4. The overall approach for estimating tree value is acceptable.

5. Update report with addendum to document current conditions and information regarding each tree previously proposed for preservation, including the Deodar Cedar. Information to include whether tree was relocated or demolished.

6. Revised report to include a long term management plan for the Blue Gum trees. Risk assessment and maintenance at regular intervals is suggested.

In reviewing photographs and aerial data, it appears that there are a few trees that may have warranted consideration for incorporation into the proposed project design.

ADDENDUM II: Blue Gum Risk Assessment & Management Report

Addendum II to Tree Report for

Senior Living and Apartment Community

Pleasant Valley Road

Oxnard, California

Client:

Dansk Investment Group, Inc.

C/O Lauterbach & Associates, Architects, Inc.

300 Montgomery Avenue

Oxnard, CA 93036

(805) 988-0912

Prepared in consultation with:

Jordan Gilbert & Bain Landscape Architects, Inc.

3350 Loma Vista Rd

Ventura, CA 93003

(805) 642-3641

Consulting Arborist:

LA Johnny

John Burke

10880 Del Norte Street #27

Ventura, California

805-754-9393

October 18, 2014

Table of Contents

Appendix C Field Notes attached as a separate pdf file.

Summary

This report is on the risk and preservation suitability of 19 blue gum trees (*Eucalyptus globulus*) and was commissioned by the owners, the Dansk Investment Group, Inc. (hereafter "owner"). The site was until recently known as the Naumann farm. It consists of 7.4 acres between Pleasant Valley Road and Etting Road in Oxnard, CA. The farm address is 2295 Etting Road.

The trees are in two groups. Row A with 7 trees runs along the north edge of the site beside Pleasant Valley Road. Row B runs beside Etting Road on the south edge of the site. Row B has 7 trees on the owner's lot and 5 connected trees on the property to the west of the owner's lot.

The 5 off-site trees are included because they are part of the same windrow as the blue gums on your property and risk mitigation measures you take for your trees will affect at least those five trees. The study included all the windrow trees within 50 feet of your property.

My recommendations to mitigate risk on your property we will change the way the wind forces are distributed to adjacent trees. That change could affect trees on your neighbor's property. That's why the 5 off-site trees were included.

The most important and time sensitive conclusion reached in this study is the hazard created by two dead trees (75* and 76*). They stand right beside the junior high school cross walk and create an unreasonably high risk hazard.

Those two trees are off-site. That they were part of the study triggers our responsibility to notify the owner and the appropriate City of Oxnard official of an obvious hazard. Perhaps the Project Planner could put us in contact with the right person to report this to. It's the right thing and the wise thing given the liability involved.

The next greatest risk is the remaining windrow of blue gums on the Masonic Cemetery site along Etting Road. While I did not assess them I could not help but notice that they are far worse than the ones on your site. I saw signs of **aggressive internal decay** and large dead branches and I watched streams of school kids walk under them.

It's unlikely a falling tree or branch will strike a person. But the probability isn't zero. That's especially true for the hour or two each school day when lots of pedestrians walk underneath 500 feet of over-mature blue gum trees.

As with trees 75* and 76*, we should notify the owner and the appropriate City of Oxnard official of an obvious hazard created by dead, decayed and declining blue gum trees on the adjacent lot. Perhaps the Project Planner could put us in contact with the right person to report this to as well.

The 14 blue gums on your property have been kept in better shape but they have a high risk of failure and the only effective way to mitigate the risk is to remove them.

These trees are deep into the phase of decline. They have reached the end of their natural life cycle and like all trees they shed mass until they collapse completely. These trees were planted around 1900 so they are 114 years old. That's old for a species reported to live 50 to 150 years. The mean age of a failed blue gum reported to the state of California is 62 years. Arborist call these trees over-mature.

Blue gum trees have collapsed and killed people, most recently in 2011 in Newport Beach, CA. Municipalities like Santa Monica and most cities in Orange County have removed all their over-mature blue gum trees because of the unreasonably high risk.

In addition to the risk assessment I did a Conservation Suitability Worksheet for each tree. Setting aside the risk concerns, the trees make a poor choice for retention. Trees with trunks this size need 25 to 40 feet of rooting area on all sides and the streets already cover a big part of that. No matter how gently it's done, the grading and paving needed to develop the site will likely cause the trees to rapidly decline.

I can't develop a protection plan that will save these trees. There is no technique that can prevent them from losing absorbing roots which will stress already stressed over-mature trees.

The Recommendations section at the end of this report includes 6 specific recommendations. The report itself describes how I gathered the information, analyzed it and reached my conclusions.

Introduction

I was retained by the owner to provide an addendum to my original report appraising the value of the trees on the site of the future Senior Living and Apartment Community between Etting Road and Pleasant Valley Road in Oxnard, California. In my original assignment, all trees on the site were to be removed but after consultation with the City of Oxnard, the owner directed me to assess the possibility of retaining the blue gum eucalyptus trees.

Multiple owners are responsible for these trees. Along Pleasant Valley Road the trunks straddle the property line with the City of Oxnard and along Etting Road your trees are connected to trees on the adjacent Hueneme Masonic Cemetery. Obtaining consensus among the responsible owners will be necessary.

We agreed that I would:

1. Conduct a level II basic risk assessment as described in the American national standard (ANSI A300-Part 9).
2. Examine the trees suitability for preservation as described in ANSI A300-Part 5 “Managing Trees During Construction”.
3. Prepare a plan to manage the trees during and after construction as described in ANSI A300-Part 5 “Managing Trees During Construction”.

This is an addendum to the original report dated March 2014. Tree numbers and maps used here come from the original report.

Observations

All Trees

I was familiar with the trees because I assessed them in March of this year. I also received a copy of the Historical Resources Report by POST/HAZELTINE ASSOCIATES in Santa Barbara, CA dated June 23, 2014. They describe the site as "The Naumann Farm at 2295 Etting Road (1944-2014)".

Reading the report, I noticed it describes the trees as, "Remnants of Blue Gum windrows are present at the westerly end of the Etting Road and Pleasant Valley Road street frontages."

The report makes important observations about lost trees and the age of the windrows (115 years). "A review of aerial photographs and onsite inspection revealed that many of the windrow's trees, which once extended from the Naumann property west towards the Japanese Cemetery, have died or been removed. According to records on file at the Museum of Ventura County the trees were planted in circa-1900 when the Hueneme Masonic Cemetery was established." (p. 16)

The report noted the findings of earlier studies. "The Blue Gum windrows on the Hueneme Masonic Cemetery property at APN 225-0-014-020 was designated as Ventura County Landmark No. 15 in 1971. In 1996, the Blue Gum windrows were evaluated as part of a Historic Architectural Survey Report for the Pleasant Valley Road/State Route 1 Interchange improvement project, Ventura County (07-VEN-01, P.M. 15.0, 07-117040). The study concluded that the Blue Gum windrows were not eligible for listing in the National Register of Historic Places or the California Register of Historical Resources (Clement 1996: 8)." (p.18)

My own observations agree with the historical report. From my earlier assessment I knew the trees were old but I didn't realize they were 115 years old.

Windrows create an artificial growing condition by planting large fast growing blue gums close together. The roots are intertwined and don't develop a normal 360 degree root plate that anchors the tree. Instead windrows trees create stability by interlocking roots.

The windrow trees all compete for limited resources mainly light. The canopies are suppressed meaning they don't form normal scaffold branches. Most of the interior branches are small with occasional larger branches that may extend away from the canopy.

The result of growing so close together is the trees don't develop a normal shape, instead they rely on their combined shape and strength to withstand the force of the wind. They occasionally stick out large over-extended branches to catch the sunlight.

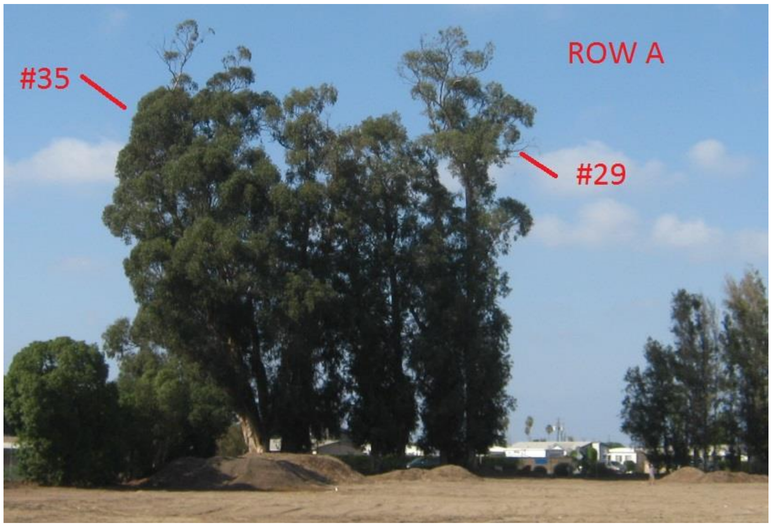
So far we have observed that there are two groups of very old blue gums that are remnants of windrows. These two groups represent the survivors of windrows planted about 1900. A nearby windrow was given landmark status in 1971. A 1996 study did not find these trees eligible for historical recognition.

Each Tree

For this assignment I created a field data collection sheet that would gather the information needed to assess risk and suitability for preservation. Field notes for each tree are summarized in Appendix B Individual Tree Data. A scan of the field notes is shown in Appendix C Field Notes.

Row A

For risk assessment, I considered the trees both as individuals and as groups. I designated the group along Pleasant Valley Road as Row A. It includes 7 trees: 29 through 35.



Above looking north

Above panorama looking south L to R: 29 through 35

In row A I observed more stumps (9) than trees (7). The trunks were in various stages of decay indicating they may have died at different times over several years. The trees on the ends of the row showed the greatest structural defects. From the numerous branch scars I can tell that some trees have lost large branches up to 12 inches in diameter from high in the canopy 50 to 100 feet above the street.

Health wise all of the trees looked stressed with either little top growth or dead branches at the very tops of the canopies. The canopies are not the typical dark green color. Each tree was different.

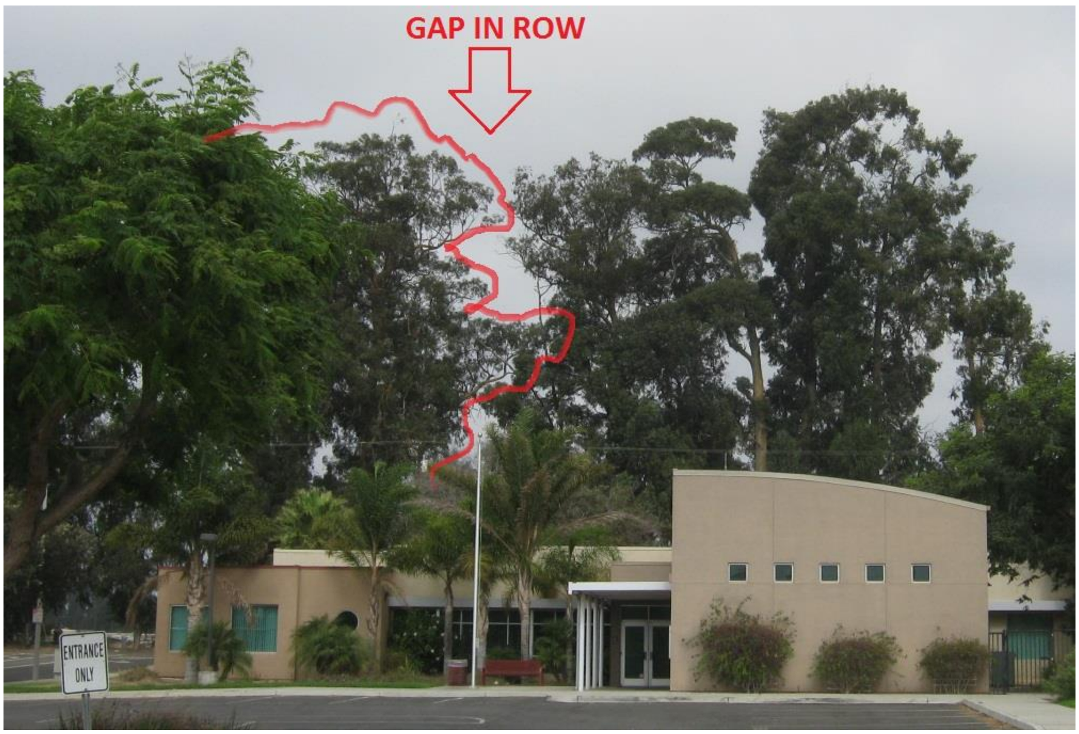
Risk factors were present on all trees but not equally. A few of the interior trees had very small suppressed branches making them less likely to cause damage. These trees tended to be shorter and protected by the larger trees in the row.

Tree 35 on the west end of this row is enormous. It has long heavy branches and has lost many branches. I observed bright yellow conks along the trunk about 30' high. It has codominant trunks and a very large cavity on the west side of its trunk. Risk data and structural defects were listed for each tree.

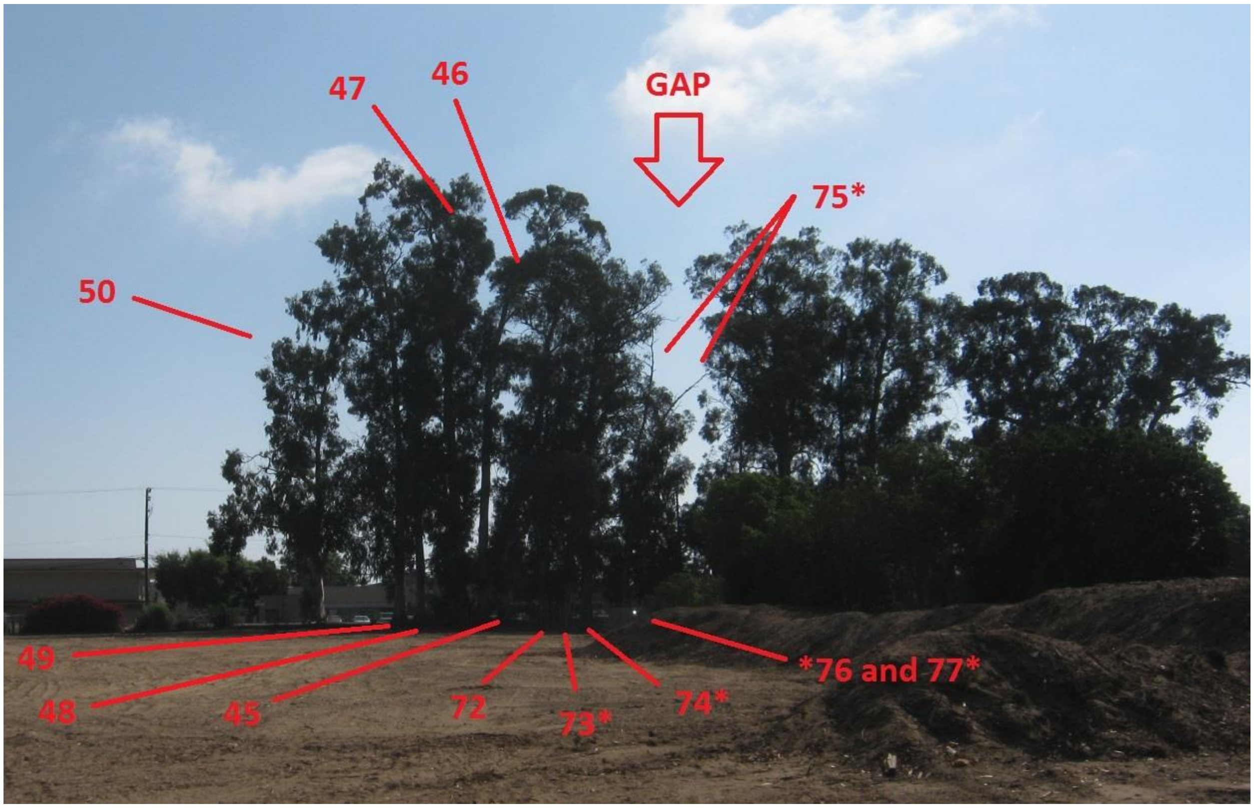
I made observations to help determine the trees suitability for conservation. It looked like a large portion of the **critical root zone** (CRZ) (Kite and Smiley p. 28)[1] was paved over by Pleasant Valley Road and the curb and sidewalk beside it. Grading for these came within about ten feet of the trunks and I made a note to check the survey in AutoCAD after I calculated the dimensions of the CRZ. I knew the plan was to add a turn lane and move the curb and sidewalk closer to the trees.

Row B

Includes 7 trees on the owner's property and 5 trees on the property to the west which are all part of the same row. This row of 12 trees extends 25 feet west beyond the property line along Etting Road. At that point there is a 25 foot break in the windrow which continues intermittently for a few hundred yards beside the Masonic Cemetary. From east to west the trees are numbered: 50, 49, 48, 47, 46, 45, 72, 73*, 74*, 75*,76* and 77*. The five off site tree numbers are followed by an asterisk, "*".



Above looking north at windrow B along Etting Road with junior high school in foreground. There is a gap of 25 feet between tree 77* and the next blue gum tree to the west.



Above looking south at windrow B along Etting Road with junior high school beyond. There is a gap of 25 feet between tree 77* and the next blue gum tree to the west.

I decided to include the five off site trees as part of my assessment of row B because their roots and branches are intertwined with trees on the owner's property. Any changes to the trees on the owner's property might impact these off-site trees.

If the owner removed trees from row B it would exposed the five off site trees to different wind loads and probably greater loads since they would no longer be protected by the larger trees to their east on the owner's property. The off-site trees extend about 25 feet west of the property line to a small gap in the larger windrow which used to extend all the way to Pleasant Valley Road.

I did not examine the trees west of the small gap after tree 77*. The gap of about 24 feet would have included four or five additional trees which have probably died.

The first thing I noticed approaching row B were the dead trees 75* and 76*. I watched school kids walking past them when school was dismissed for the day.

While I did not examine the individual trees west of 77* I did look at the windrow and noted they were in very poor condition with lots of dead branches and down trees. I noticed a bright yellow fungus on the first tree to the west of tree 77*. I saw the same conk on tree 35 in row A.

I observed only one stump in row B between trees 48 and 49. The trees showed structural defects. From the numerous branch scars I can tell that some trees have lost large branches up to 12 inches in diameter from high in the canopy 50 to 100 feet above the street.

Health wise all of the trees looked stressed with either little top growth or dead branches at the very tops of the canopies. The canopies are not the typical dark green color. Each tree was different.

Risk factors were present on all trees but not equally. A few of the interior trees had very small suppressed branches making them less likely to cause damage. These trees tended to be shorter and protected by the larger trees in the row.

I made observations to help determine the trees suitability for conservation. It looked like a large portion of the **critical root zone** (CRZ) was paved over by Etting Road and path beside it. Paving came within about ten feet of the trunks and I made a note to check the survey in AutoCAD after I calculated the dimensions of the CRZ. I knew the plan was to add a sidewalk closer to the trees. Right now the area planned for the sidewalk is heavily compacted by foot traffic from the school across the street.

Analysis

Risk Analysis:

All Trees

Analysis was done at the level of the individual tree and the row for risk and suitability for conservation.

Each Tree

Each tree was analyzed using the 7 step process described in the Best Management Practices on page 38.[2] "Risk is the combination of the likelihood of an event and the severity of the potential consequences."(Smiley, p. 7)

The national standard uses a qualitative approach meaning labels not numbers are used to rate risk as extreme, high, moderate and low.

Trees with an "extreme risk" rating need immediate attention. I did not rate any of the analyzed trees as extreme. Trees with a "high risk" rating need mitigation measures but the decision to conduct the mitigation and the timing are the owners' decision based on the owners' risk tolerance. There were several trees with a high risk rating.

I conducted the risk analysis in the field, including the part or parts most likely to fail. That is shown on the Individual Tree Data sheet in Appendix B. In addition to there is a separate page with risk mitigation procedures for each tree and the time interval for the next risk assessment.

The target is the same for all the trees in each row. For row A the target is the Pleasant Valley Road and the sidewalk. On all occasions on site I observed intermittent vehicle traffic and pedestrian traffic. In addition to people and vehicles there is infrastructure that could be damaged. Traffic on a major surface street could be affected.

The target for trees in row B is Etting Road and the shoulder of the road which is used as a sidewalk. During school hours the shoulder is filled with school kids and the street is filled with vehicles. In addition to people and vehicles there is infrastructure that could be damaged. Traffic at a busy school entrance could be affected.

The following 7 part risk analysis was conducted in the field for each tree. See the field notes in Appendix C for details and Appendix B for a summary of each trees data.

1 Identify possible targets

2 ID tree parts that could strike target

3 Likelihood of Failure within 5 years:
- Improbable - Possible - Probable - Imminent

4 Likelihood of Impacting a Target:
- Very Low - Low - Medium - High

5 Table 1

Likelihood of Failure	Likelihood of Impacting Target			
	Very Low	Low	Medium	High
Imminent	*Unlikely*	*Somewhat*	*Likely*	*Very likely*
Probable	*Unlikely*	*Unlikely*	*Somewhat*	*Likely*
Possible	*Unlikely*	*Unlikely*	*Unlikely*	*Somewhat*
Improbable	*Unlikely*	*Unlikely*	*Unlikely*	*Unlikely*

6 Consequences of Failure:
- Negligible - Minor - Significant - Severe

7 Table 2
Risk Rating

Likelihood of Failure + Impact	Consequences			
	Negligible	Minor	Significant	Severe
Very likely	*Low*	*Moderate*	*High*	*Extreme*
Likely	*Low*	*Moderate*	*High*	*High*
Somewhat likely	*Low*	*Low*	*Moderate*	*Moderate*
Unlikely	*Low*	*Low*	*Low*	*Low*

Row A - Risk Analysis:

Following is a summary of the risk analysis for the trees in row A along Pleasant Valley Road.

Tree Number	Common Name	Risk Rating	Likelihood of Failure in 5 years:	Likelihood of Impacting a Target:	Consequence of Failure:	Risk Mitigation Indicated?
29	blue gum	High	Probable	High	Significant	Yes
30	blue gum	Moderate	Possible	high	Significant	Yes
31	blue gum	Moderate	Possible	high	Significant	Yes
32	blue gum	Low	Possible	Medium	Significant	Yes
33	blue gum	Mod/high	Probable	high	Significant	Yes
34	blue gum	high	Probable	high	Significant	Yes
35	blue gum	High	Probable	high	Significant	Yes

Row B - Risk Analysis:

Following is a summary of the risk analysis for the trees in row B along Etting Road.

Tree Number	Common Name	Risk Rating	Likelihood of Failure in 5 years:	Likelihood of Impacting a Target:	Consequence of Failure:	Risk Mitigation Indicated?
45	blue gum	High	Probable	high	Significant	Yes
46	blue gum	high	probable	high	Significant	Yes
47	blue gum	Moderate	Possible	high	Significant	Yes
48	blue gum	Moderate	Possible	high	Significant	Yes
49	blue gum	high	probable	high	Significant	Yes
50	blue gum	Moderate	Possible	high	Significant	Yes
72	blue gum	Moderate	Possible	high	Significant	Yes
73*	blue gum	high	probable	high	Significant	Yes
74*	blue gum	high	probable	high	Significant	Yes
75*	blue gum	high	probable	high	Significant	Yes
76*	blue gum	high	probable	high	Significant	Yes
77*	blue gum	low	improbable	medium	Significant	no

General Conservation Suitability Analysis:

All Trees

I analyzed the trees suitability for preservation as required in the national standard on page 11[3]. I used the General Conservation Suitability Worksheet as described in the BMP's (Fite, p. 8) The worksheet guides the arborist through an 8 step analysis where points are awarded up to 100 points.

Trees earning more than 80 points are rate as "Good" choices for preservation with the prospect of long-term survival. Trees earning a "Moderate" rating score between 60 and 79 points. These trees have health or structural defects that can be treated. They may require more resources to manage and their life span may be shorter than trees in the "Good" category. Trees scoring below 60 points, rated "Poor" have significant defects that cannot be abated with treatments and can be expected to decline.

Information for preservation analysis comes from several sources including the health and risk assessments and the new site plan for distance to cut/fill and construction activity. Construction tolerance of species is listed in appendix A of the BMP's (Fite, p. 31) Eucalyptus are rated moderate and score 7 points for that step.

Species desirability is described as a subjective rating. So I chose to award all the trees 10 points to maximize the score because the trees were considered a valuable cultural and historic resource. I wanted to err on the side of preservation for this step. I could have awarded them 1 point because of their over mature age and elevated risk ratings. The reader should bear in mind that the conservation suitability scores may be inflated 5 to 9 points.

The following 8 part preservation analysis was conducted for each tree.

Conservation Suitability Worksheet

		1	5	10	15	
1	Root Cut/Fill Distance From Trunk:	*6"/1"*	*12"/1"*	*18"/1"*	*>18"/1"*	15 pts
2	Health (Condition Rating):	*decline*	*5*	*10*	*vigorous*	15 pts
3	Defects (Risk Rating):	*severe*	*high*	*mod*	*low*	15 pts
4	Construction Tolerance:	*poor*	*moderate*	*mod/good*	*good*	15 pts
5	Age:	*>2/3*	*mature*	*young*		10 pts
6	Location of Construction Activity:	*3xdbh*		*2x dripline*		10 pts
7	Soil Tolerance:	1		10		10 pts
8	Species Desirability:	Low		High		10 pts

Suitability Rating: >80 = Good, 60-79 = Fair, <59 = poor — 100 points

Row A - *General Conservation Suitability Analysis:*

Following is a summary of the preservation analysis for the trees in row A along Pleasant Valley Road.

Tree Number	Common Name	Preservation Suitability	Score	Distance to Cut/Fill		Distance to Construction Activity	
				Actual	Recommended	Actual	Recommended
29	blue gum	Poor	45	10	42	9	40
30	blue gum	poor	54	5	25	5	16
31	blue gum	poor	51	10	31	7	16
32	blue gum	poor	61	6	34	6	24
33	blue gum	poor	53	9	31	9	25
34	blue gum	poor	45	14	48	14	20
35	blue gum	poor	45	32	101	32	65

Row Averages:				
Score	51	Points		
Actual Distance to cut/fill	12	Feet	2000	Sq. Feet
Recommended Distance to cut/fill	44	Feet	6000	Sq. Feet
Percentage of TPZ Disturbed	67%	Percent	4000	Sq. Feet
Actual Distance to Construction	12	Feet	1300	Sq. Feet
Recommended Distance to Construction	29	Feet	2650	Sq. Feet
Percentage of TPZ Permenantly Compromised	51%	Percent	1350	Sq. Feet

Row B - *General Conservation Suitability Analysis:*

Following is a summary of the preservation analysis for the trees in row B along Etting Road.

Tree Number	Common Name	Preservation Suitability	Score	Distance to Cut/Fill		Distance to Construction Activity	
				Actual	Recommended	Actual	Recommended
45	blue gum	poor	43	8	36	8	45
46	blue gum	poor	43	7	46	7	30
47	blue gum	poor	49	9	61	9	40
48	blue gum	poor	52	8	38	8	35
49	blue gum	poor	43	8	46	8	40
50	blue gum	poor	46	6	46	6	37
72	blue gum	poor	51	8	42	8	45
73*	blue gum	poor	42	8	36	8	30
74*	blue gum	poor	53	8	36	8	30
75*	blue gum	poor	0	8	36	8	15
76*	blue gum	poor	0	8	16	8	15
77*	blue gum	poor	58	9.5	17	9.5	30

Row Averages:

Score	40	Points		
Actual Distance to cut/fill	8	Feet	1200	Sq. Feet
Recommended Distance to cut/fill	38	Feet	4500	Sq. Feet
Percentage of TPZ Disturbed	73%	Percent	3300	Sq. Feet
Actual Distance to Construction	8	Feet	100	Sq. Feet
Recommended Distance to Construction	33	Feet	3400	Sq. Feet
Percentage of TPZ Permenantly Compromised	71%	Percent	2400	Sq. Feet

Discussion

Risk: Greatest Hazards

Two dead trees on the adjacent lot, numbers 75* and 76* are the greatest risk. They should be removed as soon as possible, especially 76* which is completely dead. Crowds of school kids walk right past it 10 feet away. I urge the owner to bring this hazard to the attention of the other owners or the City officials.

The most hazardous tree on the owner's property is Tree 35 at the west end of row A. It has a trunk over 8 feet in diameter with multiple trunk defects including sulfur fungus (*Laetiporus sulphureus*). According to the UC Davis pest management website this fungus is one of the most serious, "Conks don't appear until many years after the onset of decay and indicate extensive internal damage."[4] The fungus causes a brown heart rot of living trees but also will decay dead trees. Can enter trees through bark wounds and dead branch stubs."

Risk: All Trees

Trees are evaluated for risk as individuals but in this case it makes sense to also look at them as a group. That is because they are the same species, same age and being in windrows their structures are interconnected.

The most important point about all the trees is that they are 115 year old blue gum trees and blue gums are a short-lived tree with a normal life span of 50 to 150 years. [5] These surviving trees are deep into the decline phase of their life cycle. The California Tree Failure Report Program shows that the mean age for blue gum failures is 62 years. [6]

Adding to the evidence that these trees are in decline is the large number of stumps, missing trees and even fallen trunks along Etting Road. Trees shed mass as they approach the end of their life and that is happening with all the standing trees. The high risk trees have lost large scaffold branches and all the trees have dead branches in the canopy.

The most likely scenario is that these trees will continue to create and drop dead branches mostly in the 3 to 4 inch diameter. These would probably hit the sidewalks and street and with regular pruning you could probably manage that risk.

Harder to manage is the tendency for blue gums to drop seemingly healthy living branches, up to several inches in diameter. It is called Sudden Branch Drop Syndrome and it little understood. What is known is that some species notably *Eucalyptus* will without warning lose living branches. I have observed this myself on numerous occasions.

The large over-extended scaffold branches would be much harder to manage. Some of the over-extended branches are very high in the canopy, over 125 feet high and will be very difficult to reach and prune safely. Some of the lower branches are very large and heavy. Removing large branches leaves large wounds that are openings for fungus, disease and pests. Some branches will have to be removed in multiple pruning over 2 or 3 years.

It is possible that an entire trunk could fail. In addition to row A, sulfur fungus is growing on the tree beside 77* in row B. The conks are just the fruiting bodies, decay is often hidden and according to the state tree failure program, 40 percent of trunk failures don't have any decay.

Often there is no obvious sign that a blue gum will fail before it collapses catastrophically. That was the case with Haeyoon Miller who was "waiting at a red light in the early afternoon of Sept. 15, 2011, when a eucalyptus planted in an Irvine Avenue median toppled onto her car."[7] Newport Beach and their contractor West Coast Arborists, were sued for negligence. [8] There have been other deaths from failing blue gum trees in California. Many cities like Santa Monica have removed most of the blue gums on city property because of the risk they pose.

The end trees are normally exposed to greater wind forces. Because they get more sunlight they grow larger and being constrained on only one side, the other side of the canopy grows creating a lopsided crown with long over-extended branches. That is exactly what happened in both row A and B.

The large trees on the end have high risk ratings. They are the ones most likely to lose large branches and all show evidence that they have lost large branches in the past, branches as large as 12” in diameter falling from 100’ or higher. A few interior trees have very suppressed canopies meaning few large branches. These trees are protected by the larger ones and have most medium risk ratings.

If we removed only the high risk trees, the remaining medium risk trees would increase in risk. They would instantly lose the protection of larger trees and have to face wind forces they had not adapted to. Given their advanced age I don’t expect the trees have the capacity to adapt. I expect the medium trees if left standing, would become high risk trees if not immediately then in the near future, five years. If the high risk trees are removed, it would be wise to remove the remaining medium risk trees.

Risk: Species Information

Both Hoyt and the US Forest Service describe blue gums as fast growing. That is one reason they are used worldwide for windrows and pulp wood.[9]

According to Wikipedia, “Naturalists, ecologists, and the United States National Park Service consider it an invasive species due to its ability to quickly spread and displace native plant communities, while local authorities, especially many fire departments across California consider them to be a major fire hazard. [10]

According to the Forest Service: “In California, bluegum eucalyptus stands are highly susceptible to fire during the dry season. The bark, which hangs in strips from the stems, readily carries fire into the crowns, and the leaves contain volatile oils that produce a hot fire.” [11]

General Conservation Suitability:

All 19 trees scored low on the General Conservation Suitability Scale. Of the eight categories the trees only scored high on Species Desirability which is the most subject if the eight measures. The other strong point is the high quality fast draining soil.

On risk, health and age most trees scored poorly. Little could be done to change that. Another major concern is that the trees critical root zone is already nearly 25 percent covered by city streets. After construction that will become 50 percent for row A and 70 percent for row B. Covering that much root zone will have a negative effect on the health and subsequent risk of these trees.

The distance to cut/fill is a major concern. Grading for the new sidewalk along Pleasant Valley Road will come within 5 feet of row A. Row A is on a slight rise one to two feet higher than the sidewalk. Grading that close may severe structural roots and make these trees unstable. On the other side of row A there is already root damage just from the clearing operation.

For row B along Etting Road, the new sidewalk will come within 8 or 9 feet causing some damage and covering a large rooting area. On the other side the parking lot will be only 6 feet away from tree 50 and 9 feet away from tree 49.

There is no protection plan I know of that can protect mature trees from having 70 percent of their root zone paved and grading 5 to 10 feet away from the trunk.

Conclusions

Risk: Greatest Hazards

The greatest risk I identified is the two dead trees on the adjacent lot, numbers 75* and 76*. They should be removed as soon as possible. I urge the owner to bring this hazard to the attention of the other owners and City officials.

The most hazardous tree on the owner's property is Tree 35 at the west end of row A. It has a trunk over 8 feet in diameter with multiple trunk defects including sulfur fungus (*Laetiporus sulphureus*) according to the UC Davis pest management website this fungus is one of the most serious, "Conks don't appear until many years after the onset of decay and indicate extensive internal damage."[12] The fungus causes a brown heart rot of living trees but also will decay dead trees. Can enter trees through bark wounds and dead branch stubs." This tree should be scheduled for removal also.

Risk: All Trees

As a group these blue gum windrows are over mature meaning they are at the end of their life cycle and are shedding mass by way of dropped branches and even collapsed trunks. This is a natural process, there is no way to reverse it or prudently manage the risks. There are visible signs of aggressive internal fungal infection in both windrows.

Even without signs of decay, blue gums have unexpectedly and catastrophically collapsed and killed people in California. The City of Newport Beach recently paid a $1.1 million dollar settlement in the death of a woman killed by a falling blue gum. That particular tree was being "managed" and had been inspected.

One component of risk is the severity of the consequences of failure. These trees are large from 70 to 150 feet tall. They have enormous trunks up to 8 feet in diameter. Even small branches falling from such heights generate tremendous force.

Pedestrians and vehicles pass through the target zones of these trees. The probability of a person being hit by a falling branch or tree is impossible to calculate but believed to be quite small. If it occurred it could cause serious injury or death. The trunks could close either street and damage infrastructure and utilities.

All 19 trees have an elevated risk of failure in the next five years. Ten trees have a high rating and the trees are interconnected. Removing only some of the trees would destabilize the remaining trees and increase their risk of failure. The best way to mitigate the high risk of these tree rows is to remove the entire row.

Multiple owners are responsible for these trees and that complicates the decision making process. In row A along Pleasant Valley Road some of the trunks straddle the property line with the City of Oxnard and the roots and canopies occupy space on both sides of the property line. In row B five of the trees off-site, they front the cemetery property to the west.

You and I have a responsibility to communicate with the adjacent property owners because your study identified hazards on their property. Because the trees are interdependent, if you only remove the trees on your property the trees on the Masonic cemetery side will be more exposed and two of them are dead already.

The windrow of blue gums that extends west along Etting Road beyond your property have not been taken care of like the blue gums on your property. They look bad and school kids stream underneath them twice a day. Since you haven't been successful after many attempts to contact the absentee owner of the cemetery, we should find out who in City of Oxnard we should contact about the high risk trees on the adjacent lot.

Decisions to mitigate risk must be made by the owner and depend upon the owner's risk tolerance. Since there are multiple owner's agreement is needed but may be difficult to obtain especially if you can't contact one of the owners. The actions or inactions of the other owners could affect your liability exposure you theirs. If your interest diverge from the other owners then you should seek qualified legal council.

General Construction Suitability: All Trees

None of these trees are suitable for preservation. Elevated risk is one factor. Even without the risk concerns these would be a poor choice because of their age and proximity to construction. After construction 50 to 70 percent of the trees root zone will be covered with pavement and excavation will come within 10 feet of most trees and 5 feet of some trees.

These trees will decline following construction regardless of management. There is no protection plan that can prevent damage anticipated.

Recommendations

1. The owner should advise the appropriate City of Oxnard official and the absentee property owner that trees 75* and 76* are dead, have elevated risk rating of “High” and should be removed as soon as possible to mitigate the risk to pedestrians and vehicles.

2. The owner should advise the appropriate City of Oxnard official and the absentee property owner that all the blue gums west of your property are in poor shape and should be evaluated by a qualified arborist for risk. There are obvious visible structural defects on those trees and the path below them is heavily traveled by school children.

3. The owner should seek approval from the appropriate City of Oxnard officials and the adjacent property owners to remove all the blue gum trees in row A and row B to mitigate risk. Removal of 4 trees on the adjacent lot should also be sought. (73*, 74*, 75*, 76*)

4. Tree 35 should be given top priority for removal and that should occur as soon as the proper approvals can be obtained from the City of Oxnard.

5. The tree contractor should be advised of the presence of decay conks on tree 35.

6. Tree removal should be done by a properly licensed and qualified tree care company and all work should be performed in accordance with the national consensus safety standards for tree care ANSI Z133.1.

Certification

PREMISES: Senior Living and Apartment Community Pleasant Valley Road Oxnard, California

I, John Burke, CERTIFY to the best of my knowledge and belief:

1. That the statements of fact contained in this plant appraisal are true and correct.
2. That the appraisal analysis, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and that they are my personal, unbiased professional analysis, opinions and conclusions.
3. That I have no present of prospective interest in the plants that are the subject of this appraisal, and that I have no personal interest or bias with respect to the parties involved.
4. That my compensation is not contingent upon predetermined value or direction in value that favors the cause of the client, the amount of the value estimate, the attainment of a stipulated result, or the occurrence of a subsequent event.

Date: 10-18-14

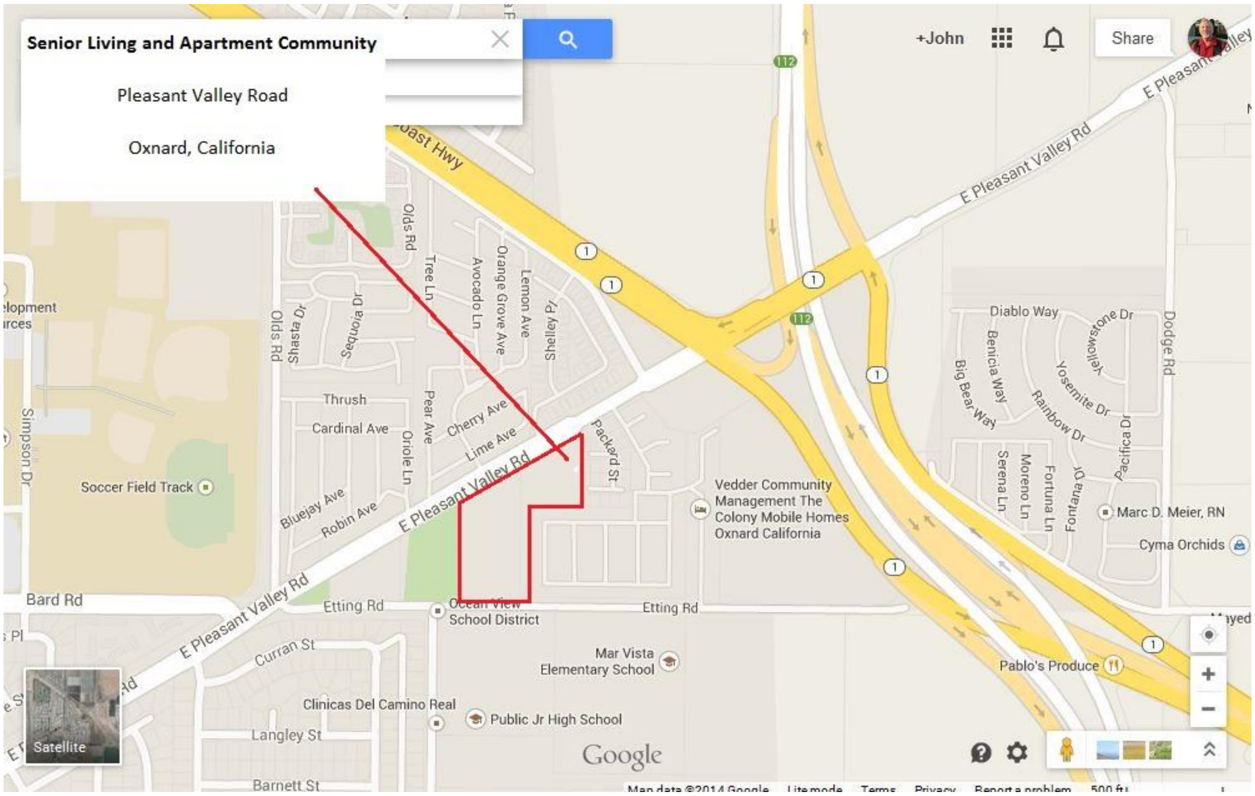
John Burke

Landscape Architect 5251

ISA Certified Arborist WE-8327A

Appendix A Tree Maps

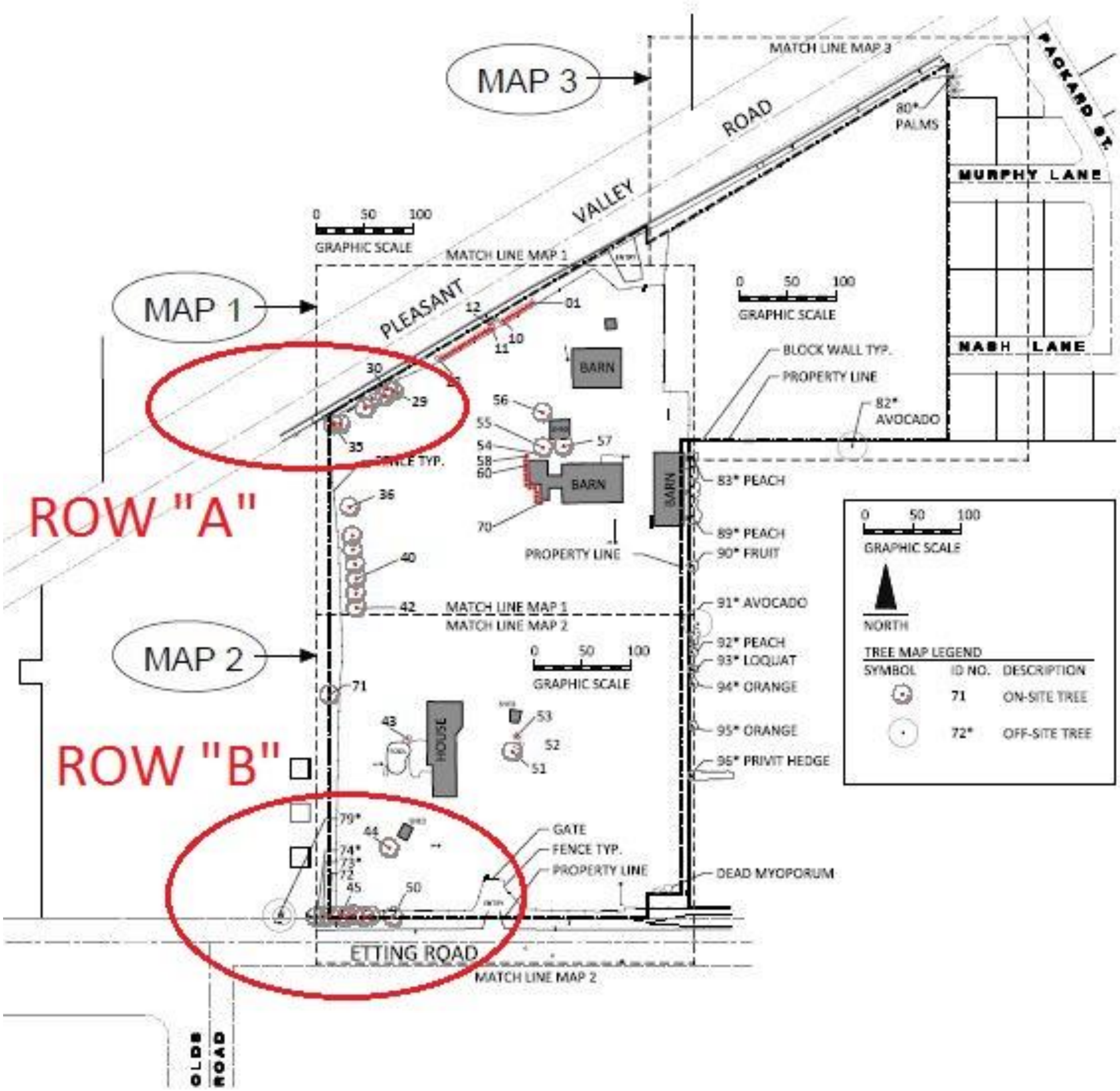
Location Map



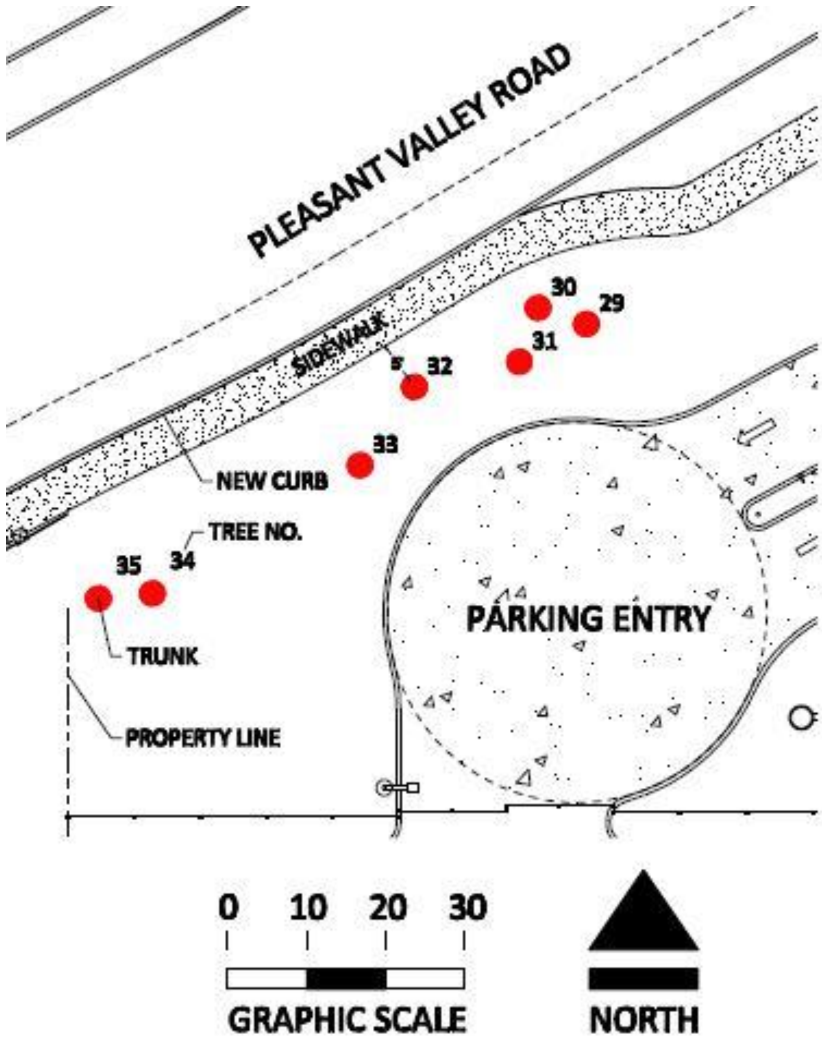
(Oriented with north at top)

Tree Key Map

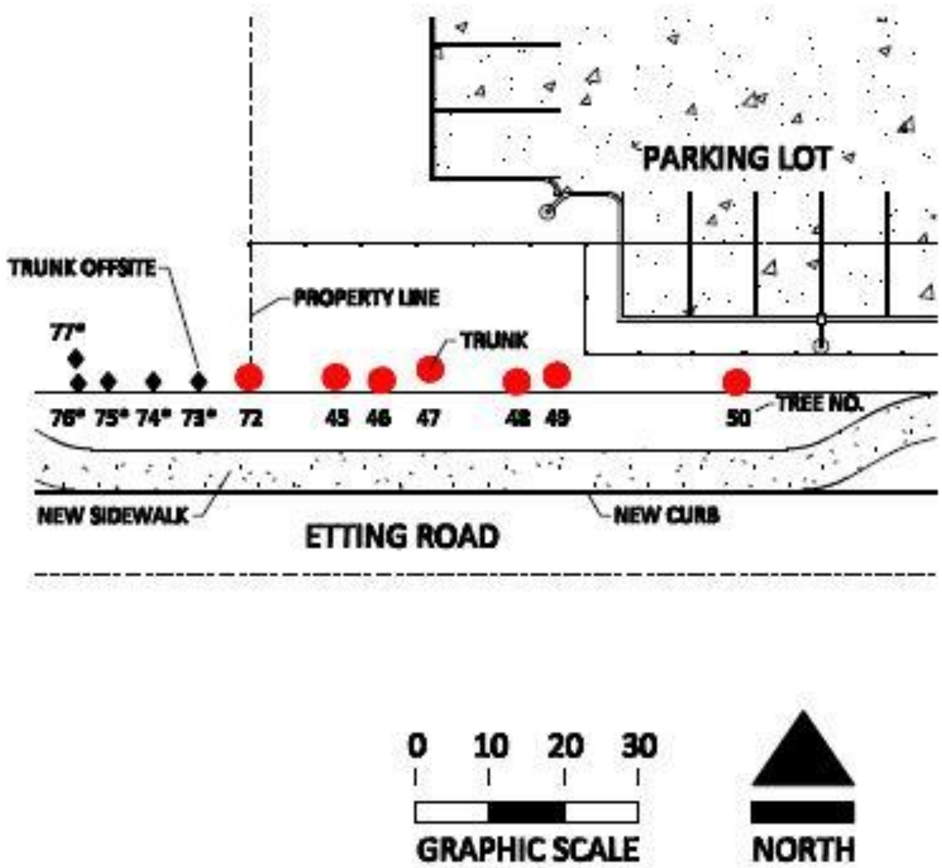
(Oriented with north at top)



Tree Map 1 Row A



Tree Map 2 Row B



Appendix B Individual Tree Data

Tree 29

GENERAL INFORMATION			
Tree Number			29
Genus			Eucalyptus
Species			globulus
Common Name			blue gum
Trunk Diameter	(DBH)	inches	42
Tree Protection Zone	(TPZ)	feet	42
Height		feet	150
Crown Width		feet	40
Condition			poor/fair
Condition Rating		points	12
RISK RATING			High
Likelihood of Failure within 5 years:			Probable
Likelihood of Impacting a Target:			High
Likelihood of both Failure and Impact:			Likely
Consequences of Failure:			Significant
Risk Mitigation Indicated?			Yes
CONSERVATION SUITABILITY RATING			Poor
Score		points	45
Distance to cut/fill			10 feet
Recommended Distance to cut/fill			42 feet
Distance to Construction Activity			9 feet
Recommended Distance to Construction			40 feet
ARBORIST RECOMMENDATION FOR CONSERVATION:			REMOVE
STRUCTURAL DEFECTS:			
dead branches, unballanced crown, conks on adjacent stump			

A poor candidate for conservation due to its High Risk rating and low score on the General Conservation Suitability scale. Branches with the highest probability of failure can be removed but that won't mitigate the underlying risk factors: age, size, and species and the presence of targets both stationary and moving.

The TPZ already compromised by street and curb 19’ from the trunk, after construction it will be 9’ - 16’. Recommended distance is 42’. Now 22 % of the TPZ is paved; after construction 70% will be paved. Decline can be expected to continue and accelerate.

Expected Risk Rating following mitigation: High It will remain a high risk tree that needs reassessed in 1 years.

Tree 29, blue gum, Risk Mitigation Pruning

Most likely part to fail: dead 3 to 6 inch diameter branches and a large 12” diameter overextended branch at the top that may also contain deadwood.

Prune to reduce and clean the crown as described in the American National Standard A300 Part 1 - 2008 Pruning and the companion publication Best Management Practices Tree Pruning (2008).

Reduce the crown by removing the top most branch back to a significant lateral branch. From the ground the attachment point is hidden by foliage, it may be about 115 feet above ground.

Clean the canopy by removing any dead branches over 1 inch in diameter. There’s not a lot of deadwood in the canopy but some visible above 100 feet. Remove any obvious crossing, damaged or diseased branches. Do not remove more than 10 percent of the trees living canopy.

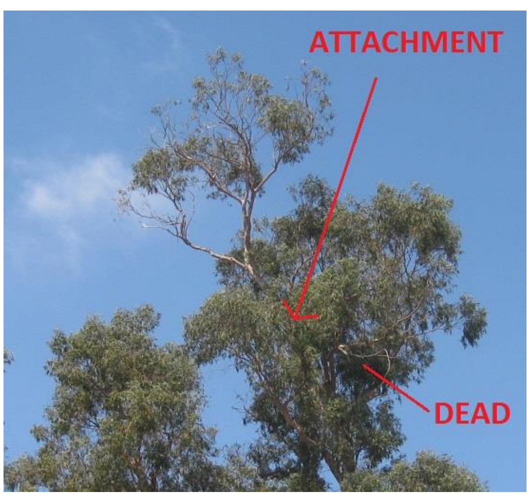
Climber should observe for decay in the trunks and branches and report findings to the supervising arborist.

The work should be performed in accordance with the national consensus safety standards for tree care ANSI Z133.1. Tree care workers should be familiar with the national consensus standards for pruning and should be supervised by an arborist certified by the International Society of Arboriculture. The contractor should provide the owner with the supervisors ISA Certification Number and Expiration Date.

The owner may want to have their own arborist observe the work and report what was actually done in order to create a record of steps taken to mitigate risk.

Continued risk monitoring is necessary for this tree. This trees should be assessed in three years to see if new dead branches have appeared. It should be assessed a year after construction occurs to see if rapid decline has occurred.

Tree 29, Photos



Tree 30

GENERAL INFORMATION			
Tree Number			30
Genus			Eucalyptus
Species			globulus
Common Name			blue gum
Trunk Diameter	(DBH)	inches	25
Tree Protection Zone	(TPZ)	feet	25
Height		feet	105
Crown Width		feet	16
Condition			poor/fair
Condition Rating		points	12
RISK RATING			Moderate
Likelihood of Failure within 5 years:			Possible
Likelihood of Impacting a Target:			high
Likelihood of both Failure and Impact:			somewhat likely
Consequences of Failure:			Significant
Risk Mitigation Indicated?			Yes
CONSERVATION SUITABILITY RATING			poor
Score		points	54
Distance to cut/fill		feet	5
Recommended Distance to cut/fill		feet	25
Distance to Construction Activity			5
Recommended Distance to Construction			16
ARBORIST RECOMMENDATION FOR CONSERVATION:			REMOVE
STRUCTURAL DEFECTS:			
30 ROOT AND BRANCH INJURIES. DEAD BRANCHES			

A poor candidate for conservation due to its close proximity to the new street cut and sidewalk. Following construction 50% of its protected zone will be paved. Decline can be expected to continue and accelerate.

Expected Risk Rating following mitigation: Moderate. It will remain a moderate risk tree that needs reassessed in 1 year.

Tree 30, blue gum, Risk Mitigation Pruning

From the ground there is little deadwood visible. Very few large branches

Prune to clean the crown of dead damaged or diseased branches over 1” diameter as described in the American National Standard A300 Part 1 - 2008 Pruning and the companion publication Best Management Practices Tree Pruning (2008).

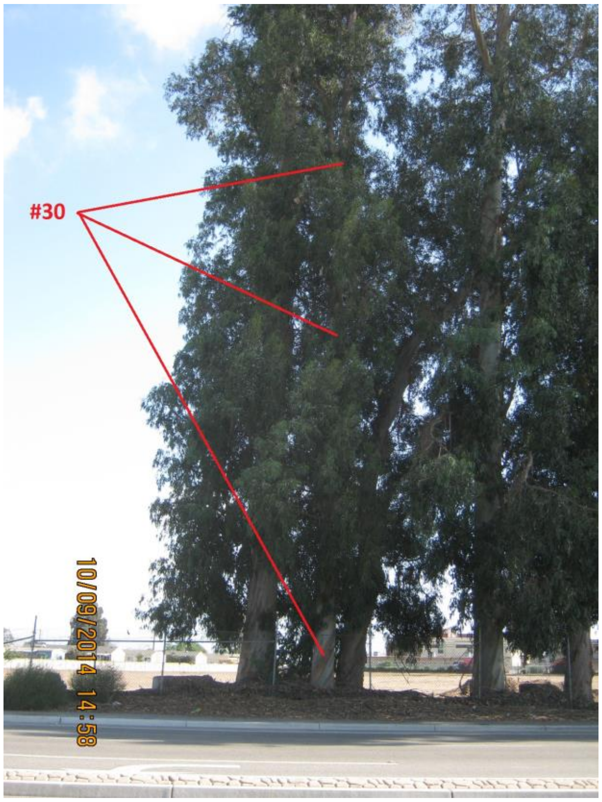
Do not remove more than 10 percent of the trees living canopy.

The work should be performed in accordance with the national consensus safety standards for tree care ANSI Z133.1. Tree care workers should be familiar with the national consensus standards for pruning and should be supervised by an arborist certified by the International Society of Arboriculture. The contractor should provide the owner with the supervisors ISA Certification Number and Expiration Date.

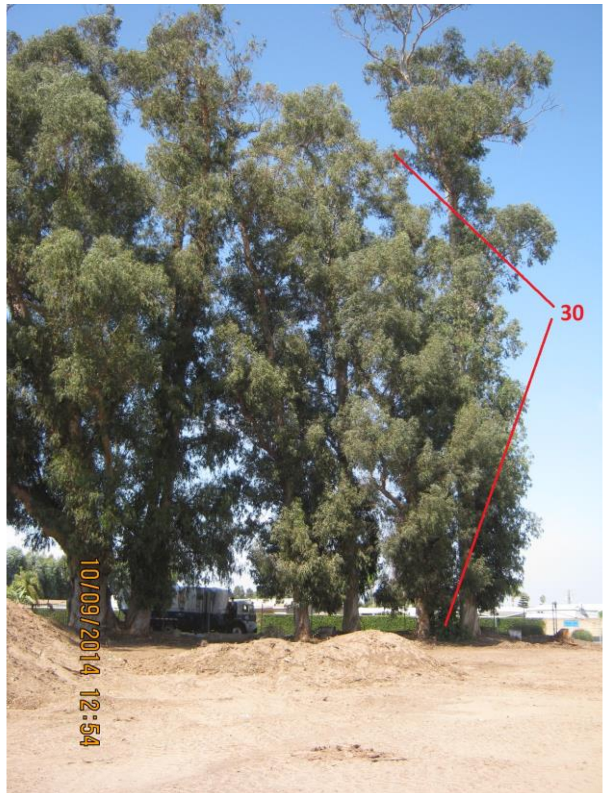
The owner may want to have their own arborist observe the work and report what was actually done in order to create a record of steps taken to mitigate risk.

Continued risk monitoring is necessary for this tree. This trees should be assessed a year after construction occurs to see if rapid decline has occurred.

Tree 30, Photos



Above looking south



Above looking north at PVR

Tree 31

GENERAL INFORMATION			
Tree Number			31
Genus			Eucalyptus
Species			globulus
Common Name			blue gum
Trunk Diameter	(DBH)	inches	31
Tree Protection Zone	(TPZ)	feet	31
Height		feet	75
Crown Width		feet	16
Condition			poor
Condition Rating		points	10
RISK RATING			Moderate
Likelihood of Failure within 5 years:			Possible
Likelihood of Impacting a Target:			high
Likelihood of both Failure and Impact:			somewhat likely
Consequences of Failure:			Significant
Risk Mitigation Indicated?			Yes
CONSERVATION SUITABILITY RATING			poor
Score		points	51
Distance to cut/fill		feet	10
Recommended Distance to cut/fill		feet	31
Distance to Construction Activity			7
Recommended Distance to Construction			16
ARBORIST RECOMMENDATION FOR CONSERVATION:			REMOVE

STRUCTURAL DEFECTS:

31 20% lean, root and branch injuries

Moderate risk is manageable but will increase over time and may increase rapidly as a result of construction in the TPZ. Removing adjacent trees would decrease its stability and increase its risk of failure.

A poor candidate for conservation due to its close proximity to the existing and proposed street curb cut, sidewalk and driveway. Following construction 60% of its protected zone will be paved. Decline can be expected to continue and accelerate.

Expected Risk Rating following mitigation: Moderate. It will remain a moderate risk tree that needs reassessed in 1 year.

Tree 31, blue gum, Risk Mitigation Pruning

Prune to clean crossing branches and thin sprouts at old branch scars.

Prune to clean the crown of dead, damaged or diseased branches over 1” diameter as described in the American National Standard A300 Part 1 - 2008 Pruning and the companion publication Best Management Practices Tree Pruning (2008).

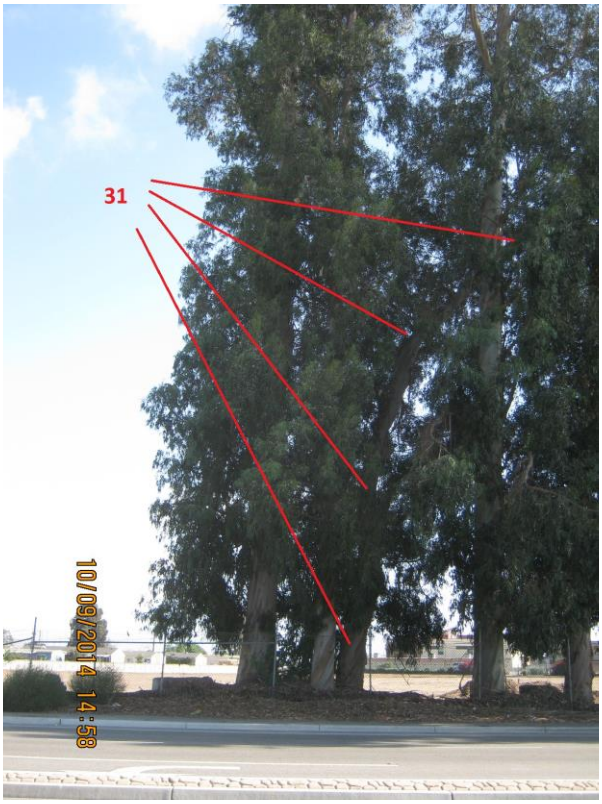
Do not remove more than 10 percent of the trees living canopy.

The work should be performed in accordance with the national consensus safety standards for tree care ANSI Z133.1. Tree care workers should be familiar with the national consensus standards for pruning and should be supervised by an arborist certified by the International Society of Arboriculture. The contractor should provide the owner with the supervisors ISA Certification Number and Expiration Date.

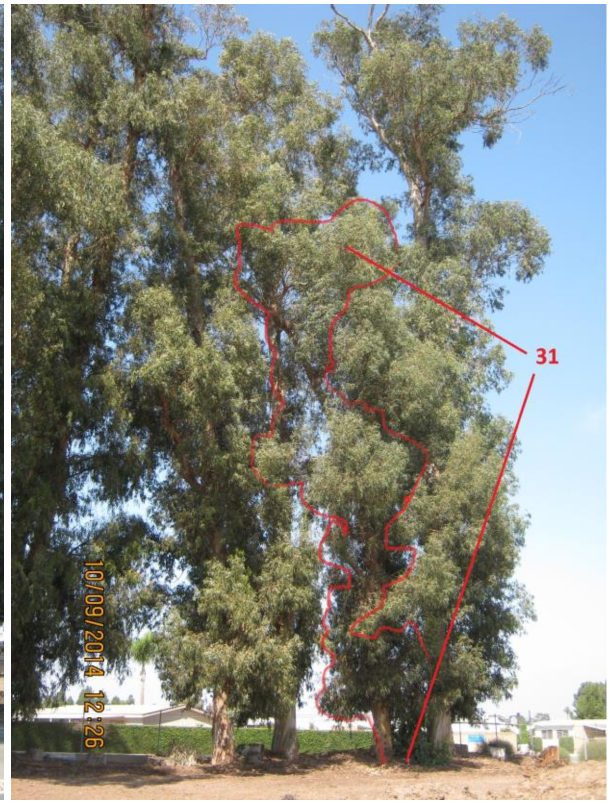
The owner may want to have their own arborist observe the work and report what was actually done in order to create a record of steps taken to mitigate risk.

Continued risk monitoring is necessary for this tree. This trees should be assessed a year after construction occurs to see if rapid decline has occurred.

Tree 31, Photos



Above looking south



Above looking north at PVR

Tree 32

GENERAL INFORMATION			
Tree Number			32
Genus			Eucalyptus
Species			globulus
Common Name			blue gum
Trunk Diameter	(DBH)	inches	34
Tree Protection Zone	(TPZ)	feet	34
Height		feet	115
Crown Width		feet	24
Condition			poor
Condition Rating		points	13
RISK RATING			Low
Likelihood of Failure within 5 years:			Possible
Likelihood of Impacting a Target:			Medium
Likelihood of both Failure and Impact:			Unlikely
Consequences of Failure:			Significant
Risk Mitigation Indicated?			Yes
CONSERVATION SUITABILITY RATING			poor
Score		points	61
Distance to cut/fill		feet	6
Recommended Distance to cut/fill		feet	34
Distance to Construction Activity			6
Recommended Distance to Construction			24
ARBORIST RECOMMENDATION FOR CONSERVATION:			REMOVE

STRUCTURAL DEFECTS:

32 slight lean, root and branch injuries

Low risk is manageable but will increase over time and may increase rapidly as a result of construction in the TPZ. Removing adjacent trees would decrease its stability and increase its risk of failure.

A poor candidate for conservation due to its close proximity to the existing and proposed street curb cut, sidewalk and driveway. Following construction 58% of its protected zone will be paved. Decline can be expected to continue and accelerate.

Expected Risk Rating following mitigation: Low. It will need risk reassessed in 1 year.

Tree 32, blue gum, Risk Mitigation Pruning

Prune to raise the canopy at the new sidewalk. Remove the lowest branch over the sidewalk at the trunk at about 15’ above ground. Very little dead visible in canopy.

Prune to clean the crown of dead, damaged or diseased branches over 1” diameter as described in the American National Standard A300 Part 1 - 2008 Pruning and the companion publication Best Management Practices Tree Pruning (2008).

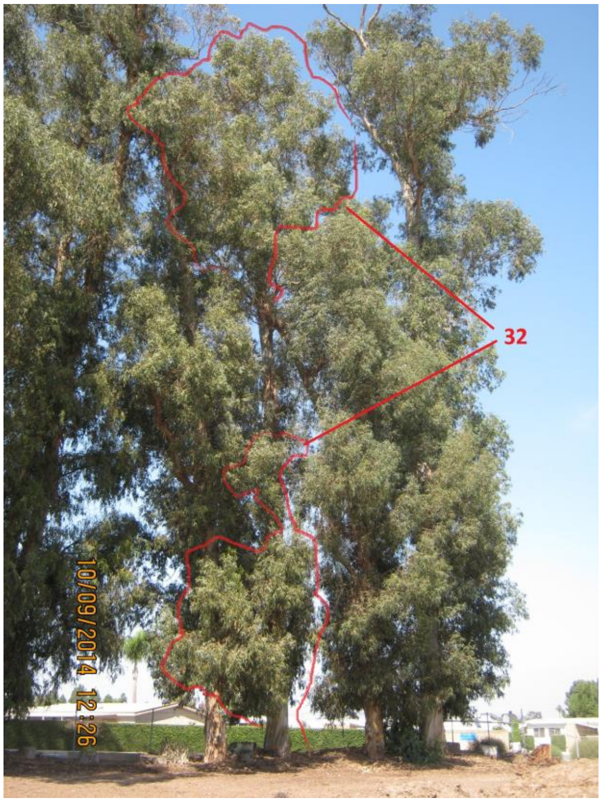
Do not remove more than 10 percent of the trees living canopy.

The work should be performed in accordance with the national consensus safety standards for tree care ANSI Z133.1. Tree care workers should be familiar with the national consensus standards for pruning and should be supervised by an arborist certified by the International Society of Arboriculture. The contractor should provide the owner with the supervisors ISA Certification Number and Expiration Date.

The owner may want to have their own arborist observe the work and report what was actually done in order to create a record of steps taken to mitigate risk.

Continued risk monitoring is necessary for this tree. This trees should be assessed a year after construction occurs to see if rapid decline has occurred.

Tree 32, Photos



Above looking north at PVR

Above looking east toward Rice Avenue

Tree 33

GENERAL INFORMATION			
Tree Number			33
Genus			Eucalyptus
Species			globulus
Common Name			blue gum
Trunk Diameter	(DBH)	inches	31
Tree Protection Zone	(TPZ)	feet	31
Height		feet	115
Crown Width		feet	25
Condition			poor
Condition Rating		points	11
RISK RATING			Mod/high
Likelihood of Failure within 5 years:			Probable
Likelihood of Impacting a Target:			high
Likelihood of both Failure and Impact:			likely
Consequences of Failure:			Significant
Risk Mitigation Indicated?			Yes
CONSERVATION SUITABILITY RATING			poor
Score		points	53
Distance to cut/fill		feet	9
Recommended Distance to cut/fill		feet	31
Distance to Construction Activity			9
Recommended Distance to Construction			25
ARBORIST RECOMMENDATION FOR CONSERVATION:			REMOVE

STRUCTURAL DEFECTS:

33 leaning trunk

Moderate risk is manageable but will increase over time and may increase rapidly as a result of construction in the TPZ. Removing adjacent trees would decrease its stability and increase its risk of failure.

A poor candidate for conservation due to its close proximity to the existing and proposed street curb cut, sidewalk and driveway. Following construction 48% of its protected zone will be paved. Decline can be expected to continue and accelerate.

Expected Risk Rating following mitigation: Moderate. It will remain a moderate risk tree that needs reassessed in 1 year.

Tree 33, blue gum, Risk Mitigation Pruning

Top branches appear stressed and may be dying, little dead in the rest of the canopy. Raise canopy at new sidewalk and driveway by removing descending 4” branches at trunk.

Prune to raise canopy for clearance and clean the crown of dead, damaged or diseased branches over 1” diameter as described in the American National Standard A300 Part 1 - 2008 Pruning and the companion publication Best Management Practices Tree Pruning (2008).

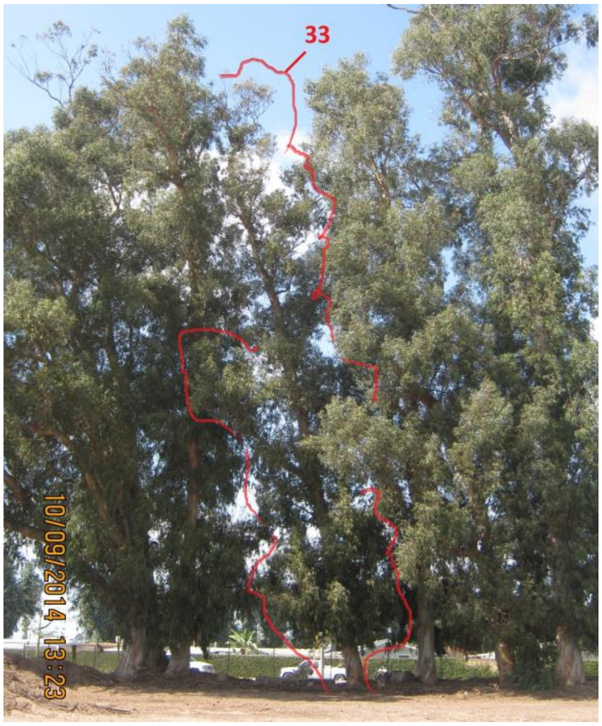
Do not remove more than 10 percent of the trees living canopy.

The work should be performed in accordance with the national consensus safety standards for tree care ANSI Z133.1. Tree care workers should be familiar with the national consensus standards for pruning and should be supervised by an arborist certified by the International Society of Arboriculture. The contractor should provide the owner with the supervisors ISA Certification Number and Expiration Date.

The owner may want to have their own arborist observe the work and report what was actually done in order to create a record of steps taken to mitigate risk.

Continued risk monitoring is necessary for this tree. This trees should be assessed a year after construction occurs to see if rapid decline has occurred.

Tree 33, Photos



Above looking north at PVR

Above looking south

Small twisted branch clusters, typical

Tree 34

GENERAL INFORMATION			
Tree Number			34
Genus			Eucalyptus
Species			globulus
Common Name			blue gum
Trunk Diameter	(DBH)	inches	48
Tree Protection Zone	(TPZ)	feet	48
Height		feet	125
Crown Width		feet	20
Condition			poor
Condition Rating		points	10
RISK RATING			high
Likelihood of Failure within 5 years:			Probable
Likelihood of Impacting a Target:			high
Likelihood of both Failure and Impact:			likely
Consequences of Failure:			Significant
Risk Mitigation Indicated?			Yes
CONSERVATION SUITABILITY RATING			poor
Score		points	45
Distance to cut/fill		feet	14
Recommended Distance to cut/fill		feet	48
Distance to Construction Activity			14
Recommended Distance to Construction			20
ARBORIST RECOMMENDATION FOR CONSERVATION:			REMOVE

STRUCTURAL DEFECTS:

34 codominant stems, trunk lean, dead branches

A poor candidate for conservation due to its High Risk rating and low score on the General Conservation Suitability scale. Branches with the highest probability of failure can be removed but that won't mitigate the underlying risk factors: age, size, codominant trunks and species and the presence of targets both stationary and moving.

The TPZ already compromised by street and curb 19' from the trunk and 32% paved. After construction it will be 14' and 42% will be paved. Recommended distance is 48' Decline can be expected to continue and accelerate.

Expected Risk Rating following mitigation: High It will remain a high risk tree that needs reassessed in 1 years.

Tree 34, blue gum, Risk Mitigation Pruning

Clean dead branches at top of crown and thin up to 10%.

Prune to clean the crown of dead, damaged or diseased branches over 1” diameter and thin the canopy as described in the American National Standard A300 Part 1 - 2008 Pruning and the companion publication Best Management Practices Tree Pruning (2008).

Do not remove more than 10 percent of the trees living canopy.

The work should be performed in accordance with the national consensus safety standards for tree care ANSI Z133.1. Tree care workers should be familiar with the national consensus standards for pruning and should be supervised by an arborist certified by the International Society of Arboriculture. The contractor should provide the owner with the supervisors ISA Certification Number and Expiration Date.

The owner may want to have their own arborist observe the work and report what was actually done in order to create a record of steps taken to mitigate risk.

Continued risk monitoring is necessary for this tree. This trees should be assessed a year after construction occurs to see if rapid decline has occurred.

Tree 34, Photos

Above looking north at PVR

Above looking south

Tree 35

GENERAL INFORMATION			
Tree Number			35
Genus			Eucalyptus
Species			globulus
Common Name			blue gum
Trunk Diameter	(DBH)	inches	101
Tree Protection Zone	(TPZ)	feet	101
Height		feet	135
Crown Width		feet	65
Condition			poor
Condition Rating		points	9
RISK RATING			High
Likelihood of Failure within 5 years:			Probable
Likelihood of Impacting a Target:			high
Likelihood of both Failure and Impact:			likely
Consequences of Failure:			Significant
Risk Mitigation Indicated?			Yes
CONSERVATION SUITABILITY RATING			poor
Score		points	45
Distance to cut/fill		feet	32
Recommended Distance to cut/fill		feet	101
Distance to Construction Activity			32
Recommended Distance to Construction			65
ARBORIST RECOMMENDATION FOR CONSERVATION:			REMOVE

STRUCTURAL DEFECTS:

35 cavity 4x2x1, lean, unbalanced crown, decay, codominant stems

A poor candidate for conservation due to its High Risk rating and low score on the General Conservation Suitability scale. Presents the greatest risk of any of the 7 trees in this group. Large heavy 20" dia. branches extend about 60 feet on one side of the canopy. Scars show this tree has lost many large branches from as high as 100'. Branches with the highest probability of failure can be removed but that won't mitigate the underlying risk factors: age, size, codominant trunks, overextended branches, lopsided canopy and species and the presence of targets both stationary and moving. *Laetiporus sulphureus*, sulfur fungus, present.

Expected Risk Rating following mitigation: High It will remain a high risk tree that needs reassessed in 1 years.

Tree 35, blue gum, Risk Mitigation Pruning

Prune to reduce two large scaffold branches extending south-southwest. Remove 15 to 20 feet from both cutting at a significant lateral.

Reduce the top 15-20’ of dead and stressed branches. Additonal reduction will probably be needed in coming years.

Climber should observe for decay in the trunks and branches including the conks on the north side about 60 feet high as shown in the photos.

Prune to clean the crown of dead, damaged or diseased branches over 1” diameter and thin the canopy as described in the American National Standard A300 Part 1 - 2008 Pruning and the companion publication Best Management Practices Tree Pruning (2008).

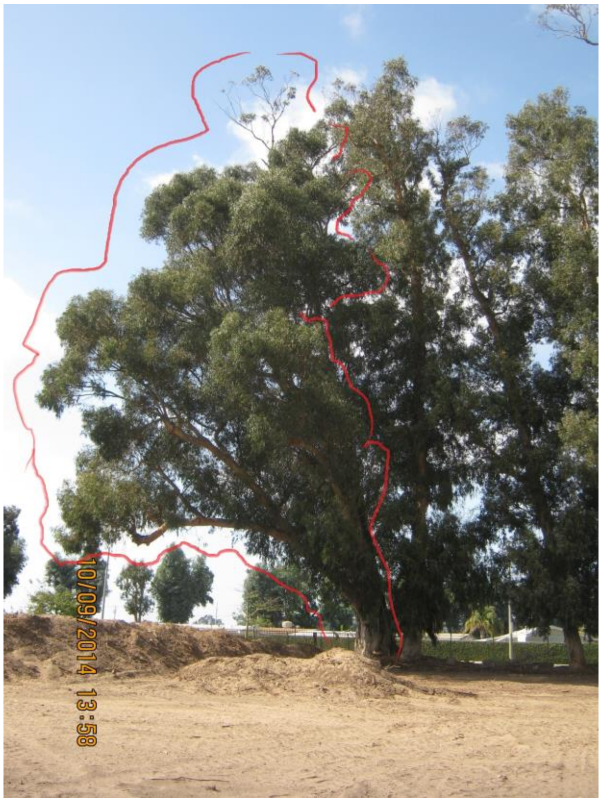
Do not remove more than 10 percent of the trees living canopy.

The work should be performed in accordance with the national consensus safety standards for tree care ANSI Z133.1. Tree care workers should be familiar with the national consensus standards for pruning and should be supervised by an arborist certified by the International Society of Arboriculture. The contractor should provide the owner with the supervisors ISA Certification Number and Expiration Date.

The owner may want to have their own arborist observe the work and report what was actually done in order to create a record of steps taken to mitigate risk.

Continued risk monitoring is necessary for this tree. This trees should be assessed a year after construction occurs to see if rapid decline has occurred.

Tree 35, Photos



Above looking north at PVR

Above looking southeast

Tree 45

GENERAL INFORMATION			
Tree Number			45
Genus			Eucalyptus
Species			globulus
Common Name			blue gum
Trunk Diameter	(DBH)	inches	36
Tree Protection Zone	(TPZ)	feet	36
Height		feet	100
Crown Width		feet	45
Condition			poor/fair
Condition Rating		points	11
RISK RATING			High
Likelihood of Failure within 5 years:			Probable
Likelihood of Impacting a Target:			high
Likelihood of both Failure and Impact:			likely
Consequences of Failure:			Significant
Risk Mitigation Indicated?			Yes
CONSERVATION SUITABILITY RATING			poor
Score		points	43
Distance to cut/fill		feet	8
Recommended Distance to cut/fill		feet	36
Distance to Construction Activity			8
Recommended Distance to Construction			45
ARBORIST RECOMMENDATION FOR CONSERVATION:			REMOVE

STRUCTURAL DEFECTS:

45 trunk wound, lean, unbalanced crown, root and branch injuries

A poor candidate for conservation due to its High Risk rating and low score on the General Conservation Suitability scale.

Expected Risk Rating following mitigation: High

It will remain a high risk tree that needs reassessed in 1 years.

Tree 45, blue gum, Risk Mitigation Pruning

Prune to clean dead 40’-60’ high, some up to 4” diameter.

Prune to clean the crown of dead, damaged or diseased branches over 1” diameter and thin the canopy.

Remove sprouts on bottom 12’ of trunk to improve aesthetics and views.

Prune to as described in the American National Standard A300 Part 1 - 2008 Pruning and the companion publication Best Management Practices Tree Pruning (2008).

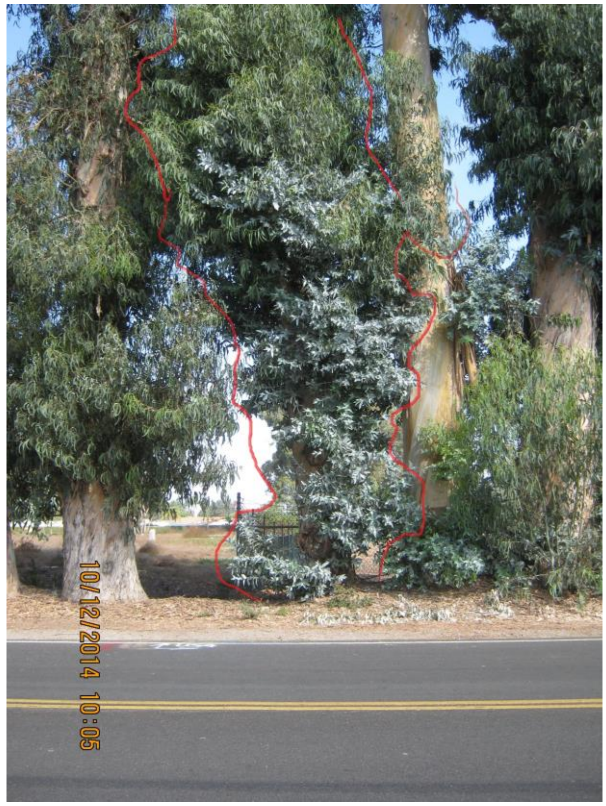
Do not remove more than 10 percent of the trees living canopy.

The work should be performed in accordance with the national consensus safety standards for tree care ANSI Z133.1. Tree care workers should be familiar with the national consensus standards for pruning and should be supervised by an arborist certified by the International Society of Arboriculture. The contractor should provide the owner with the supervisors ISA Certification Number and Expiration Date.

The owner may want to have their own arborist observe the work and report what was actually done in order to create a record of steps taken to mitigate risk.

Continued risk monitoring is necessary for this tree. This trees should be assessed a year after construction occurs to see if rapid decline has occurred.

Tree 45, Photos



Above looking south

Above looking north

left looking north

Tree 46

GENERAL INFORMATION			
Tree Number			46
Genus			Eucalyptus
Species			globulus
Common Name			blue gum
Trunk Diameter	(DBH)	inches	46
Tree Protection Zone	(TPZ)	feet	46
Height		feet	117
Crown Width		feet	30
Condition			poor
Condition Rating		points	9
RISK RATING			high
Likelihood of Failure within 5 years:			probable
Likelihood of Impacting a Target:			high
Likelihood of both Failure and Impact:			likely
Consequences of Failure:			Significant
Risk Mitigation Indicated?			Yes
CONSERVATION SUITABILITY RATING			poor
Score		points	43
Distance to cut/fill		feet	7
Recommended Distance to cut/fill		feet	46
Distance to Construction Activity			7
Recommended Distance to Construction			30
ARBORIST RECOMMENDATION FOR CONSERVATION:			REMOVE

STRUCTURAL DEFECTS:

46 codominant trunks, root and branch injuries, dead branches,unbalanced crown, L LCR

A poor candidate for conservation due to its High Risk rating and low score on the General Conservation Suitability scale. Massive heavy trunk.

Expected Risk Rating following mitigation: High

It will remain a high risk tree that needs reassessed in 1 years.

Tree 46, blue gum, Risk Mitigation Pruning

Caution dead hangers in canopy.

Prune to clean dead stub at 50’ and 80’ high, some up to 6” diameter.

Prune to clean the crown of dead, damaged or diseased branches over 1” diameter and thin the canopy.

Remove sprouts on bottom 12’ of trunk to improve aesthetics and views.

Prune to as described in the American National Standard A300 Part 1 - 2008 Pruning and the companion publication Best Management Practices Tree Pruning (2008).

Do not remove more than 10 percent of the trees living canopy.

The work should be performed in accordance with the national consensus safety standards for tree care ANSI Z133.1. Tree care workers should be familiar with the national consensus standards for pruning and should be supervised by an arborist certified by the International Society of Arboriculture. The contractor should provide the owner with the supervisors ISA Certification Number and Expiration Date.

The owner may want to have their own arborist observe the work and report what was actually done in order to create a record of steps taken to mitigate risk.

Continued risk monitoring is necessary for this tree. This trees should be assessed a year after construction occurs to see if rapid decline has occurred.

Tree 46, Photos

Above looking south

Above looking north

Tree 47

GENERAL INFORMATION			
Tree Number			47
Genus			Eucalyptus
Species			globulus
Common Name			blue gum
Trunk Diameter	(DBH)	inches	61
Tree Protection Zone	(TPZ)	feet	61
Height		feet	117
Crown Width		feet	40
Condition			poor/fair
Condition Rating		points	11
RISK RATING			Moderate
Likelihood of Failure within 5 years:			Possible
Likelihood of Impacting a Target:			high
Likelihood of both Failure and Impact:			somewhat likely
Consequences of Failure:			Significant
Risk Mitigation Indicated?			Yes
CONSERVATION SUITABILITY RATING			poor
Score		points	49
Distance to cut/fill		feet	9
Recommended Distance to cut/fill		feet	61
Distance to Construction Activity			9
Recommended Distance to Construction			40
ARBORIST RECOMMENDATION FOR CONSERVATION:			REMOVE
STRUCTURAL DEFECTS:			

47 codominant trunks with #46, dead branches

Moderate risk is manageable but will increase over time and may increase rapidly as a result of construction in the TPZ. Removing adjacent trees would decrease its stability and increase its risk of failure.

Low score on the General Conservation Suitability scale. Massive heavy trunk.

Decline can be expected to continue and accelerate.

Expected Risk Rating following mitigation: Moderate. It will remain a moderate risk tree that needs reassessed in 1 year.

Tree 47, blue gum, Risk Mitigation Pruning

Prune to clean dead and damaged branches at 50’ on north side.

Prune to raise canopy on north side for clearance by removing 12” diameter stub back to trunk.

Prune to clean the crown of dead, damaged or diseased branches over 1” diameter and thin the canopy. Not much visible.

Remove sprouts on bottom 12’ of trunk to improve aesthetics and views.

Prune to as described in the American National Standard A300 Part 1 - 2008 Pruning and the companion publication Best Management Practices Tree Pruning (2008).

Do not remove more than 10 percent of the trees living canopy.

The work should be performed in accordance with the national consensus safety standards for tree care ANSI Z133.1. Tree care workers should be familiar with the national consensus standards for pruning and should be supervised by an arborist certified by the International Society of Arboriculture. The contractor should provide the owner with the supervisors ISA Certification Number and Expiration Date.

The owner may want to have their own arborist observe the work and report what was actually done in order to create a record of steps taken to mitigate risk.

Continued risk monitoring is necessary for this tree. This trees should be assessed a year after construction occurs to see if rapid decline has occurred.

Tree 47, Photos

Above looking north

Above looking south

Above looking at branch stub

Tree 48

GENERAL INFORMATION			
Tree Number			48
Genus			Eucalyptus
Species			globulus
Common Name			blue gum
Trunk Diameter	(DBH)	inches	38
Tree Protection Zone	(TPZ)	feet	38
Height		feet	80
Crown Width		feet	35
Condition			fair
Condition Rating		points	13
RISK RATING			Moderate
Likelihood of Failure within 5 years:			Possible
Likelihood of Impacting a Target:			high
Likelihood of both Failure and Impact:			somewhat likely
Consequences of Failure:			Significant
Risk Mitigation Indicated?			Yes
CONSERVATION SUITABILITY RATING			poor
Score		points	52
Distance to cut/fill		feet	8
Recommended Distance to cut/fill		feet	38
Distance to Construction Activity			8
Recommended Distance to Construction			35
ARBORIST RECOMMENDATION FOR CONSERVATION:			REMOVE

STRUCTURAL DEFECTS:

48 trunk lean, over-extended branch

Moderate risk is manageable but will increase over time and may increase rapidly as a result of construction in the TPZ. Removing adjacent trees would decrease its stability and increase its risk of failure.

Low score on the General Conservation Suitability scale. Large over-extended branch.

Decline can be expected to continue and accelerate.

Expected Risk Rating following mitigation: Moderate. It will remain a moderate risk tree that needs reassessed in 1 year.

Tree 48, blue gum, Risk Mitigation Pruning

Prune to reduce overextended branch at the top of tree by 20'.

Prune to clean dead, little showing.

Prune to clean the crown of dead, damaged or diseased branches over 1" diameter and thin the canopy. Not much visible.

Remove sprouts on bottom 15' of trunk to improve aesthetics and views.

Prune to as described in the American National Standard A300 Part 1 - 2008 Pruning and the companion publication Best Management Practices Tree Pruning (2008).

Do not remove more than 10 percent of the trees living canopy.

The work should be performed in accordance with the national consensus safety standards for tree care ANSI Z133.1. Tree care workers should be familiar with the national consensus standards for pruning and should be supervised by an arborist certified by the International Society of Arboriculture. The contractor should provide the owner with the supervisors ISA Certification Number and Expiration Date.

The owner may want to have their own arborist observe the work and report what was actually done in order to create a record of steps taken to mitigate risk.

Continued risk monitoring is necessary for this tree. This trees should be assessed a year after construction occurs to see if rapid decline has occurred.

Tree 48, Photos

Above looking south

Tree 49

GENERAL INFORMATION			
Tree Number			49
Genus			Eucalyptus
Species			globulus
Common Name			blue gum
Trunk Diameter	(DBH)	inches	46
Tree Protection Zone	(TPZ)	feet	46
Height		feet	117
Crown Width		feet	40
Condition			poor
Condition Rating		points	10.5
RISK RATING			high
Likelihood of Failure within 5 years:			probable
Likelihood of Impacting a Target:			high
Likelihood of both Failure and Impact:			likely
Consequences of Failure:			Significant
Risk Mitigation Indicated?			Yes
CONSERVATION SUITABILITY RATING			poor
Score		points	43
Distance to cut/fill		feet	8
Recommended Distance to cut/fill		feet	46
Distance to Construction Activity			8
Recommended Distance to Construction			40
ARBORIST RECOMMENDATION FOR CONSERVATION:			REMOVE

STRUCTURAL DEFECTS:

49 root and branch injuries, dead branches to 6",unbalanced crown

A poor candidate for conservation due to its High Risk rating and low score on the General Conservation Suitability scale. Lots of lost wood already.

Expected Risk Rating following mitigation: High

It will remain a high risk tree that needs reassessed in 1 years.

Tree 49, blue gum, Risk Mitigation Pruning

Prune to clean dead branches to 4” in upper third of canopy.

Prune to clean dead branches to 6” in middle third of canopy north side.

Prune to clean the crown of dead, damaged or diseased branches over 1” diameter and thin the canopy.

Remove sprouts on bottom 15’ of trunk to improve aesthetics and views.

Prune to as described in the American National Standard A300 Part 1 - 2008 Pruning and the companion publication Best Management Practices Tree Pruning (2008).

Do not remove more than 10 percent of the trees living canopy.

The work should be performed in accordance with the national consensus safety standards for tree care ANSI Z133.1. Tree care workers should be familiar with the national consensus standards for pruning and should be supervised by an arborist certified by the International Society of Arboriculture. The contractor should provide the owner with the supervisors ISA Certification Number and Expiration Date.

The owner may want to have their own arborist observe the work and report what was actually done in order to create a record of steps taken to mitigate risk.

Continued risk monitoring is necessary for this tree. This trees should be assessed a year after construction occurs to see if rapid decline has occurred.

Tree 49, Photos

Above looking south

Tree 50

GENERAL INFORMATION			
Tree Number			50
Genus			Eucalyptus
Species			globulus
Common Name			blue gum
Trunk Diameter	(DBH)	inches	46
Tree Protection Zone	(TPZ)	feet	46
Height		feet	75
Crown Width		feet	37
Condition			poor
Condition Rating		points	10
RISK RATING			Moderate
Likelihood of Failure within 5 years:			Possible
Likelihood of Impacting a Target:			high
Likelihood of both Failure and Impact:			somewhat likely
Consequences of Failure:			Significant
Risk Mitigation Indicated?			Yes
CONSERVATION SUITABILITY RATING			poor
Score		points	46
Distance to cut/fill		feet	6
Recommended Distance to cut/fill		feet	46
Distance to Construction Activity			6
Recommended Distance to Construction			37
ARBORIST RECOMMENDATION FOR CONSERVATION:			REMOVE

STRUCTURAL DEFECTS:

50 trunk wound, lean, root and branch injuries, dead branches,unbalanced crown

Moderate risk is manageable but will increase over time and may increase rapidly as a result of construction in the TPZ. Removing adjacent trees would decrease its stability and increase its risk of failure.

Low score on the General Conservation Suitability scale. End tree, over-extended branches.

Decline can be expected to continue and accelerate.

Expected Risk Rating following mitigation: Moderate. It will remain a moderate risk tree that needs reassessed in 1 year.

Tree 50, blue gum, Risk Mitigation Pruning

Prune to reduce longest branches on bottom 1/3 by 15'.

Prune to clean the crown of dead, damaged or diseased branches over 1" diameter and thin the canopy.

Remove sprouts on bottom 15' of trunk to improve aesthetics and views.

Prune to as described in the American National Standard A300 Part 1 - 2008 Pruning and the companion publication Best Management Practices Tree Pruning (2008).

Do not remove more than 10 percent of the trees living canopy.

The work should be performed in accordance with the national consensus safety standards for tree care ANSI Z133.1. Tree care workers should be familiar with the national consensus standards for pruning and should be supervised by an arborist certified by the International Society of Arboriculture. The contractor should provide the owner with the supervisors ISA Certification Number and Expiration Date.

The owner may want to have their own arborist observe the work and report what was actually done in order to create a record of steps taken to mitigate risk.

Continued risk monitoring is necessary for this tree. This trees should be assessed a year after construction occurs to see if rapid decline has occurred.

Tree 50, Photos

Above looking south

Tree 72

GENERAL INFORMATION			
Tree Number			72
Genus			Eucalyptus
Species			globulus
Common Name			blue gum
Trunk Diameter	(DBH)	inches	42
Tree Protection Zone	(TPZ)	feet	42
Height		feet	100
Crown Width		feet	45
Condition			fair
Condition Rating		points	12
RISK RATING			Moderate
Likelihood of Failure within 5 years:			Possible
Likelihood of Impacting a Target:			high
Likelihood of both Failure and Impact:			somewhat likely
Consequences of Failure:			Significant
Risk Mitigation Indicated?			Yes
CONSERVATION SUITABILITY RATING			poor
Score		points	51
Distance to cut/fill		feet	8
Recommended Distance to cut/fill		feet	42
Distance to Construction Activity			8
Recommended Distance to Construction			45
ARBORIST RECOMMENDATION FOR CONSERVATION:			REMOVE
STRUCTURAL DEFECTS:			

72 lean, root and branch injuries, #45 crossess at 40'

Straddles property line, must coordinate with other owner. Moderate risk is manageable but will increase over time and may increase rapidly as a result of construction in the TPZ. Removing adjacent trees would decrease its stability and increase its risk of failure.

Low score on the General Conservation Suitability scale. End tree, over-extended branches.

Decline can be expected to continue and accelerate.

Expected Risk Rating following mitigation: Moderate. It will remain a moderate risk tree that needs reassessed in 1 year.

Tree 72, blue gum, Risk Mitigation Pruning

Straddles property line, must coordinate with other owner.

Prune to clean dead very high in canopy.

Prune to clean the crown of dead, damaged or diseased branches over 1” diameter and thin the canopy.

Remove sprouts on bottom 15’ of trunk to improve aesthetics and views.

Prune to as described in the American National Standard A300 Part 1 - 2008 Pruning and the companion publication Best Management Practices Tree Pruning (2008).

Do not remove more than 10 percent of the trees living canopy.

The work should be performed in accordance with the national consensus safety standards for tree care ANSI Z133.1. Tree care workers should be familiar with the national consensus standards for pruning and should be supervised by an arborist certified by the International Society of Arboriculture. The contractor should provide the owner with the supervisors ISA Certification Number and Expiration Date.

The owner may want to have their own arborist observe the work and report what was actually done in order to create a record of steps taken to mitigate risk.

Continued risk monitoring is necessary for this tree. This trees should be assessed a year after construction occurs to see if rapid decline has occurred.

Tree 72, Photos

Above looking north

Above looking south

*Offsite Tree 73**

GENERAL INFORMATION			
Tree Number			73*
Genus			Eucalyptus
Species			globulus
Common Name			blue gum
Trunk Diameter	(DBH)	inches	36
Tree Protection Zone	(TPZ)	feet	36
Height		feet	85
Crown Width		feet	30
Condition			poor
Condition Rating		points	8.5
RISK RATING			high
Likelihood of Failure within 5 years:			probable
Likelihood of Impacting a Target:			high
Likelihood of both Failure and Impact:			likely
Consequences of Failure:			Significant
Risk Mitigation Indicated?			Yes
CONSERVATION SUITABILITY RATING			poor
Score		points	42
Distance to cut/fill		feet	8
Recommended Distance to cut/fill		feet	36
Distance to Construction Activity			8
Recommended Distance to Construction			30
ARBORIST RECOMMENDATION FOR CONSERVATION:			REMOVE

STRUCTURAL DEFECTS:

73* lean, dead branches,unbalanced crown

A poor candidate for conservation due to its High Risk rating and low score on the General Conservation Suitability scale. Deadwood to 4” at 20’-60’ high. Leans across #74* @30’-50’ high. Canopies intertwined. Dead stubs

Expected Risk Rating following mitigation: High

It will remain a high risk tree that needs reassessed in 1 years.

Offsite Tree 73*, blue gum, Risk Mitigation Pruning

Prune to clean dead branches to 4”at 20’-60’ high.

Prune to clean the crown of dead, damaged or diseased branches over 1” diameter and thin the canopy.

Prune to as described in the American National Standard A300 Part 1 - 2008 Pruning and the companion publication Best Management Practices Tree Pruning (2008).

Do not remove more than 10 percent of the trees living canopy.

The work should be performed in accordance with the national consensus safety standards for tree care ANSI Z133.1. Tree care workers should be familiar with the national consensus standards for pruning and should be supervised by an arborist certified by the International Society of Arboriculture. The contractor should provide the owner with the supervisors ISA Certification Number and Expiration Date.

The owner may want to have their own arborist observe the work and report what was actually done in order to create a record of steps taken to mitigate risk.

Continued risk monitoring is necessary for this tree. This trees should be assessed a year after construction occurs to see if rapid decline has occurred.

Offsite Tree 73*, Photos

Above looking north

Above looking south

*Offsite Tree 74**

GENERAL INFORMATION			
Tree Number			74*
Genus			Eucalyptus
Species			globulus
Common Name			blue gum
Trunk Diameter	(DBH)	inches	36
Tree Protection Zone	(TPZ)	feet	36
Height		feet	80
Crown Width		feet	30
Condition			fair
Condition Rating		points	13.5
RISK RATING			high
Likelihood of Failure within 5 years:			probable
Likelihood of Impacting a Target:			high
Likelihood of both Failure and Impact:			likely
Consequences of Failure:			Significant
Risk Mitigation Indicated?			Yes
CONSERVATION SUITABILITY RATING			poor
Score		points	53
Distance to cut/fill		feet	8
Recommended Distance to cut/fill		feet	36
Distance to Construction Activity			8
Recommended Distance to Construction			30
ARBORIST RECOMMENDATION FOR CONSERVATION:			REMOVE

STRUCTURAL DEFECTS:

74* trunk wound,dead branches,#73 crosses

A poor candidate for conservation due to its High Risk rating and low score on the General Conservation Suitability scale. Deadwood to 4” at 20’-60’ high.

73* leans across #74* @30’-50’ high. Canopies intertwined. Dead stubs

Expected Risk Rating following mitigation: High

It will remain a high risk tree that needs reassessed in 1 years.

Offsite Tree 74*, blue gum, Risk Mitigation Pruning

Prune to clean dead branches to 4”.

Prune to clean the crown of dead, damaged or diseased branches over 1” diameter and thin the canopy.

Prune to as described in the American National Standard A300 Part 1 - 2008 Pruning and the companion publication Best Management Practices Tree Pruning (2008).

Do not remove more than 10 percent of the trees living canopy.

The work should be performed in accordance with the national consensus safety standards for tree care ANSI Z133.1. Tree care workers should be familiar with the national consensus standards for pruning and should be supervised by an arborist certified by the International Society of Arboriculture. The contractor should provide the owner with the supervisors ISA Certification Number and Expiration Date.

The owner may want to have their own arborist observe the work and report what was actually done in order to create a record of steps taken to mitigate risk.

Continued risk monitoring is necessary for this tree. This trees should be assessed a year after construction occurs to see if rapid decline has occurred.

Offsite Tree 74*, Photos

Above looking north

Above looking south

*Offsite Tree 75**

GENERAL INFORMATION			
Tree Number			75*
Genus			Eucalyptus
Species			globulus
Common Name			blue gum
Trunk Diameter	(DBH)	inches	36
Tree Protection Zone	(TPZ)	feet	36
Height		feet	40
Crown Width		feet	15
Condition			very poor
Condition Rating		points	3
RISK RATING			high
Likelihood of Failure within 5 years:			probable
Likelihood of Impacting a Target:			high
Likelihood of both Failure and Impact:			likely
Consequences of Failure:			Significant
Risk Mitigation Indicated?			Yes
CONSERVATION SUITABILITY RATING			poor
Score		points	
Distance to cut/fill		feet	8
Recommended Distance to cut/fill		feet	36
Distance to Construction Activity			8
Recommended Distance to Construction			15
ARBORIST RECOMMENDATION FOR CONSERVATION:			REMOVE

STRUCTURAL DEFECTS:

75* codom with half dead + half of half dead, dead branches,unbalanced crown

A poor candidate for conservation due to its High Risk rating and low score on the General Conservation Suitability scale. Tree is codominant and 3/4 dead.

Mostly dead with sprouts. Collapse likely within 5 years

Mitigation should be removal.

It will remain a high risk tree that needs reassessed in 1 years.

Offsite Tree 75*, blue gum, Risk Mitigation Pruning

Tree is ¾ dead and should be removed.

The work should be performed in accordance with the national consensus safety standards for tree care ANSI Z133.1. Tree care workers should be familiar with the national consensus standards for pruning and should be supervised by an arborist certified by the International Society of Arboriculture. The contractor should provide the owner with the supervisors ISA Certification Number and Expiration Date.

The owner may want to have their own arborist observe the work and report what was actually done in order to create a record of steps taken to mitigate risk.

Continued risk monitoring is necessary for this tree. This trees should be assessed a year after construction occurs to see if rapid decline has occurred.

Offsite Tree 75*, Photos

Above looking west

Above looking west

*Offsite Tree 76**

GENERAL INFORMATION			
Tree Number			76*
Genus			Eucalyptus
Species			globulus
Common Name			blue gum
Trunk Diameter	(DBH)	inches	16
Tree Protection Zone	(TPZ)	feet	16
Height		feet	45
Crown Width		feet	15
Condition			dead
Condition Rating		points	0
RISK RATING			high
Likelihood of Failure within 5 years:			probable
Likelihood of Impacting a Target:			high
Likelihood of both Failure and Impact:			likely
Consequences of Failure:			Significant
Risk Mitigation Indicated?			Yes
CONSERVATION SUITABILITY RATING			poor
Score		points	
Distance to cut/fill		feet	8
Recommended Distance to cut/fill		feet	16
Distance to Construction Activity			8
Recommended Distance to Construction			15
ARBORIST RECOMMENDATION FOR CONSERVATION:			REMOVE

STRUCTURAL DEFECTS:

76* dead tree

Dead tree

Offsite Tree 76*, blue gum, Risk Mitigation Pruning

Tree is dead and should be removed.

The work should be performed in accordance with the national consensus safety standards for tree care ANSI Z133.1. Tree care workers should be familiar with the national consensus standards for pruning and should be supervised by an arborist certified by the International Society of Arboriculture. The contractor should provide the owner with the supervisors ISA Certification Number and Expiration Date.

The owner may want to have their own arborist observe the work and report what was actually done in order to create a record of steps taken to mitigate risk.

Continued risk monitoring is necessary for this tree. This trees should be assessed a year after construction occurs to see if rapid decline has occurred.

Offsite Tree 76*, Photos

Above looking north

*Offsite Tree 77**

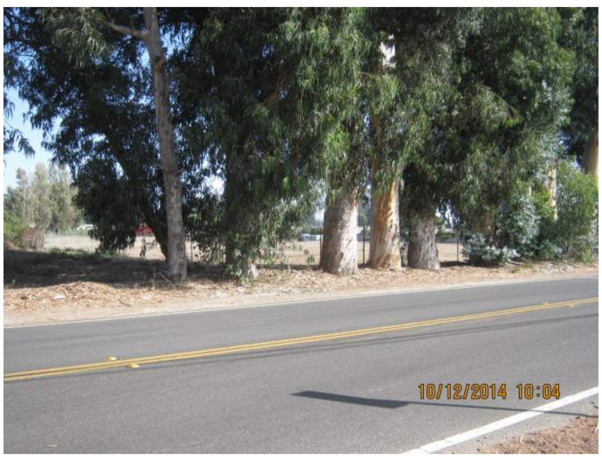
GENERAL INFORMATION			
Tree Number			77*
Genus			Eucalyptus
Species			globulus
Common Name			blue gum
Trunk Diameter	(DBH)	inches	17
Tree Protection Zone	(TPZ)	feet	17
Height		feet	30
Crown Width		feet	30
Condition			fair
Condition Rating		points	14
RISK RATING			low
Likelihood of Failure within 5 years:			improbable
Likelihood of Impacting a Target:			medium
Likelihood of both Failure and Impact:			unlikely
Consequences of Failure:			Significant
Risk Mitigation Indicated?			no
CONSERVATION SUITABILITY RATING			poor
Score		points	58
Distance to cut/fill		feet	9.5
Recommended Distance to cut/fill		feet	17
Distance to Construction Activity			9.5
Recommended Distance to Construction			30
ARBORIST RECOMMENDATION FOR CONSERVATION:			retain
STRUCTURAL DEFECTS:			

77* lean, branch injuries

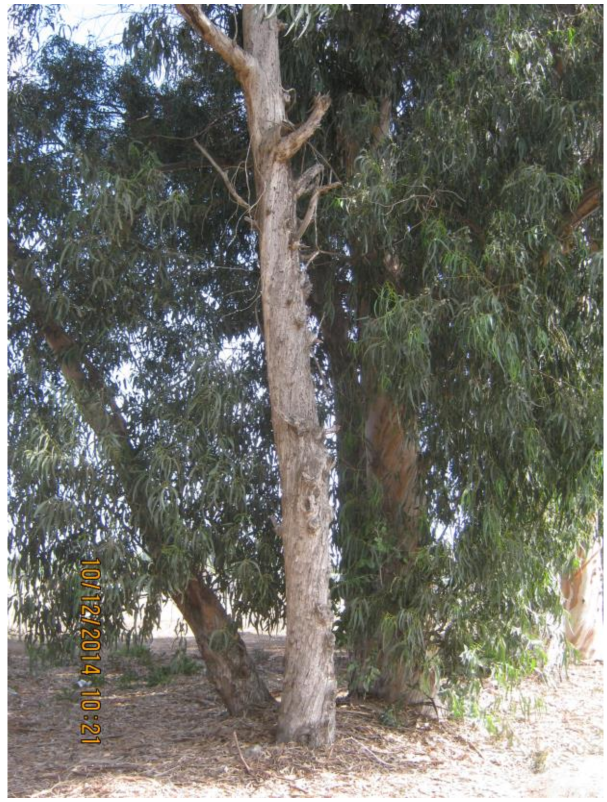
A poor candidate for conservation due to extreme lean and low score on the General Conservation Suitability scale.

Small size means it will remain a low/medium risk tree that needs reassessed in 1 years.

Offsite Tree 77*, Photos



Above looking north



Above looking northeast

Offsite Trees 78 and continuing west along Etting Road.*

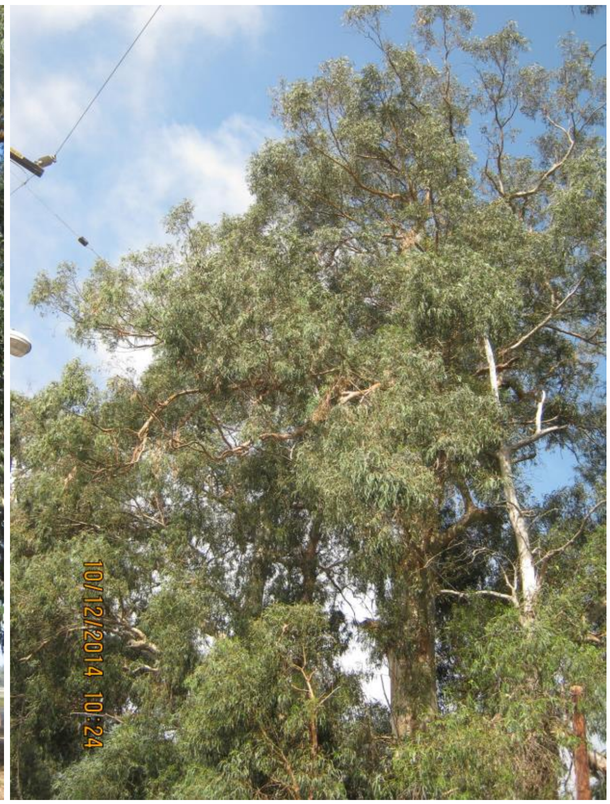
These trees are in bad shade with signs of extensive internal decay. Collapsed trunks. Many dead and hang dead branches, dead thin stressed canopies

Photos

Offsite Trees 78* and others to the west of site on north side of Etting Road.

These trees are in bad shade with signs of extensive internal decay. Collapsed trunks. Many dead and hang dead branches, dead thin stressed canopies

Photos




GAP IN ROW
ENTRANCE ONLY

Endnotes

[1] Kite and Smiley, Best Management Practices: Managing Trees in Construction, ISA, 2008, P. 28.

[2] Smiley, Thomas, Nelda Metheny and Sharon Lilly, Best Management Practices Tree Risk Assessment, International Society of Arboriculture, 2011.

[3] American National Standard, ANSI A300 (Part 5)-2012.Management of Trees and Shrubs During Site Planning, Site Development and Construction. Tree Care Industry Association, Londonderry, 2012

[4] California Statewide Integrated Pest Management Program, US Davis:

http://www.ipm.ucdavis.edu/PMG/PESTNOTES/pn74109.html

[5] The Urban Forest Ecosystem Institute at University of California San Luis Obispo, 2014: http://selectree.calpoly.edu/treedetail.lasso?rid=543

[6] California Tree Failure Report Program http://ucanr.edu/sites/treefail/Failure_Photos/Eucalyptus_globulus/

[7] Daily Pilot, "Family of woman crushed by tree gets $1.1 million" http://articles.dailypilot.com/2013-08-27/news/tn-dpt-me-0828-newport-eucalyptus-death-20130827_1_hyun-myung-suk-sunyl-chung-haeyoon-miller

[8] Newport Beach Independent, http://www.newportbeachindy.com/contractor-tree-death-extra-120k/

[9] Hoyt, Roland Ornamental Plants for Subtropical Regions, Livingston Press, Anaheim, 1998, p.290.

[10] Wikipedia http://en.wikipedia.org/wiki/Eucalyptus_globulus

[11] Forest Service, 2014, http://www.na.fs.fed.us/pubs/silvics_manual/volume_2/eucalyptus/globulus.htm

[12] California Statewide Integrated Pest Management Program, US Davis:

http://www.ipm.ucdavis.edu/PMG/PESTNOTES/pn74109.html

ADDENDUM III: Decision to Preserve Blue Gum Trees

Addendum to

Tree Report for Senior Living and Apartment Com. Pleasant Valley Rd Dated March 31, 2014

Plus

Addendum I: Reply to Planners Comments. Dated September 21, 2014

Plus

Addendum II: Blue Gum Risk Assessment & Management Report. Dated October 18, 2014

Client:

Dansk Investment Group, Inc.

C/O Lauterbach & Associates, Architects, Inc.

300 Montgomery Avenue

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Prepared in consultation with:

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Consulting Arborist:

LA Johnny

John Burke

10880 Del Norte Street #27

Ventura, California

805-754-9393

January 26, 2015

Table of Contents

Summary

This addendum concerns the preservation suitability of 19 blue gum trees (*Eucalyptus globulus*) on the project site in Oxnard, CA.

The owner Vince Daly wants to preserve the trees. None of the 19 trees was rated an Extreme Risk meaning failure is imminent. Ten trees have a High Risk rating. Mr. Daly plans to lower the risk of all trees by following the risk reduction pruning recommendations provided in Appendix B of my Risk Assessment & Management Report, dated October 18, 2014.

Mr. Daly's decision is supported by the facts in the report and reflect his priorities.

In short:

1. The trees are being preserved as best as we can given their condition.
2. The trees will retain residual risk of failure regardless of what pruning takes place.
3. Risk reduction pruning recommendations were provided in Appendix B of Addendum II and have been included again in this addendum.
4. Additional information obtained during risk reduction pruning may require a reassessment of a tree's risk rating.
5. The owner is aware of the risk of preserving these 19 trees and is willing to take it on.
6. A Tree Protection Plan was prepared by Jordan Gilbert and Bain and reviewed by me.

Introduction

When the owner's studied my risk assessment report they saw I had included specific information about how to mitigate the risk of each tree. The owner wanted to know if he could follow my risk mitigation pruning instructions and keep the trees rather than removing them as I recommended. We agreed to meet on-site to review the trees and discuss the available options.

Observations

No new observations were made.

Analysis

No new analysis was done.

Discussion

A site meeting was held on November 14, 2014 with Vince Daly, Mark Pettit, the owner's architect, Paul Jordan, Mike Gilbert and myself. I explained to Mr. Daly that my recommendations were made at the end of my study. The individual risk mitigation instructions and pruning specifications were done at the beginning of my study as I gathered information.

Mr. Daly told me that he was willing to accept the risk; furthermore, he explained that his company planned to retain ownership of the site and would devote the resources needed to monitor the aging trees.

Mr. Daly understood that the trees appraised value based on accepted industry standards is far less than the cost of mitigation and monitoring which will be an ongoing expense for the next 10 to 20 years.

Mr. Daly also understood that he would need a Tree Protection Plan that would manage the trees before, during and after construction. We agreed that the tree protection plan would include the risk mitigation instructions and pruning.

Conclusions

After reviewing my last report, Addendum II: Blue Gum Risk Assessment & Management Report, the owner decided to preserve the trees by assuming the additional liability and cost that this option required. None of the trees are an Extreme Risk meaning failure is immanent.

According to the International Society of Arboriculture, “The priority for action depends upon the risk rating and risk tolerance of the owner or manager.” Mr. Daly has made an informed decision to preserve the trees which is consistent with the industry standard and best management practices.

The owner’s landscape architect has prepared a Tree Protection Plan

Recommendations

1. The City should accept the owner’s decision to preserve the 19 blue gum trees.

2. The owner should have a tree protection plan.

3. The Tree Protection Plan should include the instructions and pruning specifications found in Appendix B Individual Tree Data from my last report dated October 18, 2014.

Certification

PREMISES: Senior Living and Apartment Community Pleasant Valley Road Oxnard, California

I, John Burke, CERTIFY to the best of my knowledge and belief:

1. That the statements of fact contained in this plant appraisal are true and correct.
2. That the appraisal analysis, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and that they are my personal, unbiased professional analysis, opinions and conclusions.
3. That I have no present of prospective interest in the plants that are the subject of this appraisal, and that I have no personal interest or bias with respect to the parties involved.
4. That my compensation is not contingent upon predetermined value or direction in value that favors the cause of the client, the amount of the value estimate, the attainment of a stipulated result, or the occurrence of a subsequent event.

Date: 1/26/2015

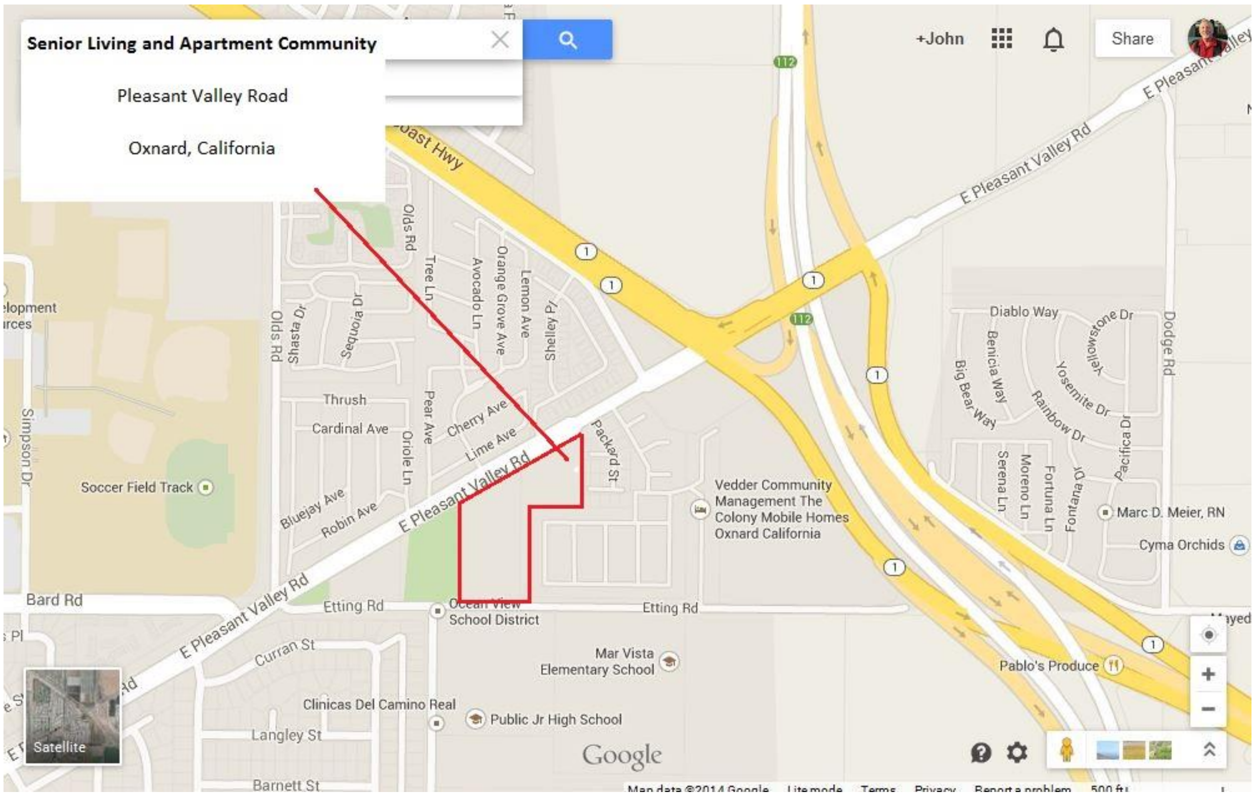
John Burke

Landscape Architect 5251

ISA Certified Arborist WE-8327A

Appendix A Tree Maps

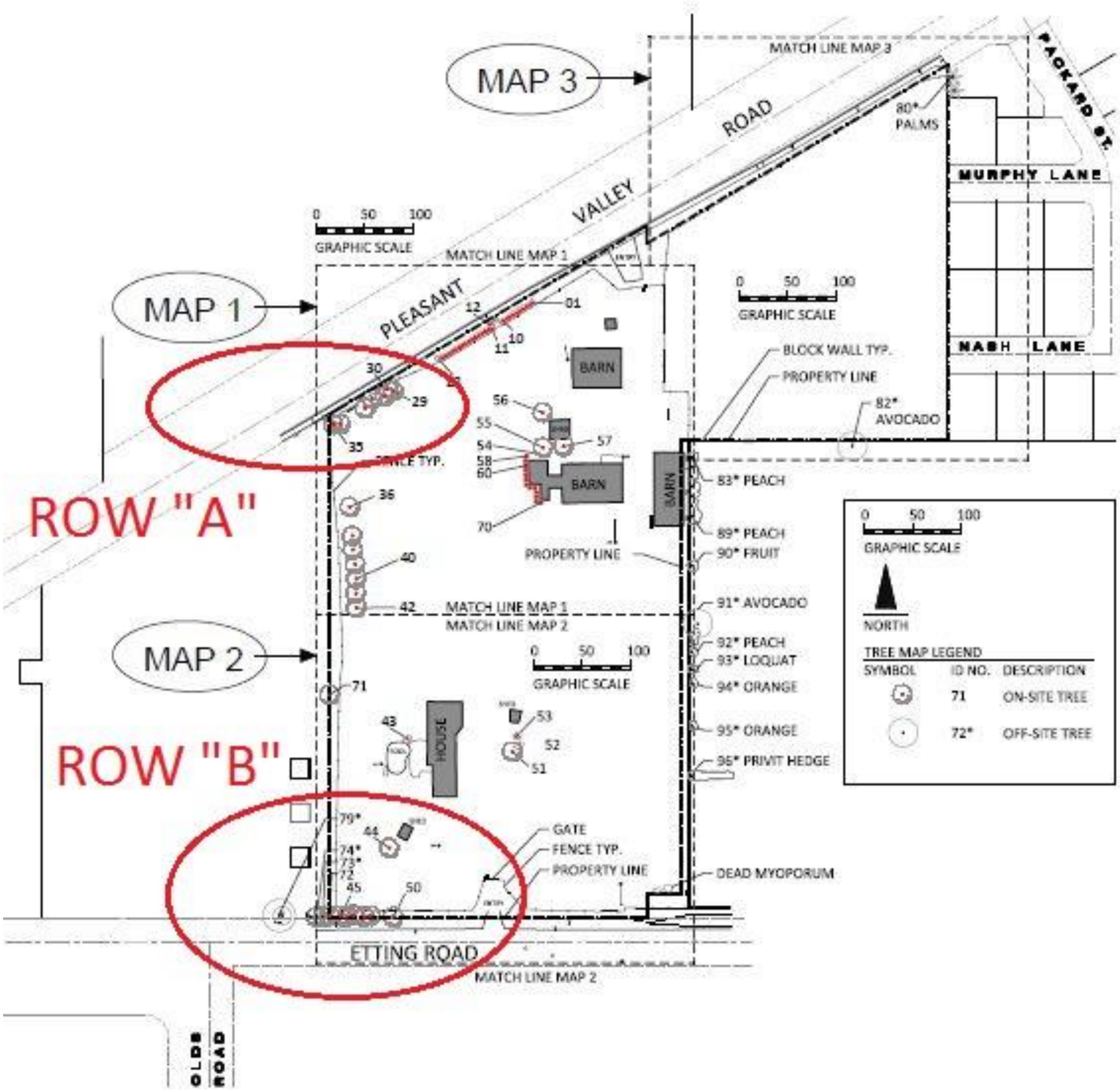
Location Map



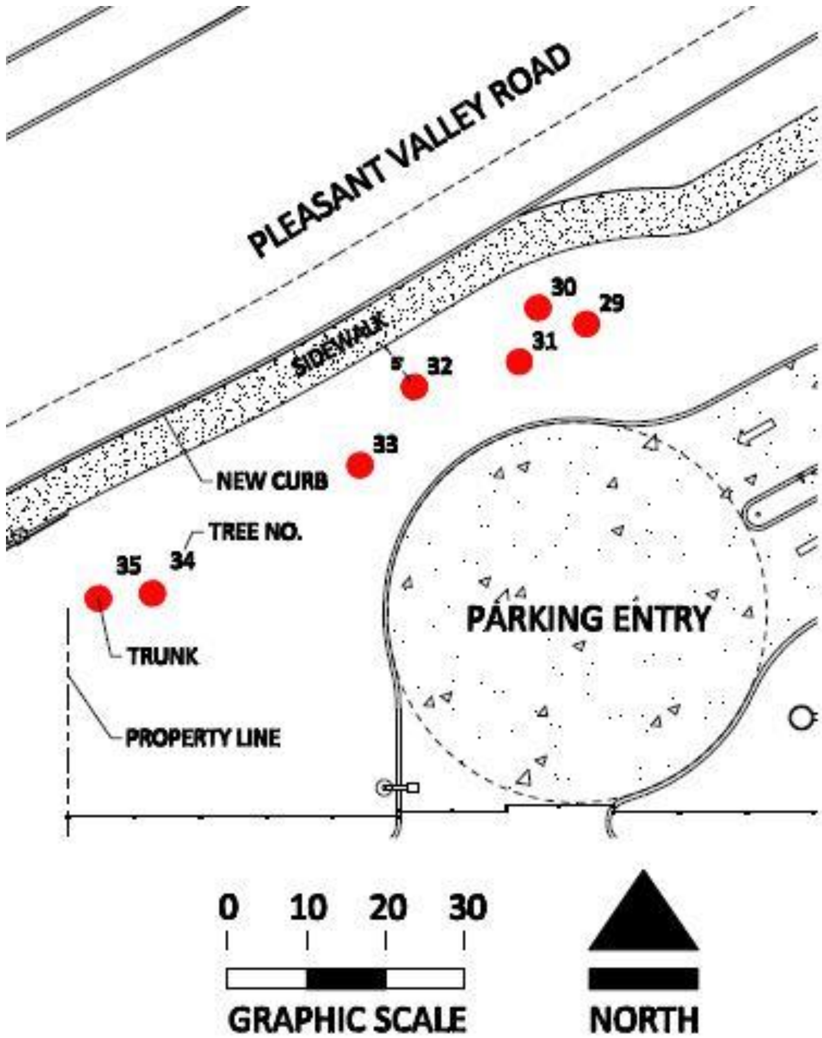
(Oriented with north at top)

Tree Key Map

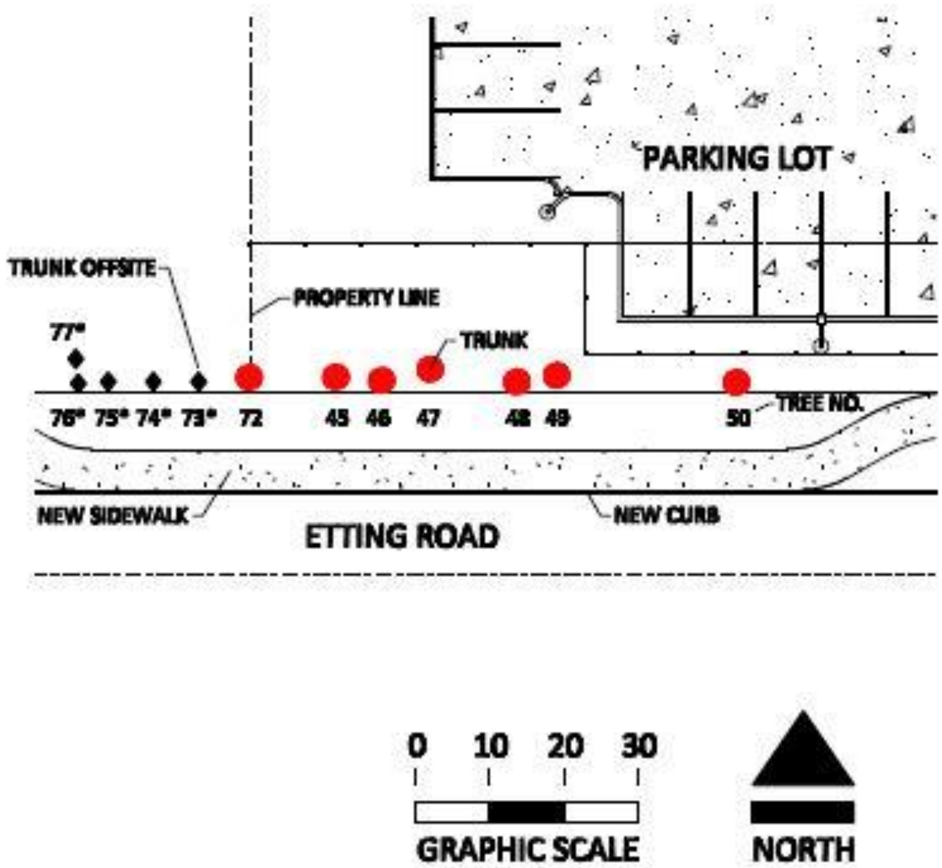
(Oriented with north at top)



Tree Map 1 Row A



Tree Map 2 Row B



Appendix B Individual Tree Data

Tree 29

GENERAL INFORMATION			
Tree Number			29
Genus			Eucalyptus
Species			globulus
Common Name			blue gum
Trunk Diameter	(DBH)	inches	42
Tree Protection Zone	(TPZ)	feet	42
Height		feet	150
Crown Width		feet	40
Condition			poor/fair
Condition Rating		points	12
RISK RATING			High
Likelihood of Failure within 5 years:			Probable
Likelihood of Impacting a Target:			High
Likelihood of both Failure and Impact:			Likely
Consequences of Failure:			Significant
Risk Mitigation Indicated?			Yes
CONSERVATION SUITABILITY RATING			Poor
Score		points	45
Distance to cut/fill			10 feet
Recommended Distance to cut/fill			42 feet
Distance to Construction Activity			9 feet
Recommended Distance to Construction			40 feet
ARBORIST RECOMMENDATION FOR CONSERVATION:			REMOVE

STRUCTURAL DEFECTS:

dead branches, unballanced crown, conks on adjacent stump

A poor candidate for conservation due to its High Risk rating and low score on the General Conservation Suitability scale. Branches with the highest probability of failure can be removed but that won’t mitigate the underlying risk factors: age, size, and species and the presence of targets both stationary and moving.

The TPZ already compromised by street and curb 19’ from the trunk, after construction it will be 9’ - 16’. Recommended distance is 42’. Now 22 % of the TPZ is paved; after construction 70% will be paved. Decline can be expected to continue and accelerate.

Expected Risk Rating following mitigation: High It will remain a high risk tree that needs reassessed in 1 years.

Tree 29, blue gum, Risk Mitigation Pruning

Most likely part to fail: dead 3 to 6 inch diameter branches and a large 12” diameter overextended branch at the top that may also contain deadwood.

Prune to reduce and clean the crown as described in the American National Standard A300 Part 1 - 2008 Pruning and the companion publication Best Management Practices Tree Pruning (2008).

Reduce the crown by removing the top most branch back to a significant lateral branch. From the ground the attachment point is hidden by foliage, it may be about 115 feet above ground.

Clean the canopy by removing any dead branches over 1 inch in diameter. There’s not a lot of deadwood in the canopy but some visible above 100 feet. Remove any obvious crossing, damaged or diseased branches. Do not remove more than 10 percent of the trees living canopy.

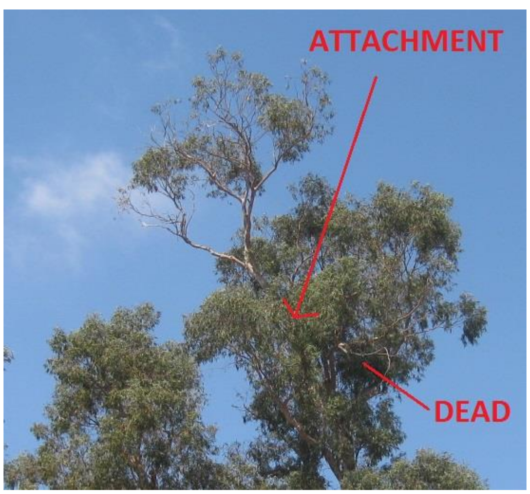
Climber should observe for decay in the trunks and branches and report findings to the supervising arborist.

The work should be performed in accordance with the national consensus safety standards for tree care ANSI Z133.1. Tree care workers should be familiar with the national consensus standards for pruning and should be supervised by an arborist certified by the International Society of Arboriculture. The contractor should provide the owner with the supervisors ISA Certification Number and Expiration Date.

The owner may want to have their own arborist observe the work and report what was actually done in order to create a record of steps taken to mitigate risk.

Continued risk monitoring is necessary for this tree. This trees should be assessed in three years to see if new dead branches have appeared. It should be assessed a year after construction occurs to see if rapid decline has occurred.

Tree 29, Photos



Tree 30

GENERAL INFORMATION			
Tree Number			30
Genus			Eucalyptus
Species			globulus
Common Name			blue gum
Trunk Diameter	(DBH)	inches	25
Tree Protection Zone	(TPZ)	feet	25
Height		feet	105
Crown Width		feet	16
Condition			poor/fair
Condition Rating		points	12
RISK RATING			Moderate
Likelihood of Failure within 5 years:			Possible
Likelihood of Impacting a Target:			high
Likelihood of both Failure and Impact:			somewhat likely
Consequences of Failure:			Significant
Risk Mitigation Indicated?			Yes
CONSERVATION SUITABILITY RATING			poor
Score		points	54
Distance to cut/fill		feet	5
Recommended Distance to cut/fill		feet	25
Distance to Construction Activity			5
Recommended Distance to Construction			16
ARBORIST RECOMMENDATION FOR CONSERVATION:			REMOVE
STRUCTURAL DEFECTS:			
30 ROOT AND BRANCH INJURIES. DEAD BRANCHES			

A poor candidate for conservation due to its close proximity to the new street cut and sidewalk. Following construction 50% of its protected zone will be paved. Decline can be expected to continue and accelerate.

Expected Risk Rating following mitigation: Moderate. It will remain a moderate risk tree that needs reassessed in 1 year.

Tree 30, blue gum, Risk Mitigation Pruning

From the ground there is little deadwood visible. Very few large branches

Prune to clean the crown of dead damaged or diseased branches over 1” diameter as described in the American National Standard A300 Part 1 - 2008 Pruning and the companion publication Best Management Practices Tree Pruning (2008).

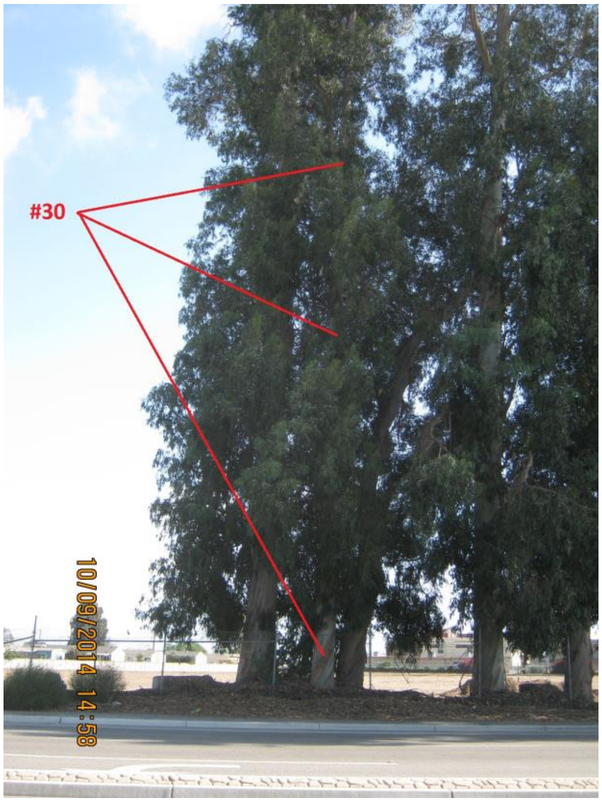
Do not remove more than 10 percent of the trees living canopy.

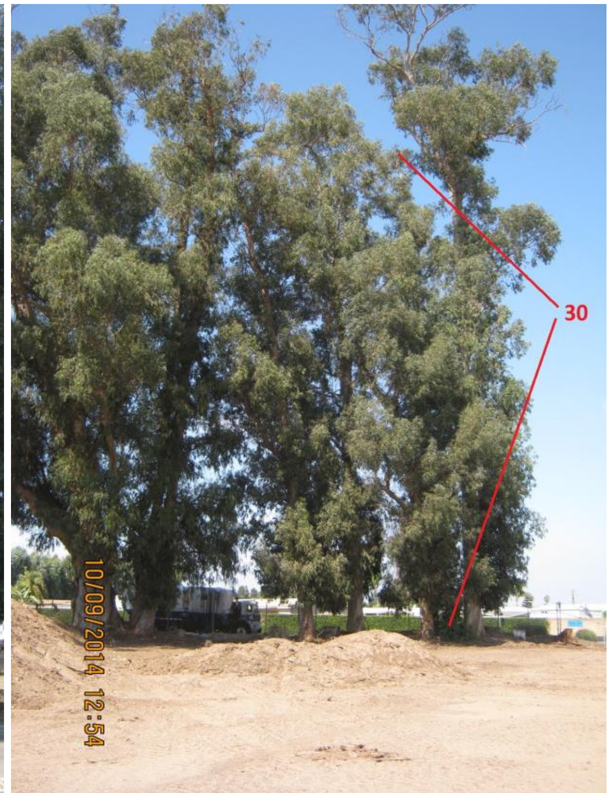
The work should be performed in accordance with the national consensus safety standards for tree care ANSI Z133.1. Tree care workers should be familiar with the national consensus standards for pruning and should be supervised by an arborist certified by the International Society of Arboriculture. The contractor should provide the owner with the supervisors ISA Certification Number and Expiration Date.

The owner may want to have their own arborist observe the work and report what was actually done in order to create a record of steps taken to mitigate risk.

Continued risk monitoring is necessary for this tree. This trees should be assessed a year after construction occurs to see if rapid decline has occurred.

Tree 30, Photos





Above looking south

Above looking north at PVR

Tree 31

GENERAL INFORMATION			
Tree Number			31
Genus			Eucalyptus
Species			globulus
Common Name			blue gum
Trunk Diameter	(DBH)	inches	31
Tree Protection Zone	(TPZ)	feet	31
Height		feet	75
Crown Width		feet	16
Condition			poor
Condition Rating		points	10
RISK RATING			Moderate
Likelihood of Failure within 5 years:			Possible
Likelihood of Impacting a Target:			high
Likelihood of both Failure and Impact:			somewhat likely
Consequences of Failure:			Significant
Risk Mitigation Indicated?			Yes
CONSERVATION SUITABILITY RATING			poor
Score		points	51
Distance to cut/fill		feet	10
Recommended Distance to cut/fill		feet	31
Distance to Construction Activity			7
Recommended Distance to Construction			16
ARBORIST RECOMMENDATION FOR CONSERVATION:			REMOVE

STRUCTURAL DEFECTS:

31 20% lean, root and branch injuries

Moderate risk is manageable but will increase over time and may increase rapidly as a result of construction in the TPZ. Removing adjacent trees would decrease its stability and increase its risk of failure.

A poor candidate for conservation due to its close proximity to the existing and proposed street curb cut, sidewalk and driveway. Following construction 60% of its protected zone will be paved. Decline can be expected to continue and accelerate.

Expected Risk Rating following mitigation: Moderate. It will remain a moderate risk tree that needs reassessed in 1 year.

Tree 31, blue gum, Risk Mitigation Pruning

Prune to clean crossing branches and thin sprouts at old branch scars.

Prune to clean the crown of dead, damaged or diseased branches over 1” diameter as described in the American National Standard A300 Part 1 - 2008 Pruning and the companion publication Best Management Practices Tree Pruning (2008).

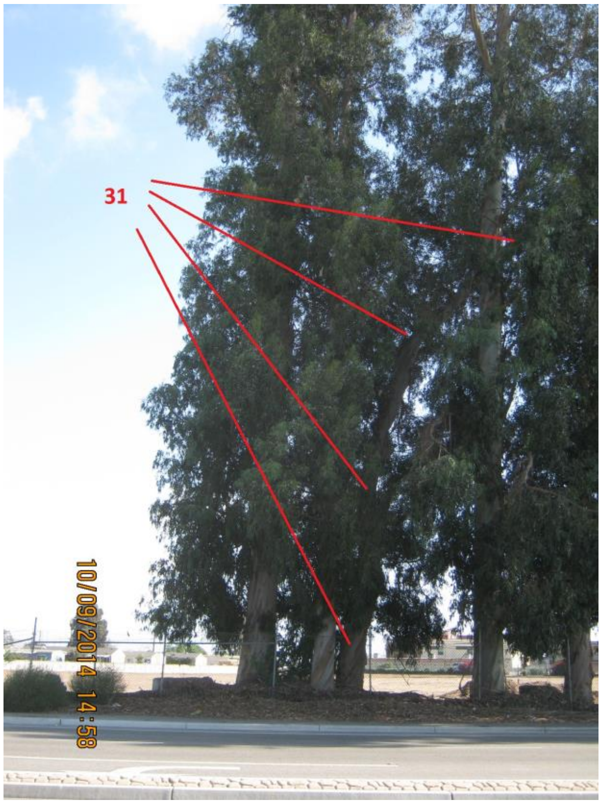
Do not remove more than 10 percent of the trees living canopy.

The work should be performed in accordance with the national consensus safety standards for tree care ANSI Z133.1. Tree care workers should be familiar with the national consensus standards for pruning and should be supervised by an arborist certified by the International Society of Arboriculture. The contractor should provide the owner with the supervisors ISA Certification Number and Expiration Date.

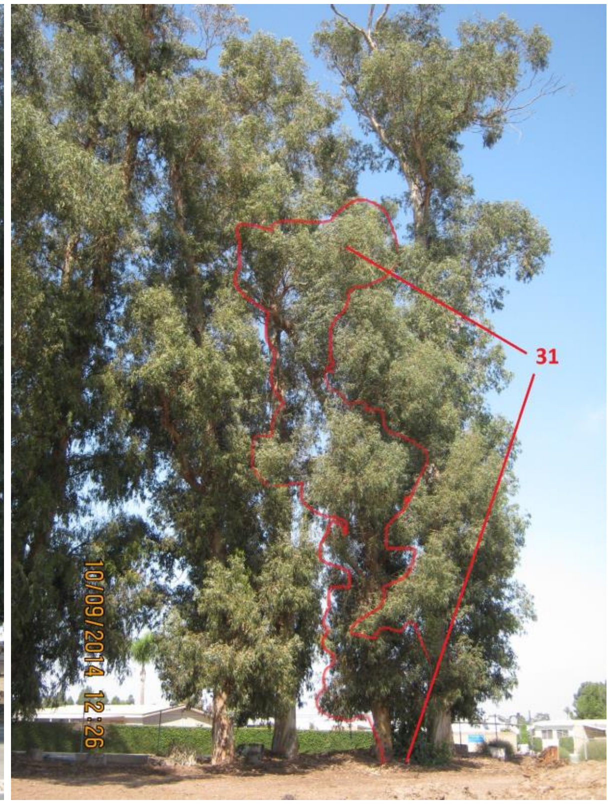
The owner may want to have their own arborist observe the work and report what was actually done in order to create a record of steps taken to mitigate risk.

Continued risk monitoring is necessary for this tree. This trees should be assessed a year after construction occurs to see if rapid decline has occurred.

Tree 31, Photos



Above looking south



Above looking north at PVR

Tree 32

GENERAL INFORMATION			
Tree Number			32
Genus			Eucalyptus
Species			globulus
Common Name			blue gum
Trunk Diameter	(DBH)	inches	34
Tree Protection Zone	(TPZ)	feet	34
Height		feet	115
Crown Width		feet	24
Condition			poor
Condition Rating		points	13
RISK RATING			Low
Likelihood of Failure within 5 years:			Possible
Likelihood of Impacting a Target:			Medium
Likelihood of both Failure and Impact:			Unlikely
Consequences of Failure:			Significant
Risk Mitigation Indicated?			Yes
CONSERVATION SUITABILITY RATING			poor
Score		points	61
Distance to cut/fill		feet	6
Recommended Distance to cut/fill		feet	34
Distance to Construction Activity			6
Recommended Distance to Construction			24
ARBORIST RECOMMENDATION FOR CONSERVATION:			REMOVE

STRUCTURAL DEFECTS:

32 slight lean, root and branch injuries

Low risk is manageable but will increase over time and may increase rapidly as a result of construction in the TPZ. Removing adjacent trees would decrease its stability and increase its risk of failure.

A poor candidate for conservation due to its close proximity to the existing and proposed street curb cut, sidewalk and driveway. Following construction 58% of its protected zone will be paved. Decline can be expected to continue and accelerate.

Expected Risk Rating following mitigation: Low. It will need risk reassessed in 1 year.

Tree 32, blue gum, Risk Mitigation Pruning

Prune to raise the canopy at the new sidewalk. Remove the lowest branch over the sidewalk at the trunk at about 15’ above ground. Very little dead visible in canopy.

Prune to clean the crown of dead, damaged or diseased branches over 1” diameter as described in the American National Standard A300 Part 1 - 2008 Pruning and the companion publication Best Management Practices Tree Pruning (2008).

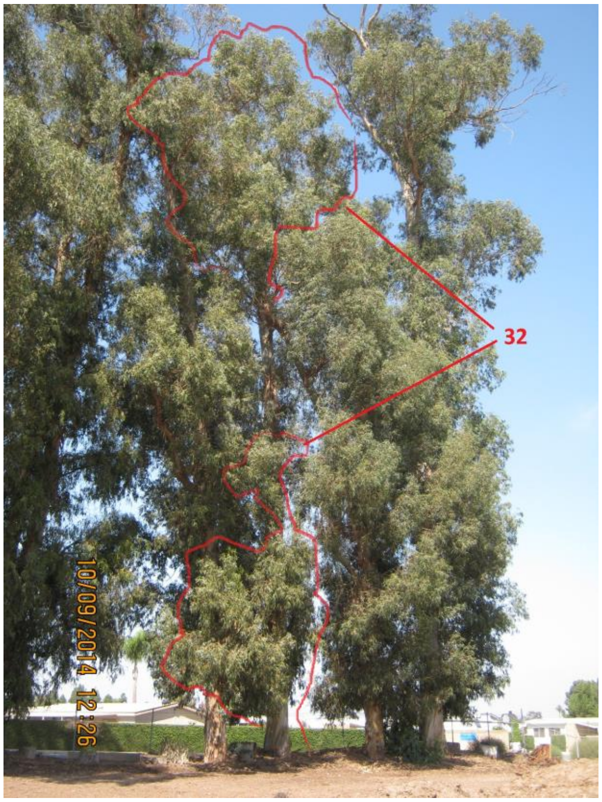
Do not remove more than 10 percent of the trees living canopy.

The work should be performed in accordance with the national consensus safety standards for tree care ANSI Z133.1. Tree care workers should be familiar with the national consensus standards for pruning and should be supervised by an arborist certified by the International Society of Arboriculture. The contractor should provide the owner with the supervisors ISA Certification Number and Expiration Date.

The owner may want to have their own arborist observe the work and report what was actually done in order to create a record of steps taken to mitigate risk.

Continued risk monitoring is necessary for this tree. This trees should be assessed a year after construction occurs to see if rapid decline has occurred.

Tree 32, Photos



Above looking north at PVR

Above looking east toward Rice Avenue

Tree 33

GENERAL INFORMATION			
Tree Number			33
Genus			Eucalyptus
Species			globulus
Common Name			blue gum
Trunk Diameter	(DBH)	inches	31
Tree Protection Zone	(TPZ)	feet	31
Height		feet	115
Crown Width		feet	25
Condition			poor
Condition Rating		points	11
RISK RATING			Mod/high
Likelihood of Failure within 5 years:			Probable
Likelihood of Impacting a Target:			high
Likelihood of both Failure and Impact:			likely
Consequences of Failure:			Significant
Risk Mitigation Indicated?			Yes
CONSERVATION SUITABILITY RATING			poor
Score		points	53
Distance to cut/fill		feet	9
Recommended Distance to cut/fill		feet	31
Distance to Construction Activity			9
Recommended Distance to Construction			25
ARBORIST RECOMMENDATION FOR CONSERVATION:			REMOVE

STRUCTURAL DEFECTS:

33 leaning trunk

Moderate risk is manageable but will increase over time and may increase rapidly as a result of construction in the TPZ. Removing adjacent trees would decrease its stability and increase its risk of failure.

A poor candidate for conservation due to its close proximity to the existing and proposed street curb cut, sidewalk and driveway. Following construction 48% of its protected zone will be paved. Decline can be expected to continue and accelerate.

Expected Risk Rating following mitigation: Moderate. It will remain a moderate risk tree that needs reassessed in 1 year.

Tree 33, blue gum, Risk Mitigation Pruning

Top branches appear stressed and may be dying, little dead in the rest of the canopy. Raise canopy at new sidewalk and driveway by removing descending 4” branches at trunk.

Prune to raise canopy for clearance and clean the crown of dead, damaged or diseased branches over 1” diameter as described in the American National Standard A300 Part 1 - 2008 Pruning and the companion publication Best Management Practices Tree Pruning (2008).

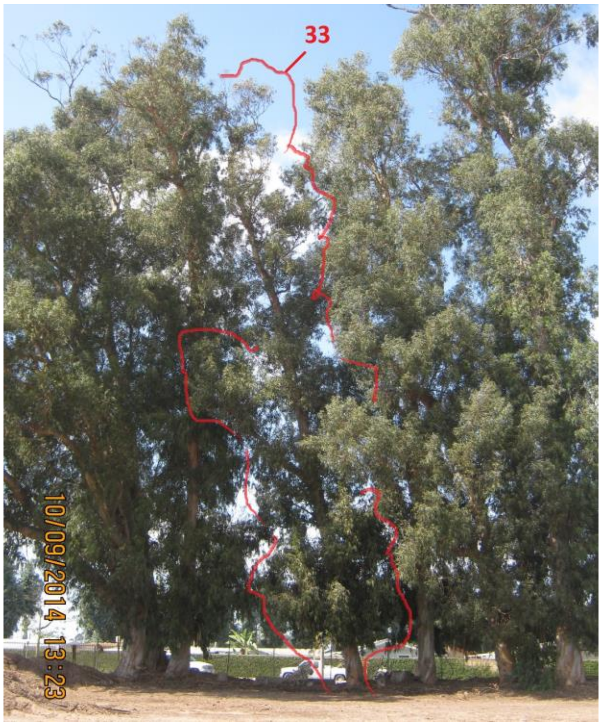
Do not remove more than 10 percent of the trees living canopy.

The work should be performed in accordance with the national consensus safety standards for tree care ANSI Z133.1. Tree care workers should be familiar with the national consensus standards for pruning and should be supervised by an arborist certified by the International Society of Arboriculture. The contractor should provide the owner with the supervisors ISA Certification Number and Expiration Date.

The owner may want to have their own arborist observe the work and report what was actually done in order to create a record of steps taken to mitigate risk.

Continued risk monitoring is necessary for this tree. This trees should be assessed a year after construction occurs to see if rapid decline has occurred.

Tree 33, Photos



Above looking north at PVR

Above looking south

Small twisted branch clusters, typical

Tree 34

GENERAL INFORMATION			
Tree Number			34
Genus			Eucalyptus
Species			globulus
Common Name			blue gum
Trunk Diameter	(DBH)	inches	48
Tree Protection Zone	(TPZ)	feet	48
Height		feet	125
Crown Width		feet	20
Condition			poor
Condition Rating		points	10
RISK RATING			high
Likelihood of Failure within 5 years:			Probable
Likelihood of Impacting a Target:			high
Likelihood of both Failure and Impact:			likely
Consequences of Failure:			Significant
Risk Mitigation Indicated?			Yes
CONSERVATION SUITABILITY RATING			poor
Score		points	45
Distance to cut/fill		feet	14
Recommended Distance to cut/fill		feet	48
Distance to Construction Activity			14
Recommended Distance to Construction			20
ARBORIST RECOMMENDATION FOR CONSERVATION:			REMOVE

STRUCTURAL DEFECTS:

34 codominant stems, trunk lean, dead branches

A poor candidate for conservation due to its High Risk rating and low score on the General Conservation Suitability scale. Branches with the highest probability of failure can be removed but that won’t mitigate the underlying risk factors: age, size, codominant trunks and species and the presence of targets both stationary and moving.

The TPZ already compromised by street and curb 19’ from the trunk and 32% paved. After construction it will be 14’ and 42% will be paved. Recommended distance is 48’ Decline can be expected to continue and accelerate.

Expected Risk Rating following mitigation: High It will remain a high risk tree that needs reassessed in 1 years.

Tree 34, blue gum, Risk Mitigation Pruning

Clean dead branches at top of crown and thin up to 10%.

Prune to clean the crown of dead, damaged or diseased branches over 1” diameter and thin the canopy as described in the American National Standard A300 Part 1 - 2008 Pruning and the companion publication Best Management Practices Tree Pruning (2008).

Do not remove more than 10 percent of the trees living canopy.

The work should be performed in accordance with the national consensus safety standards for tree care ANSI Z133.1. Tree care workers should be familiar with the national consensus standards for pruning and should be supervised by an arborist certified by the International Society of Arboriculture. The contractor should provide the owner with the supervisors ISA Certification Number and Expiration Date.

The owner may want to have their own arborist observe the work and report what was actually done in order to create a record of steps taken to mitigate risk.

Continued risk monitoring is necessary for this tree. This trees should be assessed a year after construction occurs to see if rapid decline has occurred.

Tree 34, Photos

Above looking north at PVR

Above looking south

Tree 35

GENERAL INFORMATION			
Tree Number			35
Genus			Eucalyptus
Species			globulus
Common Name			blue gum
Trunk Diameter	(DBH)	inches	101
Tree Protection Zone	(TPZ)	feet	101
Height		feet	135
Crown Width		feet	65
Condition			poor
Condition Rating		points	9
RISK RATING			High
Likelihood of Failure within 5 years:			Probable
Likelihood of Impacting a Target:			high
Likelihood of both Failure and Impact:			likely
Consequences of Failure:			Significant
Risk Mitigation Indicated?			Yes
CONSERVATION SUITABILITY RATING			poor
Score		points	45
Distance to cut/fill		feet	32
Recommended Distance to cut/fill		feet	101
Distance to Construction Activity			32
Recommended Distance to Construction			65
ARBORIST RECOMMENDATION FOR CONSERVATION:			REMOVE

STRUCTURAL DEFECTS:

35 cavity 4x2x1, lean, unbalanced crown, decay, codominant stems

A poor candidate for conservation due to its High Risk rating and low score on the General Conservation Suitability scale. Presents the greatest risk of any of the 7 trees in this group. Large heavy 20” dia. branches extend about 60 feet on one side of the canopy. Scars show this tree has lost many large branches from as high as 100’. Branches with the highest probability of failure can be removed but that won’t mitigate the underlying risk factors: age, size, codominant trunks, overextended branches, lopsided canopy and species and the presence of targets both stationary and moving. *Laetiporus sulphureus*, sulfur fungus, present.

Expected Risk Rating following mitigation: High It will remain a high risk tree that needs reassessed in 1 years.

Tree 35, blue gum, Risk Mitigation Pruning

Prune to reduce two large scaffold branches extending south-southwest. Remove 15 to 20 feet from both cutting at a significant lateral.

Reduce the top 15-20’ of dead and stressed branches. Additonal reduction will probably be needed in coming years.

Climber should observe for decay in the trunks and branches including the conks on the north side about 60 feet high as shown in the photos.

Prune to clean the crown of dead, damaged or diseased branches over 1” diameter and thin the canopy as described in the American National Standard A300 Part 1 - 2008 Pruning and the companion publication Best Management Practices Tree Pruning (2008).

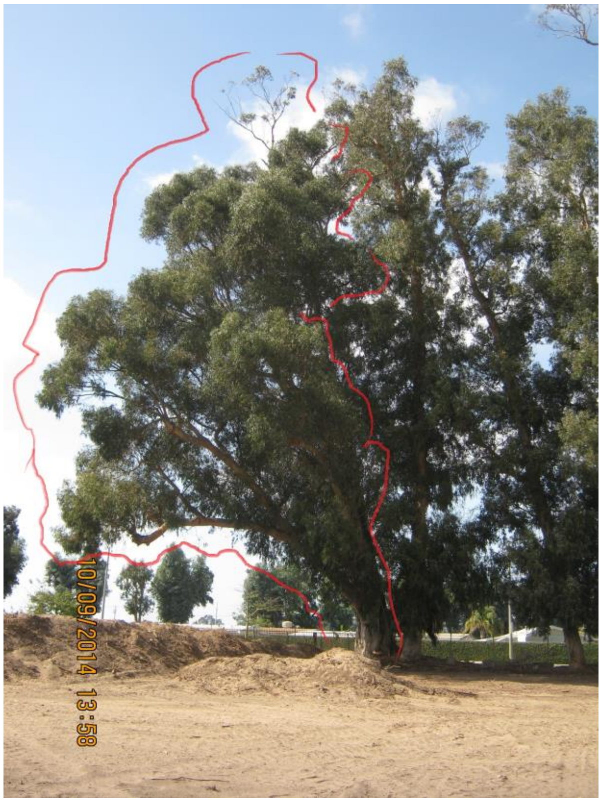
Do not remove more than 10 percent of the trees living canopy.

The work should be performed in accordance with the national consensus safety standards for tree care ANSI Z133.1. Tree care workers should be familiar with the national consensus standards for pruning and should be supervised by an arborist certified by the International Society of Arboriculture. The contractor should provide the owner with the supervisors ISA Certification Number and Expiration Date.

The owner may want to have their own arborist observe the work and report what was actually done in order to create a record of steps taken to mitigate risk.

Continued risk monitoring is necessary for this tree. This trees should be assessed a year after construction occurs to see if rapid decline has occurred.

Tree 35, Photos



Above looking north at PVR

Above looking southeast

Tree 45

GENERAL INFORMATION			
Tree Number			45
Genus			Eucalyptus
Species			globulus
Common Name			blue gum
Trunk Diameter	(DBH)	inches	36
Tree Protection Zone	(TPZ)	feet	36
Height		feet	100
Crown Width		feet	45
Condition			poor/fair
Condition Rating		points	11
RISK RATING			High
Likelihood of Failure within 5 years:			Probable
Likelihood of Impacting a Target:			high
Likelihood of both Failure and Impact:			likely
Consequences of Failure:			Significant
Risk Mitigation Indicated?			Yes
CONSERVATION SUITABILITY RATING			poor
Score		points	43
Distance to cut/fill		feet	8
Recommended Distance to cut/fill		feet	36
Distance to Construction Activity			8
Recommended Distance to Construction			45
ARBORIST RECOMMENDATION FOR CONSERVATION:			REMOVE

STRUCTURAL DEFECTS:

45 trunk wound, lean, unbalanced crown, root and branch injuries

A poor candidate for conservation due to its High Risk rating and low score on the General Conservation Suitability scale.

Expected Risk Rating following mitigation: High

It will remain a high risk tree that needs reassessed in 1 years.

Tree 45, blue gum, Risk Mitigation Pruning

Prune to clean dead 40’-60’ high, some up to 4” diameter.

Prune to clean the crown of dead, damaged or diseased branches over 1” diameter and thin the canopy.

Remove sprouts on bottom 12’ of trunk to improve aesthetics and views.

Prune to as described in the American National Standard A300 Part 1 - 2008 Pruning and the companion publication Best Management Practices Tree Pruning (2008).

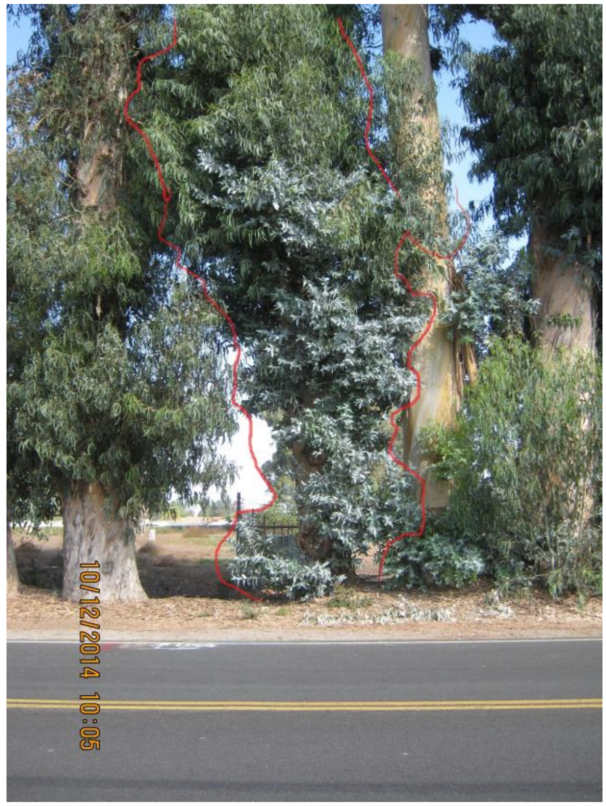
Do not remove more than 10 percent of the trees living canopy.

The work should be performed in accordance with the national consensus safety standards for tree care ANSI Z133.1. Tree care workers should be familiar with the national consensus standards for pruning and should be supervised by an arborist certified by the International Society of Arboriculture. The contractor should provide the owner with the supervisors ISA Certification Number and Expiration Date.

The owner may want to have their own arborist observe the work and report what was actually done in order to create a record of steps taken to mitigate risk.

Continued risk monitoring is necessary for this tree. This trees should be assessed a year after construction occurs to see if rapid decline has occurred.

Tree 45, Photos



Above looking south

Above looking north

left looking north

Tree 46

GENERAL INFORMATION			
Tree Number			46
Genus			Eucalyptus
Species			globulus
Common Name			blue gum
Trunk Diameter	(DBH)	inches	46
Tree Protection Zone	(TPZ)	feet	46
Height		feet	117
Crown Width		feet	30
Condition			poor
Condition Rating		points	9
RISK RATING			high
Likelihood of Failure within 5 years:			probable
Likelihood of Impacting a Target:			high
Likelihood of both Failure and Impact:			likely
Consequences of Failure:			Significant
Risk Mitigation Indicated?			Yes
CONSERVATION SUITABILITY RATING			poor
Score		points	43
Distance to cut/fill		feet	7
Recommended Distance to cut/fill		feet	46
Distance to Construction Activity			7
Recommended Distance to Construction			30
ARBORIST RECOMMENDATION FOR CONSERVATION:			REMOVE

STRUCTURAL DEFECTS:

46 codominant trunks, root and branch injuries, dead branches,unbalanced crown, L LCR

A poor candidate for conservation due to its High Risk rating and low score on the General Conservation Suitability scale. Massive heavy trunk.

Expected Risk Rating following mitigation: High

It will remain a high risk tree that needs reassessed in 1 years.

Tree 46, blue gum, Risk Mitigation Pruning

Caution dead hangers in canopy.

Prune to clean dead stub at 50’ and 80’ high, some up to 6” diameter.

Prune to clean the crown of dead, damaged or diseased branches over 1” diameter and thin the canopy.

Remove sprouts on bottom 12’ of trunk to improve aesthetics and views.

Prune to as described in the American National Standard A300 Part 1 - 2008 Pruning and the companion publication Best Management Practices Tree Pruning (2008).

Do not remove more than 10 percent of the trees living canopy.

The work should be performed in accordance with the national consensus safety standards for tree care ANSI Z133.1. Tree care workers should be familiar with the national consensus standards for pruning and should be supervised by an arborist certified by the International Society of Arboriculture. The contractor should provide the owner with the supervisors ISA Certification Number and Expiration Date.

The owner may want to have their own arborist observe the work and report what was actually done in order to create a record of steps taken to mitigate risk.

Continued risk monitoring is necessary for this tree. This trees should be assessed a year after construction occurs to see if rapid decline has occurred.

Tree 46, Photos

Above looking south

Above looking north

Tree 47

GENERAL INFORMATION			
Tree Number			47
Genus			Eucalyptus
Species			globulus
Common Name			blue gum
Trunk Diameter	(DBH)	inches	61
Tree Protection Zone	(TPZ)	feet	61
Height		feet	117
Crown Width		feet	40
Condition			poor/fair
Condition Rating		points	11
RISK RATING			Moderate
Likelihood of Failure within 5 years:			Possible
Likelihood of Impacting a Target:			high
Likelihood of both Failure and Impact:			somewhat likely
Consequences of Failure:			Significant
Risk Mitigation Indicated?			Yes
CONSERVATION SUITABILITY RATING			poor
Score		points	49
Distance to cut/fill		feet	9
Recommended Distance to cut/fill		feet	61
Distance to Construction Activity			9
Recommended Distance to Construction			40
ARBORIST RECOMMENDATION FOR CONSERVATION:			REMOVE

STRUCTURAL DEFECTS:

47 codominant trunks with #46, dead branches

Moderate risk is manageable but will increase over time and may increase rapidly as a result of construction in the TPZ. Removing adjacent trees would decrease its stability and increase its risk of failure.

Low score on the General Conservation Suitability scale. Massive heavy trunk.

Decline can be expected to continue and accelerate.

Expected Risk Rating following mitigation: Moderate. It will remain a moderate risk tree that needs reassessed in 1 year.

Tree 47, blue gum, Risk Mitigation Pruning

Prune to clean dead and damaged branches at 50’ on north side.

Prune to raise canopy on north side for clearance by removing 12” diameter stub back to trunk.

Prune to clean the crown of dead, damaged or diseased branches over 1” diameter and thin the canopy. Not much visible.

Remove sprouts on bottom 12’ of trunk to improve aesthetics and views.

Prune to as described in the American National Standard A300 Part 1 - 2008 Pruning and the companion publication Best Management Practices Tree Pruning (2008).

Do not remove more than 10 percent of the trees living canopy.

The work should be performed in accordance with the national consensus safety standards for tree care ANSI Z133.1. Tree care workers should be familiar with the national consensus standards for pruning and should be supervised by an arborist certified by the International Society of Arboriculture. The contractor should provide the owner with the supervisors ISA Certification Number and Expiration Date.

The owner may want to have their own arborist observe the work and report what was actually done in order to create a record of steps taken to mitigate risk.

Continued risk monitoring is necessary for this tree. This trees should be assessed a year after construction occurs to see if rapid decline has occurred.

Tree 47, Photos

Above looking north

Above looking south

Above looking at branch stub

Tree 48

GENERAL INFORMATION			
Tree Number			48
Genus			Eucalyptus
Species			globulus
Common Name			blue gum
Trunk Diameter	(DBH)	inches	38
Tree Protection Zone	(TPZ)	feet	38
Height		feet	80
Crown Width		feet	35
Condition			fair
Condition Rating		points	13
RISK RATING			Moderate
Likelihood of Failure within 5 years:			Possible
Likelihood of Impacting a Target:			high
Likelihood of both Failure and Impact:			somewhat likely
Consequences of Failure:			Significant
Risk Mitigation Indicated?			Yes
CONSERVATION SUITABILITY RATING			poor
Score		points	52
Distance to cut/fill		feet	8
Recommended Distance to cut/fill		feet	38
Distance to Construction Activity			8
Recommended Distance to Construction			35
ARBORIST RECOMMENDATION FOR CONSERVATION:			REMOVE

STRUCTURAL DEFECTS:

48 trunk lean, over-extended branch

Moderate risk is manageable but will increase over time and may increase rapidly as a result of construction in the TPZ. Removing adjacent trees would decrease its stability and increase its risk of failure.

Low score on the General Conservation Suitability scale. Large over-extended branch.

Decline can be expected to continue and accelerate.

Expected Risk Rating following mitigation: Moderate. It will remain a moderate risk tree that needs reassessed in 1 year.

Tree 48, blue gum, Risk Mitigation Pruning

Prune to reduce overextended branch at the top of tree by 20’.

Prune to clean dead, little showing.

Prune to clean the crown of dead, damaged or diseased branches over 1” diameter and thin the canopy. Not much visible.

Remove sprouts on bottom 15’ of trunk to improve aesthetics and views.

Prune to as described in the American National Standard A300 Part 1 - 2008 Pruning and the companion publication Best Management Practices Tree Pruning (2008).

Do not remove more than 10 percent of the trees living canopy.

The work should be performed in accordance with the national consensus safety standards for tree care ANSI Z133.1. Tree care workers should be familiar with the national consensus standards for pruning and should be supervised by an arborist certified by the International Society of Arboriculture. The contractor should provide the owner with the supervisors ISA Certification Number and Expiration Date.

The owner may want to have their own arborist observe the work and report what was actually done in order to create a record of steps taken to mitigate risk.

Continued risk monitoring is necessary for this tree. This trees should be assessed a year after construction occurs to see if rapid decline has occurred.

Tree 48, Photos

Above looking south

Tree 49

GENERAL INFORMATION			
Tree Number			49
Genus			Eucalyptus
Species			globulus
Common Name			blue gum
Trunk Diameter	(DBH)	inches	46
Tree Protection Zone	(TPZ)	feet	46
Height		feet	117
Crown Width		feet	40
Condition			poor
Condition Rating		points	10.5
RISK RATING			high
Likelihood of Failure within 5 years:			probable
Likelihood of Impacting a Target:			high
Likelihood of both Failure and Impact:			likely
Consequences of Failure:			Significant
Risk Mitigation Indicated?			Yes
CONSERVATION SUITABILITY RATING			poor
Score		points	43
Distance to cut/fill		feet	8
Recommended Distance to cut/fill		feet	46
Distance to Construction Activity			8
Recommended Distance to Construction			40
ARBORIST RECOMMENDATION FOR CONSERVATION:			REMOVE

STRUCTURAL DEFECTS:

49 root and branch injuries, dead branches to 6",unbalanced crown

A poor candidate for conservation due to its High Risk rating and low score on the General Conservation Suitability scale. Lots of lost wood already.

Expected Risk Rating following mitigation: High

It will remain a high risk tree that needs reassessed in 1 years.

Tree 49, blue gum, Risk Mitigation Pruning

Prune to clean dead branches to 4” in upper third of canopy.

Prune to clean dead branches to 6” in middle third of canopy north side.

Prune to clean the crown of dead, damaged or diseased branches over 1” diameter and thin the canopy.

Remove sprouts on bottom 15’ of trunk to improve aesthetics and views.

Prune to as described in the American National Standard A300 Part 1 - 2008 Pruning and the companion publication Best Management Practices Tree Pruning (2008).

Do not remove more than 10 percent of the trees living canopy.

The work should be performed in accordance with the national consensus safety standards for tree care ANSI Z133.1. Tree care workers should be familiar with the national consensus standards for pruning and should be supervised by an arborist certified by the International Society of Arboriculture. The contractor should provide the owner with the supervisors ISA Certification Number and Expiration Date.

The owner may want to have their own arborist observe the work and report what was actually done in order to create a record of steps taken to mitigate risk.

Continued risk monitoring is necessary for this tree. This trees should be assessed a year after construction occurs to see if rapid decline has occurred.

Tree 49, Photos

Above looking south

Tree 50

GENERAL INFORMATION			
Tree Number			50
Genus			Eucalyptus
Species			globulus
Common Name			blue gum
Trunk Diameter	(DBH)	inches	46
Tree Protection Zone	(TPZ)	feet	46
Height		feet	75
Crown Width		feet	37
Condition			poor
Condition Rating		points	10
RISK RATING			Moderate
Likelihood of Failure within 5 years:			Possible
Likelihood of Impacting a Target:			high
Likelihood of both Failure and Impact:			somewhat likely
Consequences of Failure:			Significant
Risk Mitigation Indicated?			Yes
CONSERVATION SUITABILITY RATING			poor
Score		points	46
Distance to cut/fill		feet	6
Recommended Distance to cut/fill		feet	46
Distance to Construction Activity			6
Recommended Distance to Construction			37
ARBORIST RECOMMENDATION FOR CONSERVATION:			REMOVE
STRUCTURAL DEFECTS:			
50 trunk wound, lean, root and branch injuries, dead branches,unbalanced crown			

Moderate risk is manageable but will increase over time and may increase rapidly as a result of construction in the TPZ. Removing adjacent trees would decrease its stability and increase its risk of failure.

Low score on the General Conservation Suitability scale. End tree, over-extended branches.

Decline can be expected to continue and accelerate.

Expected Risk Rating following mitigation: Moderate. It will remain a moderate risk tree that needs reassessed in 1 year.

Tree 50, blue gum, Risk Mitigation Pruning

Prune to reduce longest branches on bottom 1/3 by 15’.

Prune to clean the crown of dead, damaged or diseased branches over 1” diameter and thin the canopy.

Remove sprouts on bottom 15’ of trunk to improve aesthetics and views.

Prune to as described in the American National Standard A300 Part 1 - 2008 Pruning and the companion publication Best Management Practices Tree Pruning (2008).

Do not remove more than 10 percent of the trees living canopy.

The work should be performed in accordance with the national consensus safety standards for tree care ANSI Z133.1. Tree care workers should be familiar with the national consensus standards for pruning and should be supervised by an arborist certified by the International Society of Arboriculture. The contractor should provide the owner with the supervisors ISA Certification Number and Expiration Date.

The owner may want to have their own arborist observe the work and report what was actually done in order to create a record of steps taken to mitigate risk.

Continued risk monitoring is necessary for this tree. This trees should be assessed a year after construction occurs to see if rapid decline has occurred.

Tree 50, Photos

Above looking south

Tree 72

GENERAL INFORMATION			
Tree Number			72
Genus			Eucalyptus
Species			globulus
Common Name			blue gum
Trunk Diameter	(DBH)	inches	42
Tree Protection Zone	(TPZ)	feet	42
Height		feet	100
Crown Width		feet	45
Condition			fair
Condition Rating		points	12
RISK RATING			Moderate
Likelihood of Failure within 5 years:			Possible
Likelihood of Impacting a Target:			high
Likelihood of both Failure and Impact:			somewhat likely
Consequences of Failure:			Significant
Risk Mitigation Indicated?			Yes
CONSERVATION SUITABILITY RATING			poor
Score		points	51
Distance to cut/fill		feet	8
Recommended Distance to cut/fill		feet	42
Distance to Construction Activity			8
Recommended Distance to Construction			45
ARBORIST RECOMMENDATION FOR CONSERVATION:			REMOVE

STRUCTURAL DEFECTS:

72 lean, root and branch injuries, #45 crossess at 40'

Straddles property line, must coordinate with other owner. Moderate risk is manageable but will increase over time and may increase rapidly as a result of construction in the TPZ. Removing adjacent trees would decrease its stability and increase its risk of failure.

Low score on the General Conservation Suitability scale. End tree, over-extended branches.

Decline can be expected to continue and accelerate.

Expected Risk Rating following mitigation: Moderate. It will remain a moderate risk tree that needs reassessed in 1 year.

Tree 72, blue gum, Risk Mitigation Pruning

Straddles property line, must coordinate with other owner.

Prune to clean dead very high in canopy.

Prune to clean the crown of dead, damaged or diseased branches over 1” diameter and thin the canopy.

Remove sprouts on bottom 15’ of trunk to improve aesthetics and views.

Prune to as described in the American National Standard A300 Part 1 - 2008 Pruning and the companion publication Best Management Practices Tree Pruning (2008).

Do not remove more than 10 percent of the trees living canopy.

The work should be performed in accordance with the national consensus safety standards for tree care ANSI Z133.1. Tree care workers should be familiar with the national consensus standards for pruning and should be supervised by an arborist certified by the International Society of Arboriculture. The contractor should provide the owner with the supervisors ISA Certification Number and Expiration Date.

The owner may want to have their own arborist observe the work and report what was actually done in order to create a record of steps taken to mitigate risk.

Continued risk monitoring is necessary for this tree. This trees should be assessed a year after construction occurs to see if rapid decline has occurred.

Tree 72, Photos

Above looking north

Above looking south

*Offsite Tree 73**

GENERAL INFORMATION			
Tree Number			73*
Genus			Eucalyptus
Species			globulus
Common Name			blue gum
Trunk Diameter	(DBH)	inches	36
Tree Protection Zone	(TPZ)	feet	36
Height		feet	85
Crown Width		feet	30
Condition			poor
Condition Rating		points	8.5
RISK RATING			high
Likelihood of Failure within 5 years:			probable
Likelihood of Impacting a Target:			high
Likelihood of both Failure and Impact:			likely
Consequences of Failure:			Significant
Risk Mitigation Indicated?			Yes
CONSERVATION SUITABILITY RATING			poor
Score		points	42
Distance to cut/fill		feet	8
Recommended Distance to cut/fill		feet	36
Distance to Construction Activity			8
Recommended Distance to Construction			30
ARBORIST RECOMMENDATION FOR CONSERVATION:			REMOVE
STRUCTURAL DEFECTS:			
73* lean, dead branches,unbalanced crown			

A poor candidate for conservation due to its High Risk rating and low score on the General Conservation Suitability scale. Deadwood to 4” at 20’-60’ high. Leans across #74* @30’-50’ high. Canopies intertwined. Dead stubs

Expected Risk Rating following mitigation: High

It will remain a high risk tree that needs reassessed in 1 years.

Offsite Tree 73*, blue gum, Risk Mitigation Pruning

Prune to clean dead branches to 4”at 20’-60’ high.

Prune to clean the crown of dead, damaged or diseased branches over 1” diameter and thin the canopy.

Prune to as described in the American National Standard A300 Part 1 - 2008 Pruning and the companion publication Best Management Practices Tree Pruning (2008).

Do not remove more than 10 percent of the trees living canopy.

The work should be performed in accordance with the national consensus safety standards for tree care ANSI Z133.1. Tree care workers should be familiar with the national consensus standards for pruning and should be supervised by an arborist certified by the International Society of Arboriculture. The contractor should provide the owner with the supervisors ISA Certification Number and Expiration Date.

The owner may want to have their own arborist observe the work and report what was actually done in order to create a record of steps taken to mitigate risk.

Continued risk monitoring is necessary for this tree. This trees should be assessed a year after construction occurs to see if rapid decline has occurred.

Offsite Tree 73*, Photos

Above looking north

Above looking south

*Offsite Tree 74**

GENERAL INFORMATION			
Tree Number			74*
Genus			Eucalyptus
Species			globulus
Common Name			blue gum
Trunk Diameter	(DBH)	inches	36
Tree Protection Zone	(TPZ)	feet	36
Height		feet	80
Crown Width		feet	30
Condition			fair
Condition Rating		points	13.5
RISK RATING			high
Likelihood of Failure within 5 years:			probable
Likelihood of Impacting a Target:			high
Likelihood of both Failure and Impact:			likely
Consequences of Failure:			Significant
Risk Mitigation Indicated?			Yes
CONSERVATION SUITABILITY RATING			poor
Score		points	53
Distance to cut/fill		feet	8
Recommended Distance to cut/fill		feet	36
Distance to Construction Activity			8
Recommended Distance to Construction			30
ARBORIST RECOMMENDATION FOR CONSERVATION:			REMOVE

STRUCTURAL DEFECTS:

74* trunk wound,dead branches,#73 crosses

A poor candidate for conservation due to its High Risk rating and low score on the General Conservation Suitability scale. Deadwood to 4” at 20’-60’ high.

73* leans across #74* @30’-50’ high. Canopies intertwined. Dead stubs

Expected Risk Rating following mitigation: High

It will remain a high risk tree that needs reassessed in 1 years.

Offsite Tree 74*, blue gum, Risk Mitigation Pruning

Prune to clean dead branches to 4”.

Prune to clean the crown of dead, damaged or diseased branches over 1” diameter and thin the canopy.

Prune to as described in the American National Standard A300 Part 1 - 2008 Pruning and the companion publication Best Management Practices Tree Pruning (2008).

Do not remove more than 10 percent of the trees living canopy.

The work should be performed in accordance with the national consensus safety standards for tree care ANSI Z133.1. Tree care workers should be familiar with the national consensus standards for pruning and should be supervised by an arborist certified by the International Society of Arboriculture. The contractor should provide the owner with the supervisors ISA Certification Number and Expiration Date.

The owner may want to have their own arborist observe the work and report what was actually done in order to create a record of steps taken to mitigate risk.

Continued risk monitoring is necessary for this tree. This trees should be assessed a year after construction occurs to see if rapid decline has occurred.

Offsite Tree 74*, Photos

Above looking north

Above looking south

*Offsite Tree 75**

GENERAL INFORMATION			
Tree Number			75*
Genus			Eucalyptus
Species			globulus
Common Name			blue gum
Trunk Diameter	(DBH)	inches	36
Tree Protection Zone	(TPZ)	feet	36
Height		feet	40
Crown Width		feet	15
Condition			very poor
Condition Rating		points	3
RISK RATING			high
Likelihood of Failure within 5 years:			probable
Likelihood of Impacting a Target:			high
Likelihood of both Failure and Impact:			likely
Consequences of Failure:			Significant
Risk Mitigation Indicated?			Yes
CONSERVATION SUITABILITY RATING			poor
Score		points	
Distance to cut/fill		feet	8
Recommended Distance to cut/fill		feet	36
Distance to Construction Activity			8
Recommended Distance to Construction			15
ARBORIST RECOMMENDATION FOR CONSERVATION:			REMOVE

STRUCTURAL DEFECTS:

75* codom with half dead + half of half dead, dead branches,unbalanced crown

A poor candidate for conservation due to its High Risk rating and low score on the General Conservation Suitability scale. Tree is codominant and 3/4 dead.

Mostly dead with sprouts. Collapse likely within 5 years

Mitigation should be removal.

It will remain a high risk tree that needs reassessed in 1 years.

Offsite Tree 75*, blue gum, Risk Mitigation Pruning

Tree is ¾ dead and should be removed.

The work should be performed in accordance with the national consensus safety standards for tree care ANSI Z133.1. Tree care workers should be familiar with the national consensus standards for pruning and should be supervised by an arborist certified by the International Society of Arboriculture. The contractor should provide the owner with the supervisors ISA Certification Number and Expiration Date.

The owner may want to have their own arborist observe the work and report what was actually done in order to create a record of steps taken to mitigate risk.

Continued risk monitoring is necessary for this tree. This trees should be assessed a year after construction occurs to see if rapid decline has occurred.

Offsite Tree 75*, Photos

Above looking west

Above looking west

*Offsite Tree 76**

GENERAL INFORMATION			
Tree Number			76*
Genus			Eucalyptus
Species			globulus
Common Name			blue gum
Trunk Diameter	(DBH)	inches	16
Tree Protection Zone	(TPZ)	feet	16
Height		feet	45
Crown Width		feet	15
Condition			dead
Condition Rating		points	0
RISK RATING			high
Likelihood of Failure within 5 years:			probable
Likelihood of Impacting a Target:			high
Likelihood of both Failure and Impact:			likely
Consequences of Failure:			Significant
Risk Mitigation Indicated?			Yes
CONSERVATION SUITABILITY RATING			poor
Score		points	
Distance to cut/fill		feet	8
Recommended Distance to cut/fill		feet	16
Distance to Construction Activity			8
Recommended Distance to Construction			15
ARBORIST RECOMMENDATION FOR CONSERVATION:			REMOVE
STRUCTURAL DEFECTS:			

76* dead tree

Dead tree

Offsite Tree 76*, blue gum, Risk Mitigation Pruning

Tree is dead and should be removed.

The work should be performed in accordance with the national consensus safety standards for tree care ANSI Z133.1. Tree care workers should be familiar with the national consensus standards for pruning and should be supervised by an arborist certified by the International Society of Arboriculture. The contractor should provide the owner with the supervisors ISA Certification Number and Expiration Date.

The owner may want to have their own arborist observe the work and report what was actually done in order to create a record of steps taken to mitigate risk.

Continued risk monitoring is necessary for this tree. This trees should be assessed a year after construction occurs to see if rapid decline has occurred.

Offsite Tree 76*, Photos

Above looking north

*Offsite Tree 77**

GENERAL INFORMATION			
Tree Number			77*
Genus			Eucalyptus
Species			globulus
Common Name			blue gum
Trunk Diameter	(DBH)	inches	17
Tree Protection Zone	(TPZ)	feet	17
Height		feet	30
Crown Width		feet	30
Condition			fair
Condition Rating		points	14
RISK RATING			low
Likelihood of Failure within 5 years:			improbable
Likelihood of Impacting a Target:			medium
Likelihood of both Failure and Impact:			unlikely
Consequences of Failure:			Significant
Risk Mitigation Indicated?			no
CONSERVATION SUITABILITY RATING			poor
Score		points	58
Distance to cut/fill		feet	9.5
Recommended Distance to cut/fill		feet	17
Distance to Construction Activity			9.5
Recommended Distance to Construction			30
ARBORIST RECOMMENDATION FOR CONSERVATION:			retain

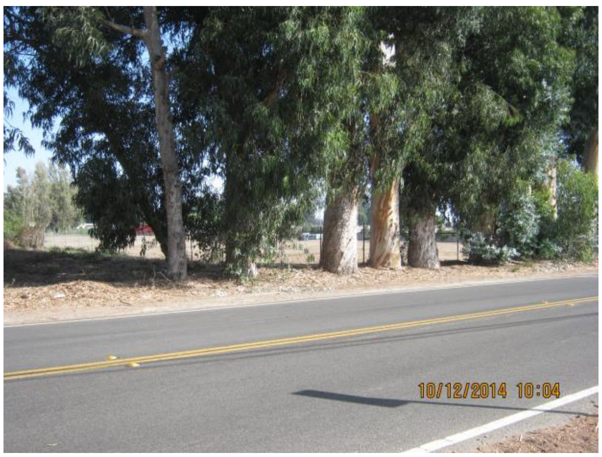
STRUCTURAL DEFECTS:

77* lean, branch injuries

A poor candidate for conservation due to extreme lean and low score on the General Conservation Suitability scale.

Small size means it will remain a low/medium risk tree that needs reassessed in 1 years.

Offsite Tree 77*, Photos



Above looking north

Above looking northeast

Offsite Trees 78 and continuing west along Etting Road.*

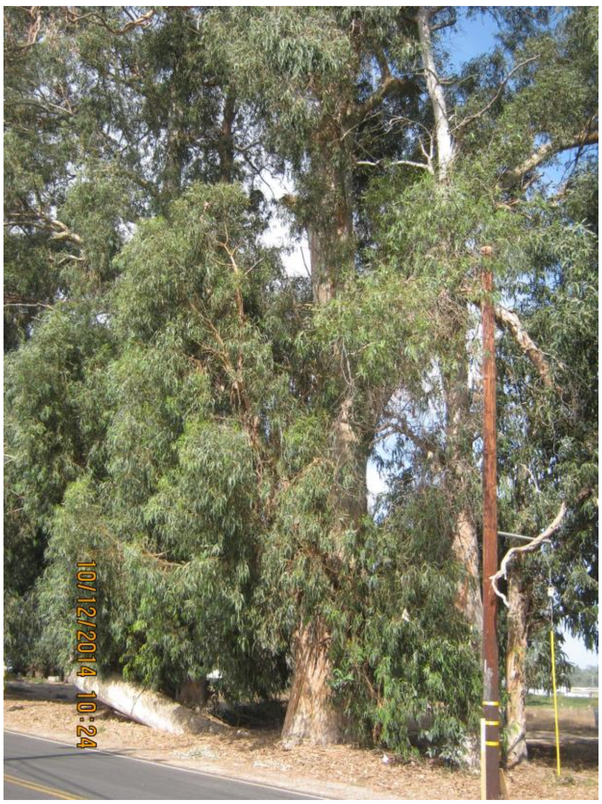
These trees are in bad shade with signs of extensive internal decay. Collapsed trunks. Many dead and hang dead branches, dead thin stressed canopies

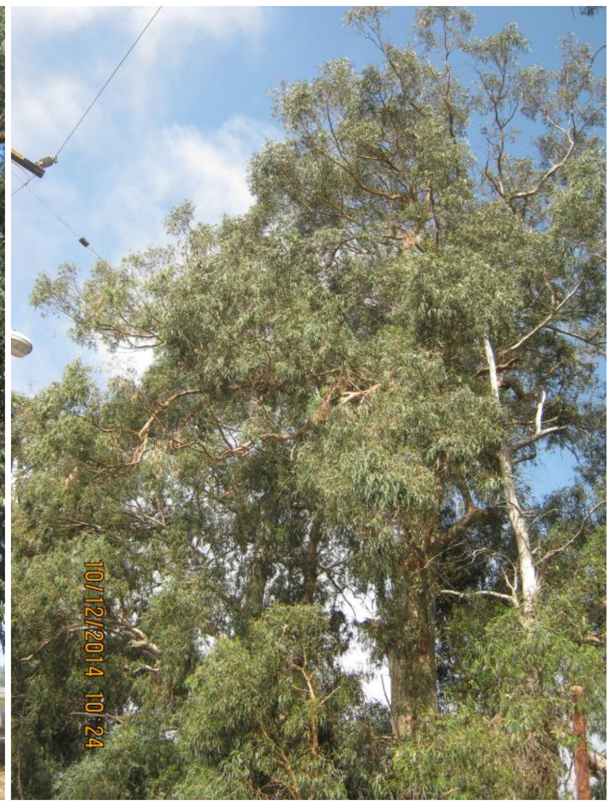
Photos

Offsite Trees 78* and others to the west of site on north side of Etting Road.

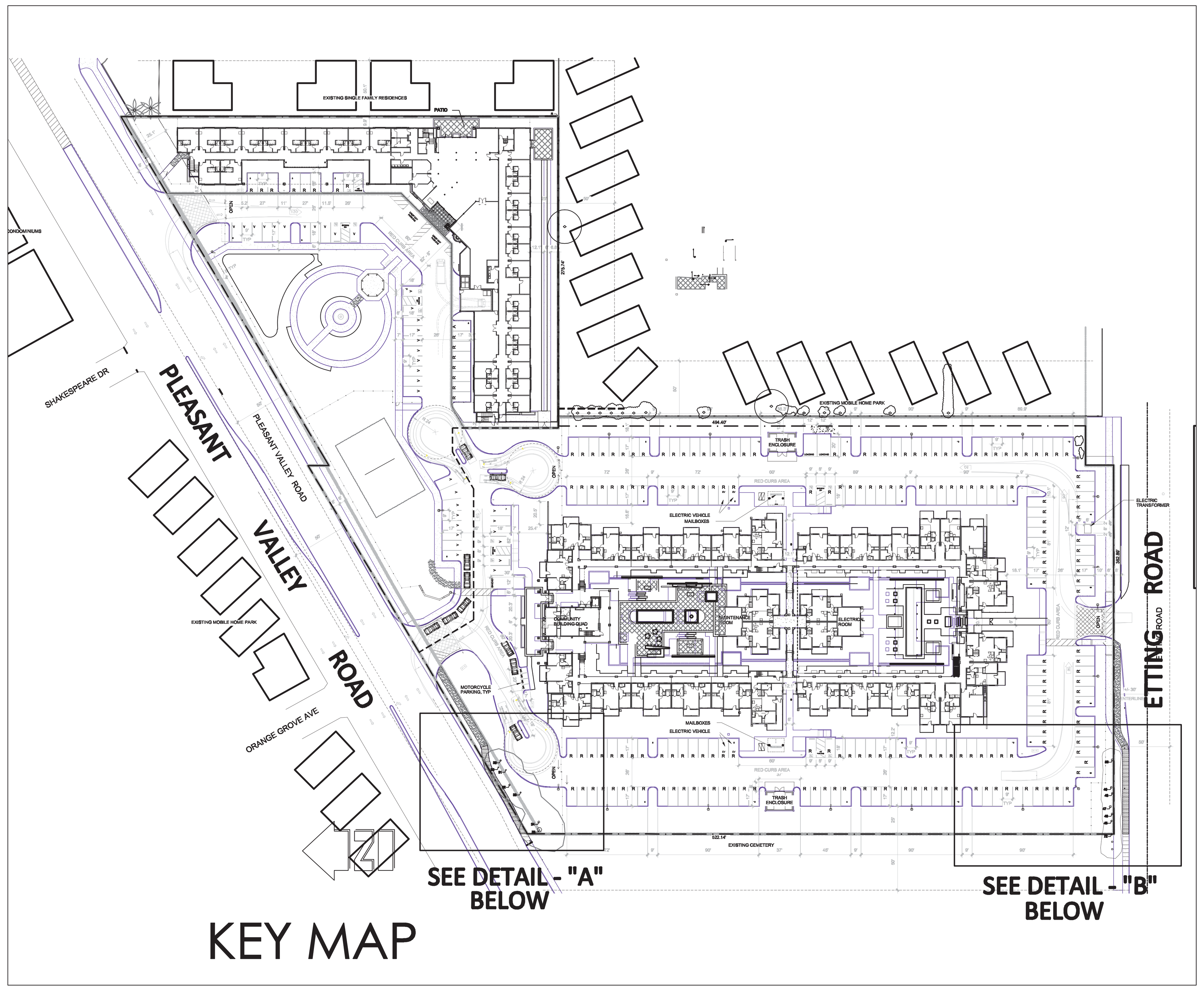
These trees are in bad shade with signs of extensive internal decay. Collapsed trunks. Many dead and hang dead branches, dead thin stressed canopies

Photos






GAP IN ROW
ENTRANCE ONLY



KEY MAP

TREE RISK MANAGEMENT PRUNING SCHEDULE

TREE NO.	BOTANICAL NAME	REQUIRED RISK MITIGATION PRUNING THE REQUIRED TREE MITIGATION PRUNING IS LISTED IN THE ADDENDUM II BLUE GUM RISK ASSESSMENT & MANAGEMENT REPORT DATED OCTOBER 18, 2014	RISK RATING AS PER REPORT
29.	EUCALYPTUS GLOBULUS	SEE PAGE 38	HIGH
30.	EUCALYPTUS GLOBULUS	SEE PAGE 41	MODERATE
31.	EUCALYPTUS GLOBULUS	SEE PAGE 44	MODERATE
32.	EUCALYPTUS GLOBULUS	SEE PAGE 47	LOW
33.	EUCALYPTUS GLOBULUS	SEE PAGE 50	MODERATE / HIGH
34.	EUCALYPTUS GLOBULUS	SEE PAGE 53	HIGH
35.	EUCALYPTUS GLOBULUS	SEE PAGE 56	HIGH
45.	EUCALYPTUS GLOBULUS	SEE PAGE 59	HIGH
46.	EUCALYPTUS GLOBULUS	SEE PAGE 62	HIGH
47.	EUCALYPTUS GLOBULUS	SEE PAGE 65	MODERATE
48.	EUCALYPTUS GLOBULUS	SEE PAGE 69	MODERATE
49.	EUCALYPTUS GLOBULUS	SEE PAGE 72	HIGH
50.	EUCALYPTUS GLOBULUS	SEE PAGE 75	MODERATE
72.	EUCALYPTUS GLOBULUS	SEE PAGE 78	MODERATE
73.	EUCALYTUS GLOBULUS	SEE PAGE 80	HIGH

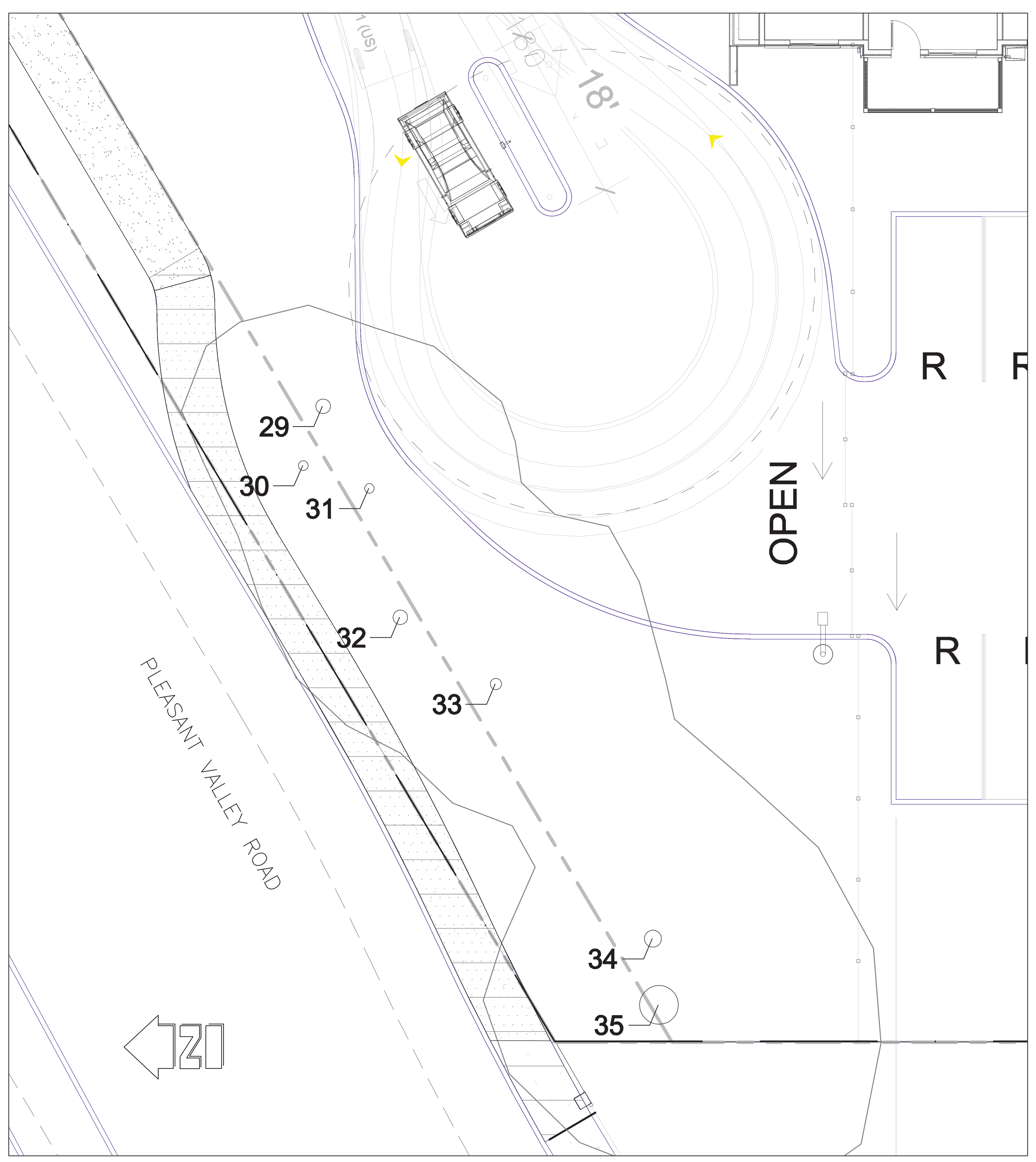
PURPOSE OF THIS PLAN

1. THIS PLAN HAS BEEN PREPARED TO IDENTIFY RISK MITIGATION PRUNING ON THE EXISTING EUCALYPTUS TREES AND DESCRIBED IN THE ADDENDUM II BLUE GUM RISK ASSESSMENT & MANAGEMENT REPORT DATED OCTOBER 18, 2014. ANY WORK PERFORMED ON THESE TREES AS PER THIS REPORT WILL NOT ELIMINATE THE RISK AS DEFINED IN THE REPORT.

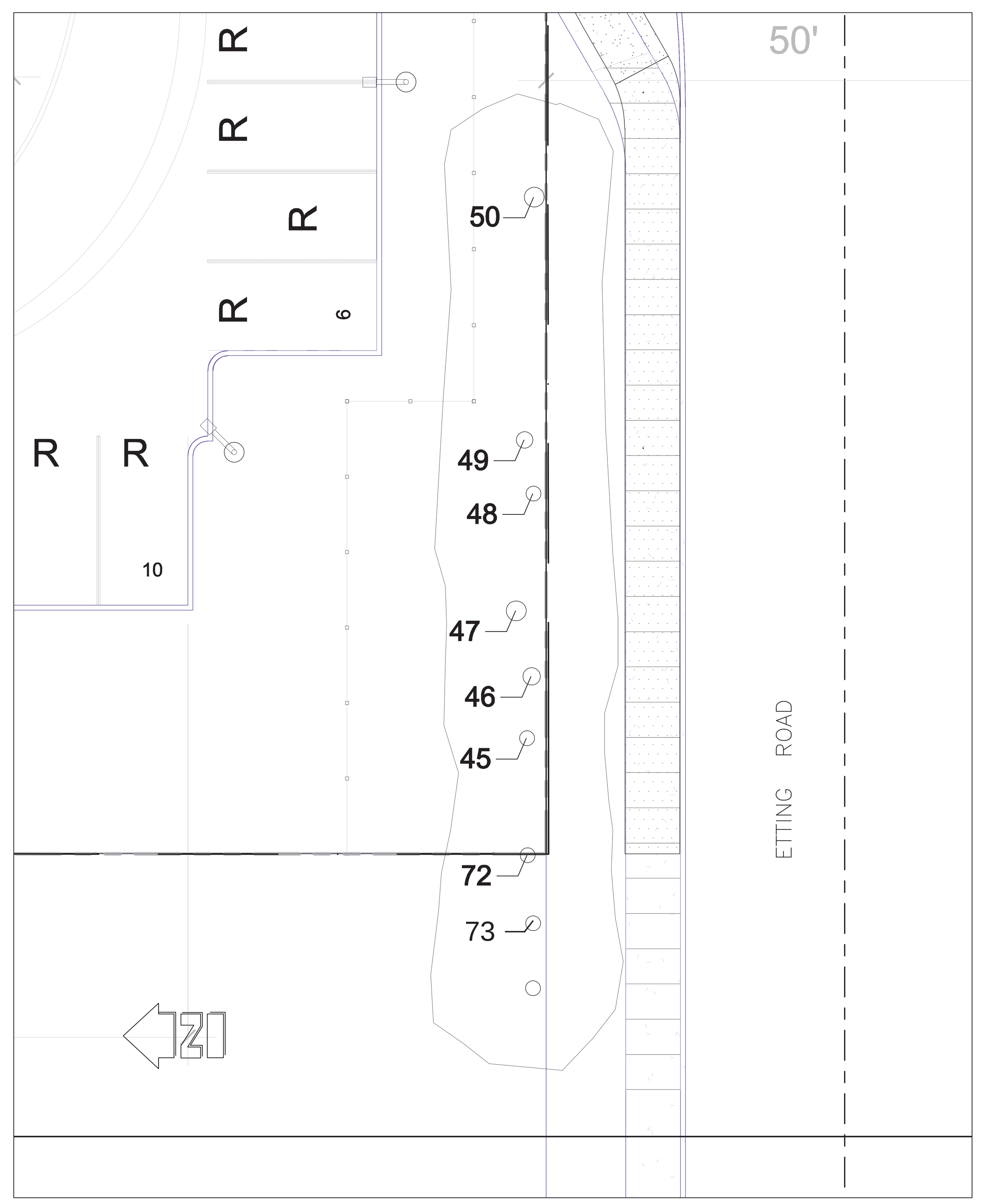
   TREES WITH A "HIGH RISK" RATING NEED MITIGATION MEASURES BUT THE DECISION TO CONDUCT THE MITIGATION AND TIMING ARE THE OWNERS' DECISION BASED ON THE OWNERS RISK TOLERANCE.

GENERAL TREE PRUNING NOTES

1. PRUNE TO REDUCE AND CLEAN THE CROWN OF DEAD DAMAGED OR DISEASED BRANCHES OVER 1" DIAMETER AS DESCRIBED IN THE AMERICAN NATIONAL STANDARD A300 PART1 – 2008 PRUNING AND THE COMPANION PUBLICATION, "BEST MANAGEMENT PRACTICES TREE PRUNING (2008).
2. THE WORK SHOULD BE PERFORMED IN ACCORDANCE WITH THE NATIONAL CONSENSUS SAFETY STANDARDS FOR TREE CARE ANSI Z133.1. TREE CARE WORKERS SHOULD BE FAMILIAR WITH THE NATIONAL CONSENSUS STANDARDS FOR PRUNING AND SHOULD BE SUPERVISED BY AN ARBORIST CERTIFIED BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE. THE CONTRACTOR SHOULD PROVIDE THE OWNER WITH THE SUPERVISOR'S ISA CERTIFICATION NUMBER AND EXPIRATION DATE.
3. THE OWNER SHALL RETAIN AN ARBORIST TO OBSERVE THE WORK AND REPORT WHAT WAS ACTUALLY DONE IN ORDER TO CREATE A RECORD OF STEPS TAKEN TO MITIGATE RISK.
4. CONTINUED RISK MONITORING IS NECESSARY FOR ALL THE EUCALYPTUS TREES. THEY SHALL BE ASSESSED ANNUALLY BY AN ARBORIST TO SEE IF RISK MITIGATION PRUNING IS NECESSARY.



A EXISTING BLUE GUM TREES AT PLEASANT VALLEY ROAD
SCALE: 1"=10'



B EXISTING BLUE GUM TREES AT ETTING ROAD
SCALE: 1"=10'

GENERAL NOTES:

1. ALL PERSONS WORKING ON THE PROJECT SHALL EXERCISE EXTREME AWARENESS AND CARE TO PROTECT EXISTING TREES TO BE PRESERVED. TREE PROTECTION CONDITIONS SHALL BE POSTED IN A CONSPICUOUS LOCATION ON–SITE.
2. THE PROJECT SUPERINTENDENT SHALL BE RESPONSIBLE FOR INSTRUCTING ALL SITE WORKERS OF THE TREE PRESERVATION REQUIREMENTS AND SHALL BE RESPONSIBLE FOR ENFORCEMENT OF THE TREE PROTECTION GUIDELINES AND/OR ORDINANCES.
3. PROTECTIVE FENCING SHALL BE PLACED PRIOR TO GRADING AND CONSTRUCTION. FIVE FOOT HIGH CHAIN LINK FENCING IS REQUIRED A MINIMUM OF 5' OUTSIDE THE DRIP LINE. WEATHERPROOF INFORMATION SIGNS ARE REQUIRED EVERY 50' ON THE FENCING. THE REQUIRED SIGN WORDING SHALL BE " PROTECTED TREE ROW. WORK IN AND AROUND THESE TREES IS BY SPECIAL PERMIT ONLY".
   THE FENCE SHALL BE PLACED PRIOR TO GRADING AND SHALL REMAIN IN PLACE UNTIL THE COMPLETION OF CONSTRUCTION. THE FENCE MAY NOT BE MOVED, ALTERED OR REMOVED WITHOUT THE WRITTEN APPROVAL FROM THE CITY OF OXNARD PARKS DEPARTMENT.
4. A PRE–CONSTRUCTION MEETING SHALL BE HELD WITH THE CONTRACTOR, CONSTRUCTION SUPERVISOR, LANDSCAPE ARCHITECT, AND THE CITY OF OXNARD PARKS DEPARTMENT REPRESENTATIVE PRIOR TO CONSTRUCTION TO REVIEW THE TREE PROTECTION SPECIFICATIONS AND THE PRESERVATION PROTOCOL.
5. NO EXCAVATION, GRADING OR CONSTRUCTION SHALL BE ALLOWED INSIDE THE PROTECTED ZONE OF ANY TREE WITHOUT WRITTEN APPROVAL BY THE PROJECT LANDSCAPE ARCHITECT. ALL APPROVED WORK SHALL BE CONDUCTED WITH HAND EQUIPMENT ONLY. ALL ROOTS OVER 2" IN DIAMETER SHALL BE SAVED AND IMMEDIATELY COVERED WITH A MINIMUM OF 6" CLEAN WASHED SAND. THOSE ROOTS TO BE SEVERED SHALL BE CLEAN CUT WITH PRUNING TOOLS TO THE EDGE OF THE EXCAVATION AND IMMEDIATELY COVERED WITH SOIL, THEN PROVIDED IRRIGATION. ROOTS TO BE IN DIRECT CONTACT WITH CONCRETE SHALL BE WRAPPED IN STYROFOAM PRIOR TO POURING THE CONCRETE.
6. ALL PRUNING SHALL BE ACCOMPLISHED BY A QUALIFIED ARBORIST AND WORK SHALL CONFORM TO THE REQUIREMENTS OF THE ISA TREE PRUNING STANDARDS. FOLLOW THE PRUNING SPECIFICATIONS IN ADDENDUM II: BLUE GUM RISK ASSESSMENT & MANAGEMENT REPORT DATED OCTOBER 18, 2014. PRUNING SPECIFICATION FOR EACH TREE ARE PROVIDED IN THE APPENDIX B TO THIS REPORT.
7. NO MATERIALS SHALL BE NAILED OR STAKED TO ANY PRESERVED TREE. NO MATERIALS OR EQUIPMENT SHALL BE STORED WITHIN THE PROTECTED ZONE OF ANY SITE PRESERVED TREE. NO OIL, GASOLINE, CHEMICALS, PAINTS, OR OTHER DELETERIOUS MATERIALS MAY BE USED, DUMPED, OR STORED UNDER THE PROTECTED ZONE OF ANY PRESERVED TREE. NO SUBSTANCE SHALL BE DEPOSITED INTO THE SOIL, INCLUDING WASTE WATER THAT CAN DRAIN OR LEACH INTO ANY PRESERVED TREE ROOT ZONE.
8. ALL GRADING WITHIN THE LOCATION OF ANY PRESERVED TREE SHALL BE CONSTRUCTED IN A MANNER TO PREVENT WATER FROM RUNOFF OR DRAINING THAT CAN ACCUMULATE UNDER THE PROTECTED ZONE OF ANY PRESERVED TREE.
9. TREES REQUIRING SPECIFIC DISEASE, INSECT OR RODENT CONTROL SHALL HAVE THE WORK COMPLETED UPON WRITTEN RECOMMENDATION BY A CALIFORNIA PEST CONTROL ADVISOR AND THE WORK SHALL BE COMPLETED BY A LICENSED CALIFORNIA PEST CONTROL OPERATOR REGISTERED IN THE COUNTY FOR WHICH THE WORK IS TO BE PERFORMED.
10. DURING ALL PHASES OF CONSTRUCTION, THE HEALTH OF THE TREE(S) SHALL BE MONITORED AND MAINTAINED AS REQUIRED TO ENSURE CONTINUED SURVIVAL.
11. ANY CHANGES IN THIS PROJECT WILL REQUIRE REVIEW BY THE PROJECT LANDSCAPE ARCHITECT TO ENSURE THAT THE CONDITIONS OF THESE GUIDELINES CONTINUE TO BE VALID.
12. IF ACCIDENTAL DAMAGE OCCURS TO ANY PROTECTED TREE, THE PROJECT SUPERINTENDENT SHALL IMMEDIATELY NOTIFY THE PROJECT LANDSCAPE ARCHITECT AND SHALL PERFORM ALL REMEDIAL WORK AS DETERMINED AND DIRECTED BY THE PROJECT LANDSCAPE ARCHITECT.
13. WHERE FEASIBLE, THE PROTECTED ZONE OF ALL TREES SHALL BE PROVIDED A 3" LAYER OF WOOD CHIP MULCH. THE MULCH SHALL BE PLACED 36" FROM THE TREE TRUNK AND SPREAD THROUGHOUT THE PROTECTED ZONE IN A UNIFORM STRATUM.

JORDAN, GILBERT & BAIN
LANDSCAPE ARCHITECTS, INC.
3350 LOMA VISTA ROAD, VENTURA CA 93003
(805) 642-3641 FAX (805) 642-9614
JOB# 14.19
NOV. 20, 2014

TREE RISK MITIGATION PRUNING PLAN

PLEASANT VALLEY RD. APARTMENTS
PLEASANT VALLEY RD., OXNARD, CA, 93033

DANSK INVESTMENTS
6591 COLLINS DR., STE. E11, MOORPARK, CA, 93021

UPDATED	5/13/15
JOB NO.	20-131103
DRAWN BY:	PJ / TC
CHECKED BY:	PJ
PROJECT MANAGER:	TC
PRINT DATE:	12-16-14

L1.7

Appendix E

Cultural Resources Reports/Surveys

Rincon Consultants, Inc.
5135 Avenida Encinas, Suite A
Carlsbad, California 92008
760 918 9444
FAX 918 9449
info@rinconconsultants.com
www.rinconconsultants.com

March 17, 2014
Project Number 13-01637

Vince Daly
Dansk Investments, LLC
6591 Campus Park Drive
Moorpark, CA 93021

Subject: Cultural Resources Constraints Analysis for the 2295 Etting Road Project, Oxnard, Ventura County, California

Dear Mr. Daly:

Rincon Consultants, Inc. (Rincon) was retained by Dansk Investments, LLC to provide cultural resources services for the 2295 Etting Road Project, Oxnard, Ventura County, California. Specifically, Rincon was tasked with conducting a cultural resources records search and summarizing the findings in a letter report. This project is subject to the California Environmental Quality Act (CEQA).

Project Description

The project site is located in the City of Oxnard in Ventura County. The project site is depicted in Township 1 South, Range 22 West, Sections 13, 14, 23, and 24 of the U.S. Geographical Survey (USGS) Oxnard, CA 7.5-minute topographic quadrangle (Figure 1). The project site comprises 7.4 acres located at 2295 Etting Road on assessor's parcel numbers (APN) 225-0-014-160 and 225-0-014-190.

The project site is currently occupied by a historic residence, three barn structures, citrus orchards, and mature trees. The project proposes to demolish existing structures and construct 121 multi-family dwellings and a 60-80 unit senior care facility.

Cultural Resources Records Search

Methods

On February 24, 2014, Rincon conducted a search of the California Historical Resources Information System (CHRIS) at the South Central Coastal Information Center (SCCIC) located at California State University, Fullerton. The search was conducted to identify all previous cultural resources work and previously recorded cultural resources within a 0.5-mile radius of the project site. The CHRIS search included a review of the National Register of Historic Places (NRHP), the California

Register of Historical Resources (CRHR), the California Points of Historical Interest list, the California Historical Landmarks list, the Archaeological Determinations of Eligibility list, and the California State Historic Resources Inventory list. The records search also included a review of all available historic USGS 7.5- and 15-minute quadrangle maps.

Findings

The SCCIC records search identified a total of eight previous studies (Table 1 in Attachment A), of which three included a portion of the project site. The three studies that included portions of the project site (VN-00236, VN-01438, and VN-02005) were linear surveys along Pleasant Valley Road and included only the northernmost portion of the project site. Study VN-01438, *Pleasant Valley Road/ State Route 1 Interchange, Ventura County, Historic Property Survey Report,* prepared by California Department of Transportation (Caltrans) Staff, identified one cultural resource within the project site (P-56-150024).

The records search identified eight previously recorded cultural resources within a 0.5 mile of the project site (Table 2 in Attachment B). One of these resources (P-56-150024) is located within the project site. Another resource, P-56-150014, the Hueneme Masonic Cemetery, is adjacent to the project site. These resources are discussed in detail below.

P-56-150024

Resource P-56-150024, also known as the Naumann Farm, was recorded by Dorene Clement in 1995. The resource consists of a farm complex on a 4.66-acre parcel. Buildings within the complex include a farm house, garage, and various outbuildings. The house is a stucco-covered wood frame house constructed in 1957. The house has brick trim, aluminum frame windows, and a composition shingle roof. Outbuildings include a pumphouse, tool shed, barn, and small storage shed. The farm complex was the home of the Naumann family. The resource was previously recommended ineligible for the CRHR and NRHP (Clement 1995).

P-56-150014

Resource P-56-150014 is located adjacent to the project site and consists of the Hueneme Masonic Cemetery. The cemetery was incorporated in 1898 and originally encompassed a 9.9-acre area, containing 358 grave sites. In 1908, the Masonic Lodge sold a 1.31 acre portion of the cemetery to the Japanese community for a cemetery of their own, now a Ventura County Historical Landmark. The cemetery is situated 670 feet (205 meters) west of the project site. In 1925, a 3.48 acre portion of the cemetery was sold to H.S. Philbrock, who in 1944 sold it to the Naumann family. In 1944 and 1948, two more portions of the cemetery, 1.972 acres and 1.186 acres, respectively, were sold to the Naumann family, leaving the cemetery at the 3.94 acre site that it occupies today (Oxnard Cultural Heritage Board 2012). Around 100 graves remain at the Masonic Cemetery, though records are not complete and many of the gravestones have been vandalized, moved, or stolen (Oxnard Cultural Heritage Board 2012). According to a Los Angeles Times Article, some of the original plots are located on the adjacent Naumann Farm (P-56-150024; Smith 1993). However, the source of this claim is unknown. The existing portion of the cemetery was recommended ineligible for listing in the NRHP and CRHR.

Ventura County Historical Landmarks and Points of Interest

Rincon reviewed the Ventura County Historical Landmarks and Points of Interest list. On Ventura County Historical Landmark, the Naumann Giant Gum Tree and Eucalyptus Row, is located directly adjacent to the project site. The Naumann Giant Gum Tree and Eucalyptus Row were planted circa 1900 by Gustav Naumann as a windbreak for agricultural purposes. The trees line Etting Road west of the project site.

Native American Scoping

Rincon requested a search of the Sacred Lands File (SLF) at the Native American Heritage Commission (NAHC) on February 20, 2014. The NAHC faxed a response on February 21, 2014 which stated that "a record search of the NAHC Sacred Lands File failed to indicate the presence of Native American traditional cultural places in the project site submitted." The NAHC also provided a contact list of 22 Native American tribes and individuals who may have information regarding the project area (Attachment C). Due to the confidential nature of this project, Rincon did not mail letters to these contacts at this time.

Discussion and Recommendations

The results of the archival research conducted for this constraints analysis indicates the proposed project has the potential to adversely affect cultural resources (Attachment D, Table 3). The cultural resources records search indicated that the majority of the property had not been intensively surveyed for cultural resources, nor has a cultural resources report meeting current professional standards been prepared for the entire project site. Rincon recommends a Phase I cultural resources survey of the project site and the preparation of a cultural resources report.

One historic built environment resource (P-56-150024) is located within the project site. Although P-56-150024 was previously recommended ineligible for CRHR and NRHP listing, this evaluation is older than five years and the resource should be reevaluated based on current standards and criteria.

The current boundaries of resource P-56-150014, the Hueneme Masonic Cemetery, are located adjacent to the project site. The original boundaries of the cemetery however, appear to have extended onto the project site. The site record for P-56-150014 indicates approximately 6.6 acres of the original 9.9-acres that comprised the cemetery were sold and are now located within the project site. It is unclear whether this land was undeveloped or contained burials prior to sale. According to a Los Angeles Times article, it is possible burial plots (but not necessarily burials) were located within this portion of the cemetery. Based on this information, Rincon recommends archival research to determine how much of the original cemetery boundaries extend onto the project site and if burial plots existed within this portion of the cemetery. Rincon further recommends a geophysical survey be conducted within the portion of the cemetery now located within the project site. This non-invasive method has the potential to identify subsurface disturbances that may indicate the location of actual burials. This data can then be used to direct mitigation measures, if necessary, or identify areas of avoidance.

The Naumann Giant Gum Tree and Eucalyptus Row is a Ventura County Historical Landmark located directly adjacent to the project site. Rincon recommends that the trees associated with this landmark be avoided.

Cultural Resources Survey

A cultural resources survey of the project site should be conducted under the direction of an archaeologist meeting the Secretary of Interior's (1983) professional qualification standards. Any cultural resources that are encountered should be recorded on State of California Department of Parks and Recreation (DPR) Series 523 forms, and the potential for project-related impacts to such sites should be considered. Any historic-age (over 45 years old) buildings, structures, objects, or landscapes within the project area, including Naumann Farm (P-56-150024) should be evaluated for NRHP/CRHR eligibility to assess the potential of the project to impact to these resources.

Geophysical Survey

A geophysical survey should be conducted to determine the presence or absence of burial plots associated with the Hueneme Masonic Cemetery within the project site. If it is determined that burials are present within the project site or a conclusion cannot be reached, impacts would be significant and additional mitigation would be necessary.

Cultural Resources Technical Report

A cultural resources technical report should be prepared that incorporates the results of this constraints analysis, the cultural resources survey, the geophysical survey, and any CRHR-eligibility evaluations. It should describe the methods and results of the literature review, Native American consultation, intensive pedestrian survey, geophysical survey, and the evaluations of P-56-150024 and any additional resources for CRHR eligibility. The report should include maps depicting the area surveyed for cultural resources, the locations of cultural resources identified during the survey, and site records or updates for cultural resources encountered during the survey. The report should be prepared in accordance with the Office of Historic Preservation's Archaeological Resource Management Reports (ARMR) guidelines (OHP 1990). As such, it should include an environmental setting and detailed cultural setting that includes prehistoric, ethnographic, and historic period subsections.

Discovery of Human Remains

If human remains are found, State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the county coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In accordance with this code, in the event of an unanticipated discovery of human remains, the Ventura County coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission, which will determine and notify a most likely descendant (MLD). The MLD would complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

Please do not hesitate to contact Rincon Consultants if you have any questions regarding this cultural resources survey or the above recommendations.

Sincerely,
RINCON CONSULTANTS, INC.

Hannah Haas, B.A.
Cultural Resource Specialist

Robert Ramirez, M.A., RPA
Principal Investigator

Duane Vander Pluym, D. Env.
Vice-President

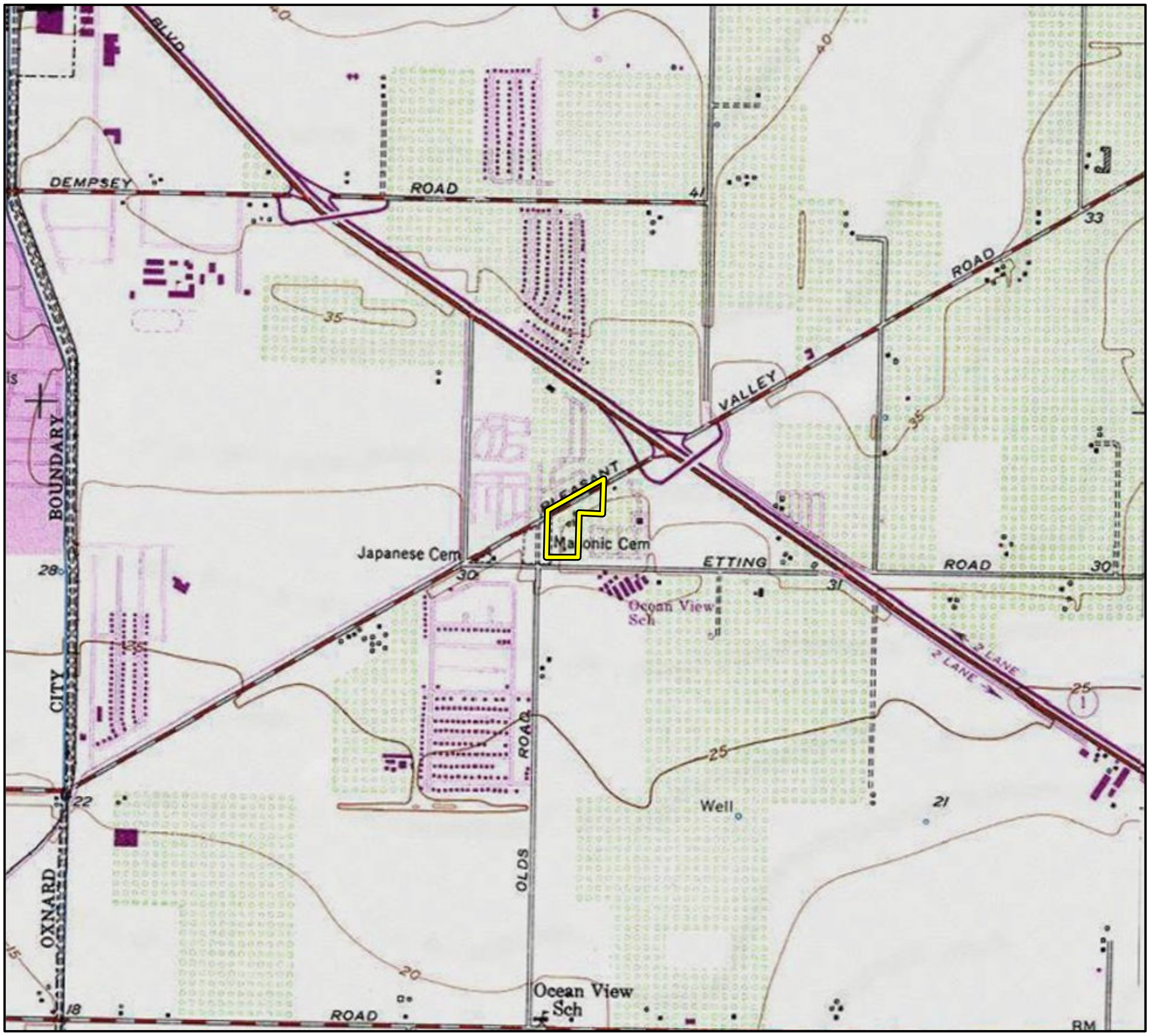
References:

Clement, Dorene. 1995. Resource Record for Naumann Farm (P-56-150024). On file at the South Central Coastal Information Center.

Oxnard Cultural Heritage Board. 2012. Staff Report and Recommendations, Agenda of August 27, 2012, Item 4A.

Smith, Leo. 1993. "History's Resting Place: The County's Cemeteries Can Be a Pathway That Leads Visitors Back Into Time." *Los Angeles Times*, February 11, 1993.

Attachments:
Figure 1. Project Location Map
Attachment A. Table 1- Previous Studies within 0.5 Mile of the Project Site
Attachment B. Table 2- Previously Recorded Cultural Resources within 0.5 Mile of the Project Site
Attachment C. Native American Scoping
Attachment D. Table 3- Summary of Cultural Resources Constraints



Imagery provided by National Geographic Society, ESRI and its licensors © 2014. Oxnard Quadrangle. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

Project Boundary

0 1,000 2,000
Feet
1:24,000

N

Project Location Map

Figure 1

Table 1
Previous Studies Within 0.5 Mile of the Project Site

SCCIC Report No.	Author	Year	Study	Relationship to Project Site
VN-00236	Horne, S.	1980	Final Report: Onshore Cultural Resources Assessment, Union Oil Company Platform Gina and Platform Gilda Project Federal Lease Ocs P-0202 and P-0216, Offshore Southern California	Within
VN-01199	Mann, T. L.	1992	A Phase I Archaeological Survey on a 20 Acre Parcel near Oxnard, California	Outside
VN-01438	Caltrans Staff	1996	Pleasant Valley Road/ State Route 1 Interchange Ventura County Historic Property Survey Report	Outside
VN-02005	Maki, M. K.	2002	Phase I Archaeological Survey of Approximately 2,000 Linear Feet for the Pleasant Valley Road Widening Project, Oxnard, Ventura County, California	Within
VN-02439	Maki, M. K.	2005	Phase I Archaeological Survey of Approximately 75 Acres for the Oxnard College Park Master Plan, Oxnard, Ventura County, California	Outside
VN-02687	Bonner, W. H.	2007	Cultural Resources Records Search and Site Visit Results for T-Mobile Candidate SV001160A (M) (Oxnard College), 4000 South Rose Avenue, Oxnard, Ventura County, California	Outside
VN-02986	Unknown	2004	Environmental Analysis Onshore Component of BHP Billiton LNG International Inc. Cabrillo Port Project	Outside
VN-03102	Stewart, N.	2009	Relinquish State-Owned right of way to the City of Oxnard- State Route 1 (VEN1) from Pleasant Valley Road (PM 15.1) to the intersection of VEN 1 and US 101	Outside

South Central Coastal Information Center, February 2014

Table 2
Previously Recorded Cultural Resources Within 0.5-mile of the Project SIte

Primary Number	Description	NRHP/CRHR Eligibility Status	Recorded/Updated By and Year	Relationship to Project Site
P-56-100060	Isolated mano	Ineligible	S. Horne 1979	Outside
P-56-150013	Japanese Cemetery	Recommended ineligible	R. W. Taylor 1978; D. Clement 1996	Outside
P-56-150014	Hueneme Masonic Cemetery	Recommended ineligible	D. Clement 1996	Adjacent
P-56-150022	Quonset hut	Recommended ineligible	D. Clement 1996; L. Durio 2003	Outside
P-56-150024	Naumann farm	Recommended ineligible	D. Clement 1995	Within
P-56-150025	2650-2652 Etting Road	Recommended ineligible	D. Clement 1995; L. Durio 2003	Outside
P-56-150026	Quonset hut	Recommended ineligible	D. Clement 1995	Outside
P-56-152784	Driscoll Berry Facility	Recommended ineligible	L. Durio 2003	Outside

South Central Coastal Information Center, February 2014

STATE OF CALIFORNIA Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Boulevard, Suite 100
West Sacramento, CA 95691
(916) 373-3715
Fax (916) 373-5471
Web Site www.nahc.ca.gov
Ds_nahc@pacbell.net

February 21, 2014

Mr. Kevin Hunt, Senior Cultural Resources Consultant
Rincon Consulting, Inc.
5135 Avenida Encinas, Suite A
Carlsbad, CA 92008

Sent by FAX to: 805-547-0901
No. of Pages: 5

RE: Sacred Lands File Search and Native American Contacts list for the **"2295 Etting Road Project (120-unit Single Housing Units and 60-8- unit Senior Facility);"** located in Ventura County, California

Dear Mr. Hunt:

A record search of the NAHC Sacred Lands Inventory **failed to indicate** the presence of Native American traditional cultural places in the Project site(s) or 'area of Potential effect' (APE), submitted to this office. Note also that the absence of archaeological and/or Native American cultural resources does not preclude their existence at the subsurface level.

In the 1985 Appellate Court decision (170 Cal App 3rd 604), the Court held that the NAHC has jurisdiction and special expertise, as a state agency, over affected Native American resources impacted by proposed projects, including archaeological places of religious significance to Native Americans, and to Native American burial sites.

Attached is a list of Native American tribes, Native American individuals or organizations that may have knowledge of cultural resources in or near the proposed project area (APE). As part of the consultation process, the NAHC recommends that local government and project developers contact the tribal governments and native American individuals on the list in order to determine if the proposed action might impact any cultural places or sacred sites. If a response from those listed on the attachment is not received in two weeks of notification, the NAHC request that a follow-up telephone call be made to ensure the project information has been received.

California Government Code Sections 65040.12(e) defines 'environmental justice' to provide "fair treatment of people...with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations and policies." Also, Executive Order B-10-11 requires that state agencies "consult with Native American tribes, their elected officials and other representatives of tribal governments in order to provide meaningful input into…the development of legislation, regulations, rules and policies on matter that may affect tribal communities."

If you have any questions or need additional information, please contact me at (916) 373-3715.

Sincerely,

Dave Singleton
Program Analyst

Attachments

Native American Contacts
Ventura County California
February 21, 2014

Beverly Salazar Folkes
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805 492-7255
(805) 558-1154 - cell
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Tataviam
Ferrnandeño

Patrick Tumamait
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(805) 686-9578 Fax
Chumash

San Luis Obispo County Chumash Council
Chief Mark Steven Vigil
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Grover Beach CA 93433
(805) 481-2461
(805) 474-4729 - Fax
Chumash

Fernandeno Tataviam Band of Mission Indians
Larry Ortega, Chairperson
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San Fernando CA 91340
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Tataviam

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Stephen William Miller
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Chumash

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list s only applicable for contacting locative Americans with regard to cultural resources for the proposed 120-unit Single Home Residential Project plus a 60-80-unit Senior Housing Facility; located in Ventura County, California for which a Sacred Lands file search and native American Contacts list were requested.

Native American Contacts
Ventura County California
February 21, 2014

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805-649-2743 (Home)

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Native American Contacts
Ventura County California
February 21, 2014

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805-466-8406

Barbareno/Ventureno Band of Mission Indians
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Rancho Pales Verdes CA 90275
310-831-5295

PeuYoKo Perez
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Raudel Joe Banuelos, Jr.
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Coastal Band of the Chumash Nation
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Santa Barbara CA 93140
805-689-9528

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list s only applicable for contacting locative Americans with regard to cultural resources for the proposed 120-unit Single Home Residential Project plus a 60-80-unit Senior Housing Facility; located in Ventura County, California for which a Sacred Lands file search and native American Contacts list were requested.

Table 3. Summary of Cultural Resources Constraints

Cultural Resource Issue	Applicable Regulations	Comments	Action required for consistency
Naumann Farm (P-56-150024)	CEQA	Recommended ineligible for CRHR listing in 1995	Update record and evaluate resource. Mitigation required if determined significant
Naumann Giant Gum Tree and Eucalyptus Row	Ventura County Ordinance No. 4225	Listed as a Ventura County Historical Landmark	Avoidance
Hueneme Masonic Cemetery (P-56-150014)	CEQA	Located directly adjacent to project site, but may extend into project site	Subsurface geophysical survey. Mitigation required if burials are identified within project site.
Unanticipated additional cultural resources within project area (archaeological, built environment, or traditional heritage)	CEQA	With implementation of appropriate resource evaluation and avoidance or mitigation measures, the project is consistent.	Survey and evaluate resources. Mitigation required for significant finds.

South Central Coastal Information Center, February 2014

Rincon Consultants, Inc.
180 North Ashwood Avenue
Ventura, California 93003

805 644 4455
FAX 644 4240

info@rinconconsultants.com
www.rinconconsultants.com

April 1, 2014
Rincon Project No. 13-01637

Vince Daly
Dansk Investments, LLC
6951 Campus Park Drive
Moorpark, California 93021

Subject: **Geophysical Survey Report**
2295 Etting Road, Oxnard, California

Dear Mr. Daly:

This report presents the results of a geophysical survey conducted by Pacific Coast Locators under the direction of Rincon Consultants, Inc. at the site located at 2295 Etting Road, Oxnard, California (Figure 1, Vicinity Map). The subject property is an approximately 7.4-acre lot identified by assessor's parcel numbers 225-0-014-160, and -190. The subject property is currently developed with a residential structure, a pool, a barn structure with attached residential structure, two large storage/workshop and garage structures, a storage shed, two storage containers, two pump houses (one active and one inactive) and one irrigation pump/irrigation well and avocado orchards.

Rincon's March 18, 2014, Phase I Environmental Site Assessment (ESA) identified historic topographic maps that depict the presence of the Masonic Cemetery on the subject property from 1951 to 1967. Additionally, according to an interview with the property owner, a 250-gallon underground storage tank (UST) utilized to store gasoline was formerly located on the northern portion of the subject property, near the storage structure.

On March 21 and 28, 2014, a geophysical survey was conducted at the subject property to assess the site for the presence of buried features that may prove to be potential unknown subsurface anomalies associated with the Masonic Cemetery and to determine if a UST was formerly or is currently located in the vicinity of the suspected former UST location on the subject property. The geophysical survey utilized the following equipment to complete the survey:

- Radio Detection (RD) 4000 transmitter with matched receiver.

- Ground Penetrating Radar (GPR) and a Schonstedt GA-52Cx hand held magnetometer.

The GPR survey found no evidence of buried caskets, headstones or other buried remains. Additionally, the GPR survey did not identify subsurface interference indicative of the existence of a UST in the vicinity of the storage structure located in the northern portion of the subject property. However, the GPR did identify evidence of disturbed soil, indicative of an excavation in the suspected vicinity of the former UST. Additional subsurface features were identified on the subject property as follows:

- A buried feature was identified in the asphalt parking lot on the east side of the existing residence. The size and depth of the subsurface anomaly are indicative of a potential underground storage tank or septic tank.
- A small area of disturbed soil was identified behind the northeast storage building where large amount of surface debris was visually evident.
- Evidence of a water line running east to west in the southwest corner of the property adjacent to Etting Rd.

The locations of the detected subsurface anomalies are included in Figure 2, Site Map. Appendix 1 includes copies of the Pacific Coast Locators Geophysical Reports completed on March 21 and 28, 2014.

The potential presence of an undocumented UST is a suspected environmental condition. Due to the proximity to the onsite residence, the subsurface feature may be a septic tank. However, according to the Phase I ESA, the property owner has stated that the site has sewer service provided by the City of Oxnard. Therefore, we recommend that City of Oxnard building permits be searched for evidence of a historic onsite septic tank or UST. Additionally, we recommended that a Geoprobe direct push rig be utilized to advance borings at the subject property to collect soil and groundwater samples. Two of the borings should be advanced at the location of the former gasoline UST and two boring should be advanced in the disturbed soil identified behind the northeast storage building. Based on the results of the City of Oxnard file review, additional sampling may be necessary in the vicinity of the subsurface feature located adjacent to the site residence. Borings will not confirm the presence or absence of a UST but they can provide data pertaining to whether a fuel release has occurred at the subject property

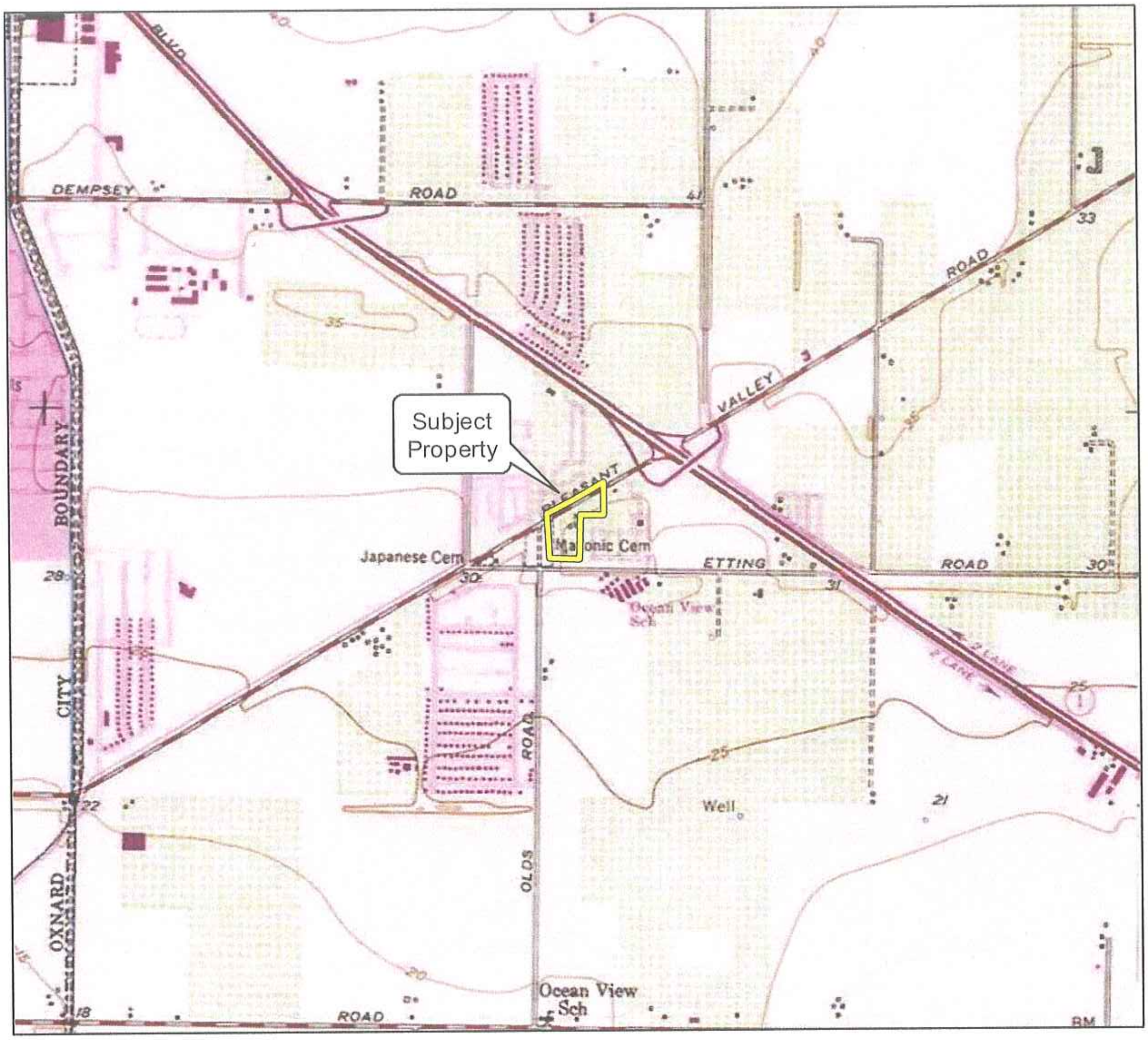
Orange survey flags and white paint were used to delineate the area of disturbed soil and detected subsurface anomalies. Please note that not all areas of the site were accessible to be surveyed. Areas with structures, trees or other features that didn't allow the equipment operator to walk over were not surveyed.

Thank you for selecting Rincon for this project. If you have any questions or if we can be of any future assistance, please contact us.

Sincerely,
RINCON CONSULTANTS, INC.

R. Scott English, RME
Senior Project Manager

Walter Hamann, PG, CEG, REA II
Vice President, Environmental Services



Imagery provided by National Geographic Society, ESRI and its licensors © 2014. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

0 1,000 2,000
Feet

N

Subject Property

Vicinity Map Figure 1

Imagery provided by ESRI and its licensors © 2014.

Site Map

Figure 2

Appendix 1

Pacific Coast Locators Subsurface Investigation Reports

Subsurface Investigation Report

Project:

Senior Living Center
Cemetery Investigation
2295 Etting Rd.
Oxnard, CA

Prepared For:

Rincon Consultants, Inc.
180 N. Ashwood Ave.
Ventura, CA 93003
Scott English

Prepared By:

Pacific Coast Locators, Inc.
EM & GPR Technicians
2606 Foothill Blvd., Ste. G La Crescenta, CA 91214
Ph: 818-249-7700   Fax: 818-249-7701

INTRODUCTION

Pacific Coast Locators, Inc. was hired by Rincon Consultants, Inc. on Friday, March 21, 2014 to perform a Subsurface Investigation to determine the absence or presence of buried features that may prove to be potential unknown casket anomalies within the area of concern on-site.

GEOPHYSICAL METHODOLOGY AND EQUIPMENT

The Geophysical Survey Systems SIR 3000 Utility Scan Ground Penetrating Radar (GPR) system, RD4000 Electro-Magnetic Transmitter & Receiver and Schonstedt GA-52Cx Magnetometer were used to survey the approximately 100' x 600' area of concern on-site to determine the absence or presence of buried features that may prove to be potential unknown casket anomalies.

The GPR survey scan sends a dielectric signal into the earth, which registers with the density of the soil that it is penetrating. Any other material of varied density will either speed up the signal creating an inverted hyperbola or slow it down leaving a hyperbola trail. This is similar to a rock in a creek. The water bends around the rock leaving a tail wake. The GPR signal is not bending however; it is sending back a continuous signal of the curvature of the anomaly it encounters.

The RD4000 Electro-Magnetic Transmitter & Receiver has Inductive & Conductive capability to locate buried conductive underground utilities, such as copper, steel and galvanized metal water pipes, electrical lines, power lines, tele-communication lines, metal and steel gas lines, and metal and steel pipelines. The RD4000 features include multiple active frequencies to delineate actively the depth and location of the target utility or pipe. The RD4000 receiver has a peak and null gain feature that pinpoints the target utility or pipe in congested areas. The audible signal to noise feature makes it easy for the locating technician to determine accurately the location of a directly connected utility or pipe by sound.

The Schonstedt GA-52Cx Magnetic Locator detects iron and steel objects underground, such as USTs, buried oil wells and buried metal monitoring well lids. The Schonstedt GA-52Cx Magnetometer provides audio detection signals with frequencies that vary with gradient field intensity. The signals peak in frequency when the locator's tip is held directly over the target.

SITE AREA

The Property is located at 2295 Etting Rd. in Oxnard, CA. Our technician performed a Subsurface Investigation using Ground Penetrating Radar and Electro-Magnetic locating equipment to determine the absence or presence of potential unknown casket anomalies within the area of concern on-site.

ANALYSES / INTERPRETATIONS AND FINDINGS

Performing a Subsurface Utility Investigation using a Geophysical Survey Systems SIR 3000 Utility Scan Ground Penetrating Radar (GPR) system, RD4000 Electro-Magnetic Transmitter & Receiver and Schonstedt GA-52Cx Magnetometer in the approximately 100' x 600' area of concern on-site found no evidence that buried caskets, headstones or other potential buried objects from the adjacent Cemetery extended into the Farm Property located at 2295 Etting Rd. in Oxnard, CA. Our technician confirmed evidence of disturbed soil due to the removal of an Underground Storage Tank in the northwest section of the property next to an existing structure. Our technician also located and confirmed a buried concrete water line in the southeast corner of the property closest to Etting Rd. Below are photos and saved GPR files of the findings on-site.

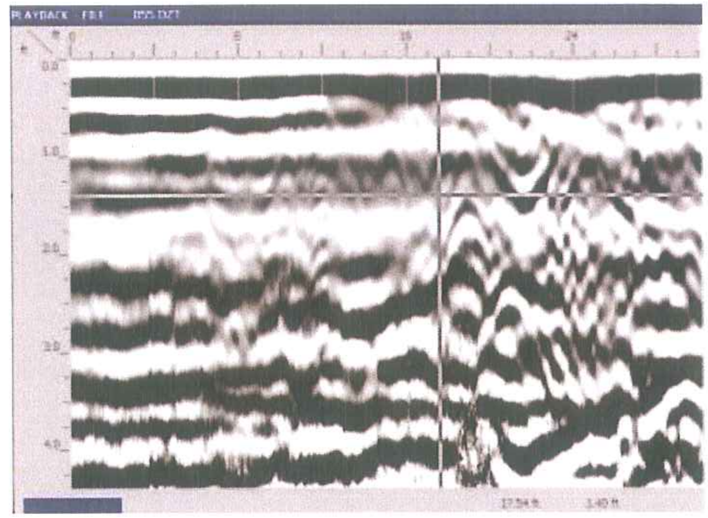


Fig. 1 - Photo and saved GPR file of a former Underground Storage Tank confirmed in the northwest section of the property next to an existing building on-site. Saved GPR file shows evidence of excavation, with normal soil lithology to the left of the cross point and disturbed soil lithology to the right.

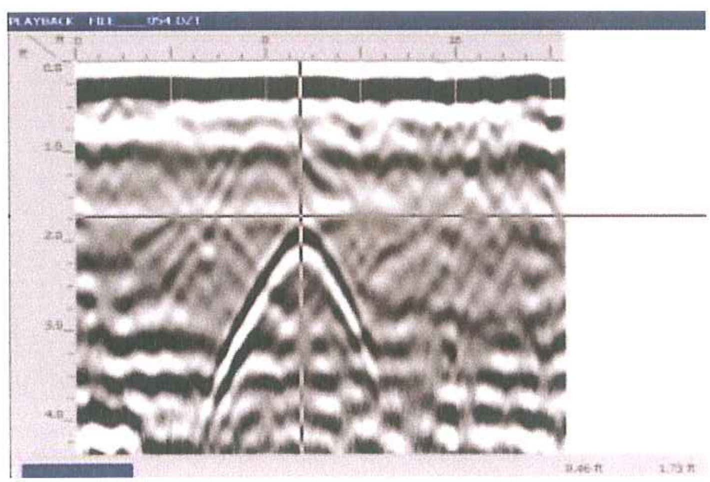


Fig 2 – Photo and saved GPR file of a buried concrete water line confirmed in the southeast corner of the property closest to Etting Rd.

Field work performed by Don Greenman,
EM & GPR Technician
Pacific Coast Locators, Inc.

Subsurface Investigation Report

Project:

Senior Living Center
Cemetery Investigation
2295 Etting Rd.
Oxnard, CA

Prepared For:

Rincon Consultants, Inc.
180 N. Ashwood Ave.
Ventura, CA 93003
Scott English

Prepared By:

Pacific Coast Locators, Inc.
EM & GPR Technicians
2606 Foothill Blvd., Ste. G La Crescenta, CA 91214
Ph: 818-249-7700 Fax: 818-249-7701

INTRODUCTION

Pacific Coast Locators, Inc. was hired by Rincon Consultants, Inc. on Friday, March 28, 2014 to perform a Subsurface Investigation to determine the absence or presence of buried features that may prove to be potential unknown casket anomalies within the area of concern on-site.

GEOPHYSICAL METHODOLOGY AND EQUIPMENT

The Geophysical Survey Systems SIR 3000 Utility Scan Ground Penetrating Radar (GPR) system, RD4000 Electro-Magnetic Transmitter & Receiver and Schonstedt GA-52Cx Magnetometer were used to survey the approximately 100' x 600' area of concern on-site to determine the absence or presence of buried features that may prove to be potential unknown casket anomalies.

The GPR survey scan sends a dielectric signal into the earth, which registers with the density of the soil that it is penetrating. Any other material of varied density will either speed up the signal creating an inverted hyperbola or slow it down leaving a hyperbola trail. This is similar to a rock in a creek. The water bends around the rock leaving a tail wake. The GPR signal is not bending however; it is sending back a continuous signal of the curvature of the anomaly it encounters.

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SITE AREA

The Property is located at 2295 Etting Rd. in Oxnard, CA. Our technician performed a Subsurface Investigation using Ground Penetrating Radar and Electro-Magnetic locating equipment to determine the absence or presence of potential unknown casket anomalies within the area of concern on-site.

ANALYSES / INTERPRETATIONS AND FINDINGS

Performing a Subsurface Utility Investigation using a Geophysical Survey Systems SIR 3000 Utility Scan Ground Penetrating Radar (GPR) system, RD4000 Electro-Magnetic Transmitter & Receiver and Schonstedt GA-52Cx Magnetometer in the approximately 200' x 600' area of concern on-site found no evidence of buried caskets, headstones or other buried remains. Our technician confirmed a buried feature approximately 2' to 3' below the surface (possible septic tank) in the asphalt parking lot on the east side of the existing house property. Our technician also confirmed an area of disturbed soil behind the northeast storage building on-site. A large amount of debris was visually confirmed in this area. Orange survey flags were used to delineate the area of disturbed soil. Below are photos and saved GPR files of the findings on-site.

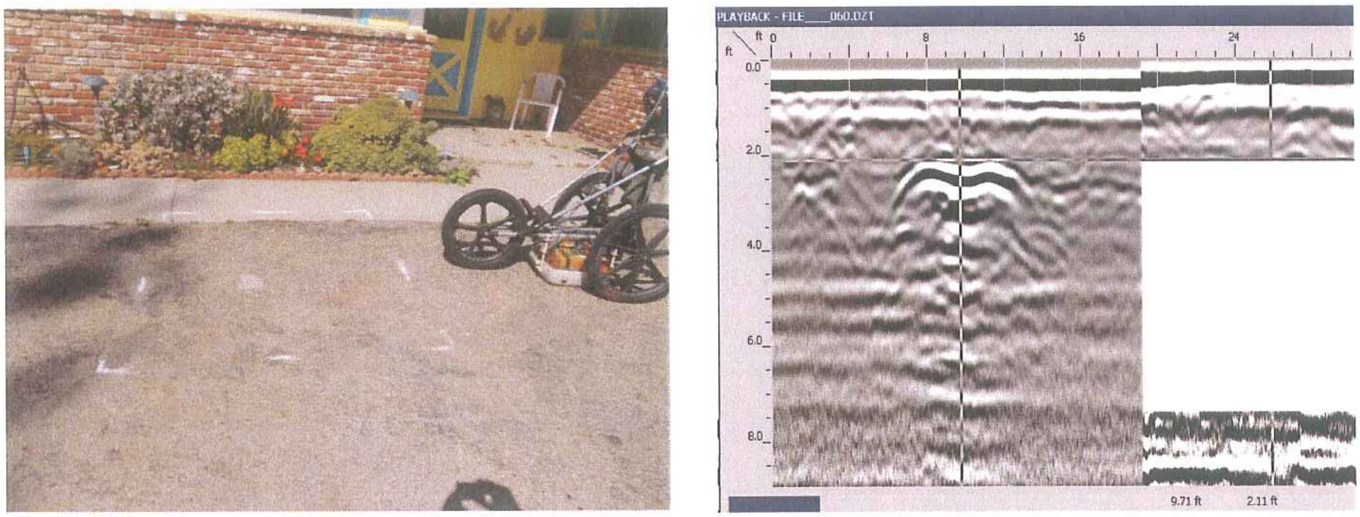


Fig. 1 - Photo and saved GPR file of a possible buried septic tank confirmed on the east side of the of the existing house property.

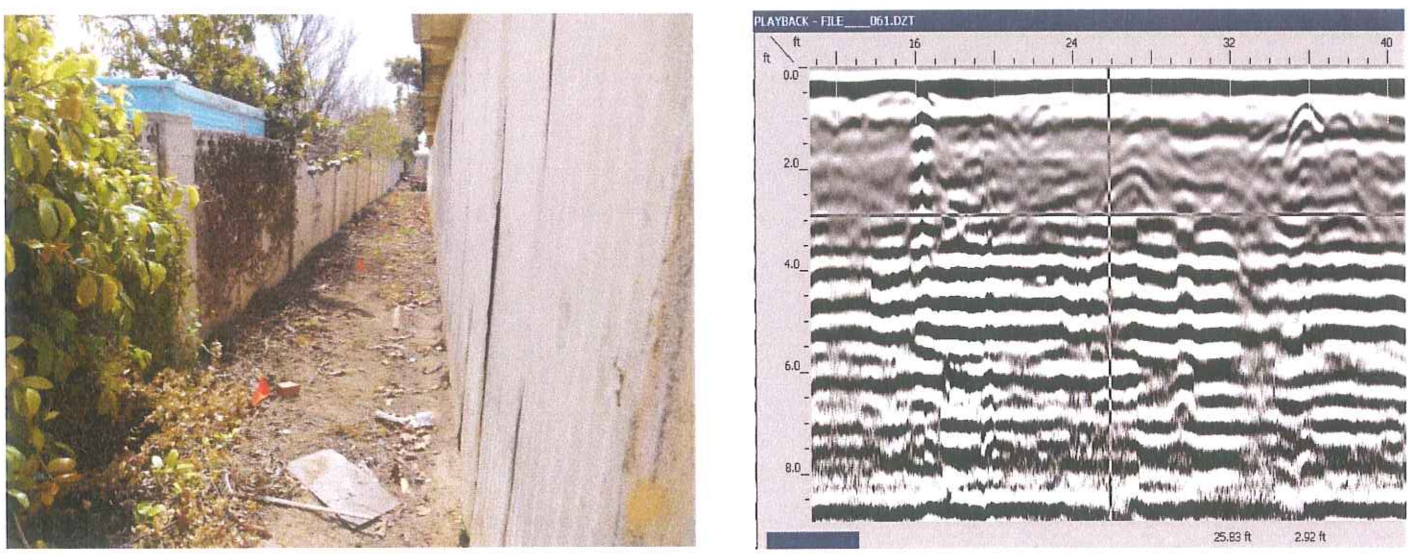
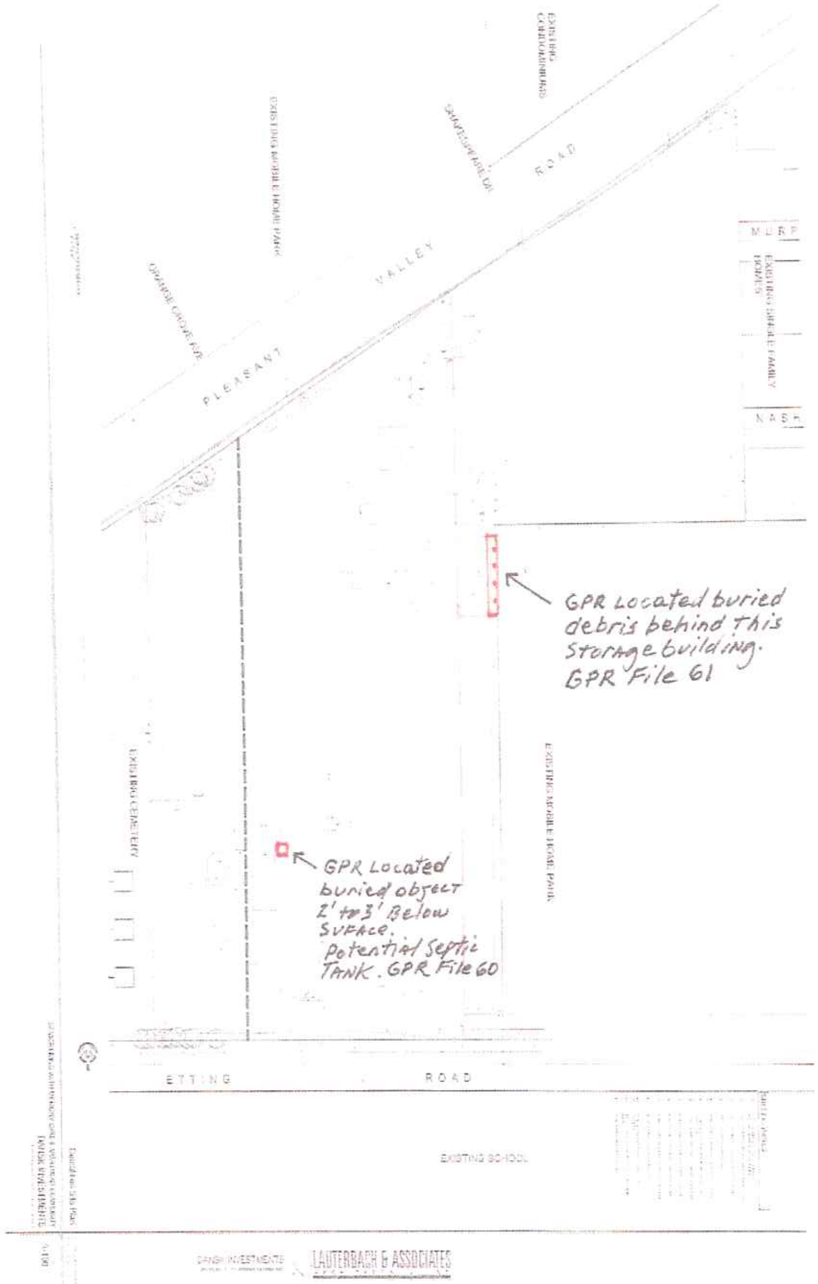


Fig 2 – Photo and saved GPR file of a disturbed soil and area of debris confirmed behind the northeast storage building on-site. Orange survey flags delineate the disturbed soil confirmed in the area.



Field work performed by Don Greenman,
EM & GPR Technician
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March 3, 2015
Job No. 14-00624

Kathleen Mallory, MA, AICP
Principal Planner
Planning & Energy/Entitlement Services
City of Oxnard
Via email: kmallory@pandes.net

Subject: Results of the Extended Phase I Archaeological Survey for the Daly/Dansk Pleasant Valley Road Apartments and Senior Living/Memory Care Center Project, Oxnard, Ventura County, California

Dear Ms. Mallory:

The following describes the results of an Extended Phase I (XPI) Survey conducted for the Daly/Dansk Pleasant Valley Road Apartments and Senior Living/Memory Care Center Project, Oxnard, Ventura County, California. The City of Oxnard retained Rincon Consultants (Rincon) to conduct this XPI survey to address public concerns regarding the potential for the proposed project to impact buried historic archaeological resources within the 7.17-acre project site. As part of this study, Rincon prepared a work plan to guide the XPI survey fieldwork (Ramirez 2015). This study has been conducted in accordance with the California Environmental Quality Act (CEQA) statues and guidelines.

Project Description

The proposed project involves two developments (an apartment complex and a senior living/memory care center) on a 7.17-acre site. The project site is located at 2295 Etting Road (APNs 225-0-014-160 and 225-0-014-190). The project site is located adjacent to an existing mobile home park to the east, the Masonic and Japanese Cemeteries to the west, and Ocean View school facilities to the south.

Project Site Occupation History

Review of a historic resources study (Post/Hazeltine Associates 2014) conducted for the project indicates the historic period occupation of the project site began as part of the La Colonia Rancho from 1769 to 1898. In 1898 the project site was sold and became part of the Hueneme Masonic Cemetery. In 1944 the project site became part of the Naumann Farm and has remained so until the present day. As part of the Naumann Farm, the Naumann family constructed several buildings, including a barn/living quarters, a shop, and shed built in the 1940s, and a residence and swimming pool built in 1957.

Fieldwork Methods

Rincon placed eight trenches (Trench 1-8) throughout the 7.17-acre.project site to determine the presence or absence of subsurface historic period archaeological deposits. Figure 1 in Attachment A depicts the locations of these trenches.

- Trenches 1-3 were placed on the western side of the project site along the border of the current boundaries of the Hueneme Masonic Cemetery. Trench excavations in this area focused on whether the cemetery extended onto the project site. Ground-penetrating radar studies (Pacific Coast Locators, Inc. 2014 and 2014b) identified no subsurface anomalies within the project site that appeared to be inhumations; however, these trenches were excavated to confirm the previous findings.
- Trenches 4 and 5 were placed next to the former location of the 1957 residence to determine if any archaeological deposits exist near this building site.
- Trench 6 was placed next to the shed location; and Trench 7 was placed next to the shop location. These trenches were used to determine whether historic archaeological deposits exist in association with the former locations of these 1940s era building and structures.
- Trench 8 was placed in the northeastern section of the project site to determine if historic archaeological deposits exist in this predominantly orchard/open space area.

Each trench was excavated using a backhoe and measured 10 feet long by 24 inches wide. Rincon archaeologist Ashley Ginther observed the trench excavations and documented the results of the work through handwritten notes and photography. A soil profile was completed for a one-meter section of each trench.

As part of remediation for contaminated soils in within the project site, four 10-by-10 foot excavations were placed near the barn/living quarters location (Figure 1). These locations were excavated to depths of one and two feet deep. A Rincon archaeologist was present to observe the excavations and did not identify any archaeological deposits. As a result of this work, no excavations were conducted within the barn/living quarters location as part of this XPI survey as this area has already been adequately tested.

Results

Rincon archaeologist Ashley Ginther conducted the XPI survey on February 17, 2015. The XPI survey identified no historic subsurface archaeological deposits with the 7.17-acre project site. Each trench was excavated to a maximum depth of five feet below ground surface (Photograph 1-8 in Attachment B). Soils within each trench were fairy uniform, consisting of light brown (Munsell 7.5 YR 6/4) sandy silt with clay inclusions. The only disturbances noted were roots and krotovina activity. An excavation record and soil profile was completed for each trench (Attachment C).

Discussion and Recommendations

The XPI survey identified no historic period subsurface archaeological deposits within the project site. These results, along with the results of the ground-penetrating radar studies conducted to identify subsurface anomalies associated with the Hueneme Masonic Cemetery (Pacific Coast Locators, Inc. 2014 and 2014b), indicate the project site is not sensitive for historic archaeological resources. Therefore, Rincon recommends no further archaeological work for the proposed project. The measures below are for unanticipated discoveries.

Unanticipated Discovery of Cultural Resources

If archaeological resources are encountered during ground-disturbing activities, work in the immediate area must be halted and an archaeologist meeting the *Secretary of the Interior's Professional Qualifications Standards* for archaeology (National Park Service 1983) contacted to evaluate the find. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for California Register of Historical Resources eligibility. If the discovery proves to be significant under CEQA and cannot be avoided by the project, additional work such as data recovery excavation may be warranted to exhaust the data potential of the resource thereby reducing any impact to a less-than-significant level.

Unanticipated Discovery of Human Remains

If human remains are found, State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the county coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In accordance with this code, in the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission, which will identify a Most Likely Descendant (MLD). The MLD would complete the inspection of the find within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

RINCON CONSULTANTS, INC.

Robert Ramirez, M.A., RPA
Cultural Resources Principal Investigator

Kevin Hunt
Cultural Resources Program Manager

References

National Park Service
1983 *Archaeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines*. Electronic document accessed December 6, 2011. Online at http://www.nps.gov/history/local-law/Arch_Standards.htm.

Pacific Coast Locators, Inc.
2014a Subsurface Investigation Report, Senior Living Center Cemetery Investigation 2295 Etting Rd. Oxnard, CA. March 21, 2014. On file at the City of Oxnard, Oxnard, CA.

Pacific Coast Locators, Inc.
2014b Subsurface Investigation Report, Senior Living Center Cemetery Investigation 2295 Etting Rd. Oxnard, CA. March 28, 2014. On file at the City of Oxnard, Oxnard, CA.

Post/Hazeltine Associates
2014 Historic Resources Report for 2295 Etting Road, Oxnard California. On file at the City of Oxnard, Oxnard, CA.

Ramirez, Robert
2015 Extended Phase I Archaeological Survey Work Plan for the Daly/Dansk Pleasant Valley Road Apartments and Senior Living/Memory Care Center Project, Oxnard, Ventura County, California. On file at the City of Oxnard, Oxnard, CA.

Attachments:

Attachment A. Figure
Attachment B. Photographs
Attachment C. Excavation Records

Attachment 1
Figure

Imagery provided by Google and its licensors © 2014.

Extended Phase I Survey Map

Figure 1

Attachment 2
Photographs


Photograph 1. Overview of Trench 1, detail


Photograph 2. Overview of Trench 2, detail

Photograph 3. Overview of Trench 3, detail

Photograph 4. Overview of Trench 4, detail

Photograph 5. Overview of Trench 5, detail.

Photograph 6. Overview of Trench 6, detail


Photograph 7. Overview of Trench 7, detail.


Photograph 8. Overview of Trench 8, detail.

Attachment 3

Excavation Records

Rincon Consultants

SHOVEL TEST PIT/AUGER TEST RECORD

Site: XPI Survey 14-00624 | Date: 02-17-15 | Project: 14-00624

STP/AT No: 1 | STP/AT Size: 10ft x 2ft | Maximum Depth: 5ft.

Screen Size: ______ ☐ Wet ☐ Dry | Excavators: Tim; Ashley Ginther

Photographs? ☑ Yes ☐ No

☑ Digital ☐ Film Frame(s): | Excavation Method: Backhoe

Soil Description

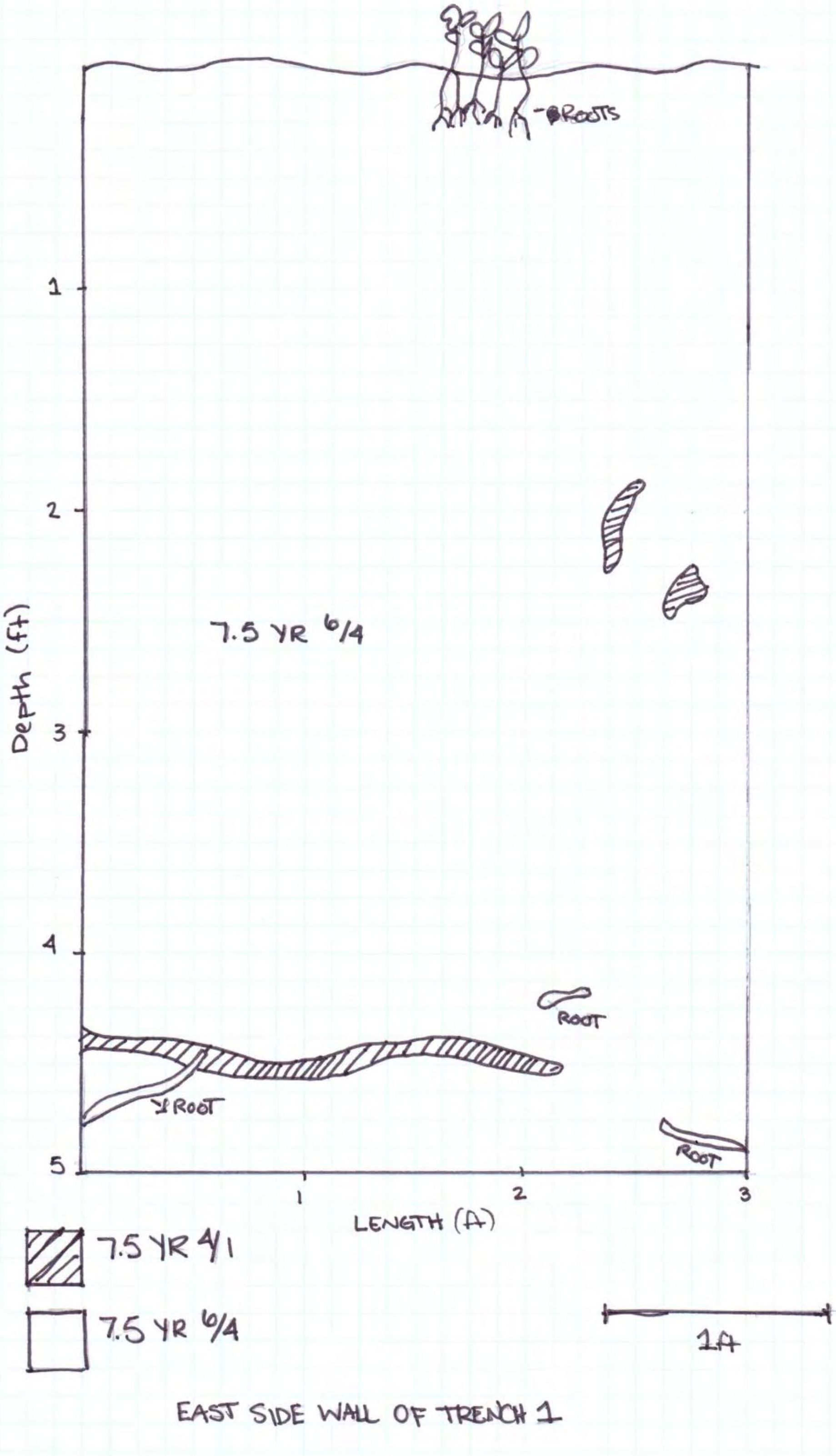
Level	Soil Type/Texture	Soil Color (Munsell)	Disturbance/Inclusions
1	Sandy Silty Soil	7.5YR 6/4	N/A
2	Sandy Silty Soil	7.5 YR 6/4	clay (7.5YR 4/1) inclusions
3	Sandy Silty Soil	7.5 YR 6/4	" " "
4	Sandy Silty Soil	7.5 YR 6/4	N/A
5	Sandy Silty Soil	7.5 YR 6/4	Clay (7.5YR 4/1) & vegitation inclusions.

Cultural Constituents

Level	Artifacts (quantity and type)	Uncollected Items
N/A	No Artifacts were observed	

Comments: steril soil with clay inclusions. Some vegitation intrusion.

Form Continues? ☐ Yes ☑ No


ROOTS
Depth (ft)
1
2
3
4
5
7.5 YR 6/4
ROOT
ROOT
ROOT
1
2
3
LENGTH (ft)
7.5 YR 4/1
7.5 YR 6/4
1ft
EAST SIDE WALL OF TRENCH 1

Rincon Consultants

SHOVEL TEST PIT/AUGER TEST RECORD

Site: XPI Survey	Date: 02/17/15	Project: 14-00624
STP/AT No: 2	STP/AT Size: 10ft x 2ft	Maximum Depth: 5ft
Screen Size: ____ ☐ Wet ☐ Dry Photographs? ☐ Yes ☐ No ☐ Digital ☐ Film Frame(s):	Excavators: Tim; Ashley Ginther Excavation Method: Backhoe	

Soil Description

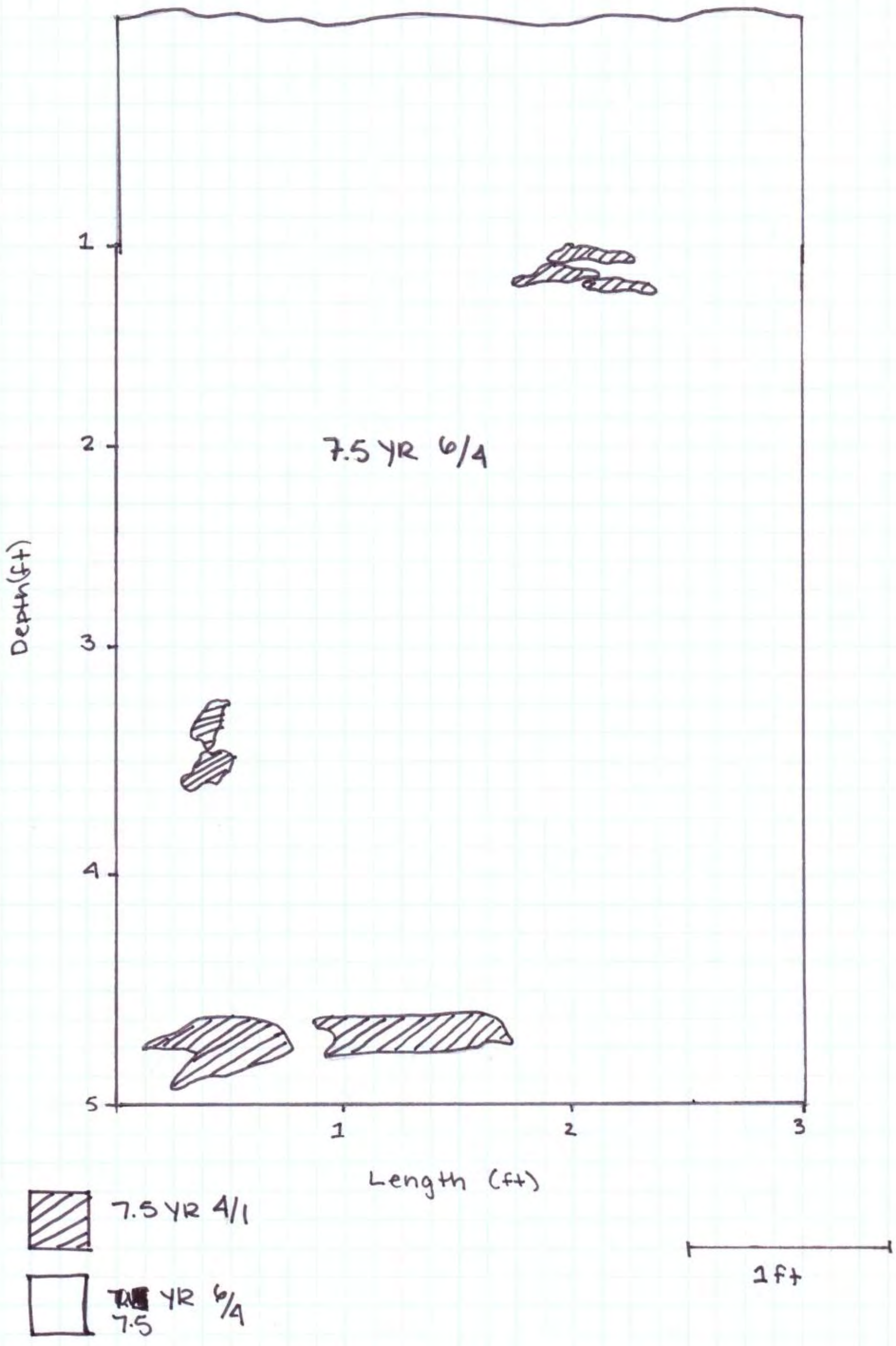
Level	Soil Type/Texture	Soil Color (Munsell)	Disturbance/Inclusions
1	Sandy Silty Soil	7.5 YR 6/4	N/A
2	Sandy Silty Soil	7.5 YR 6/4	Clay (7.5YR 4/1) inclusions
3	Sandy Silty Soil	7.5 YR 6/4	N/A ~~Clay (7.5YR 4/1) inclusions~~
4	Sandy Silty Soil	7.5 YR 6/4	Clay (7.5 YR 4/1) inclusions
5	Sandy Silty Soil	7.5 YR 6/4	Clay (7.5 YR 4/1) inclusions

Cultural Constituents

Level	Artifacts (quantity and type)	Uncollected Items
N/A	No Artifacts were observed	

Comments: Sandy silty Soil with minor clay inclusions through out the layers.

Form Continues? ☐ Yes ☐ No



EAST SIDE WALL TRENCH 2

Rincon Consultants

SHOVEL TEST PIT/AUGER TEST RECORD

Site: XPI SURVEY
Date: 02-17-15
Project: 14-00624

STP/AT No: 3
STP/AT Size: 10ft x 2ft
Maximum Depth: 5ft

Screen Size: ☐ Wet ☐ Dry
Excavators: Tim; Ashley Ginther

Photographs? ☒ Yes ☐ No
☐ Digital ☐ Film Frame(s):
Excavation Method: Backhoe

Soil Description

Level	Soil Type/Texture	Soil Color (Munsell)	Disturbance/Inclusions
1	Sandy Silty Soil	7.5 YR 6/4	Clay (7.5 YR 4/1) inclusions ~~[illegible]~~
2	Sandy Silty Soil	7.5 YR 6/4	N/A
3	Sandy Silty Soil	7.5 YR 6/4	N/A
4	Sandy Silty Soil	7.5 YR 6/4	minor clay (7.5 YR 4/1) inclusions
5	Sandy Silty Soil	7.5 YR 6/4	clay (7.5 YR 4/1) & vegitation inclusions.

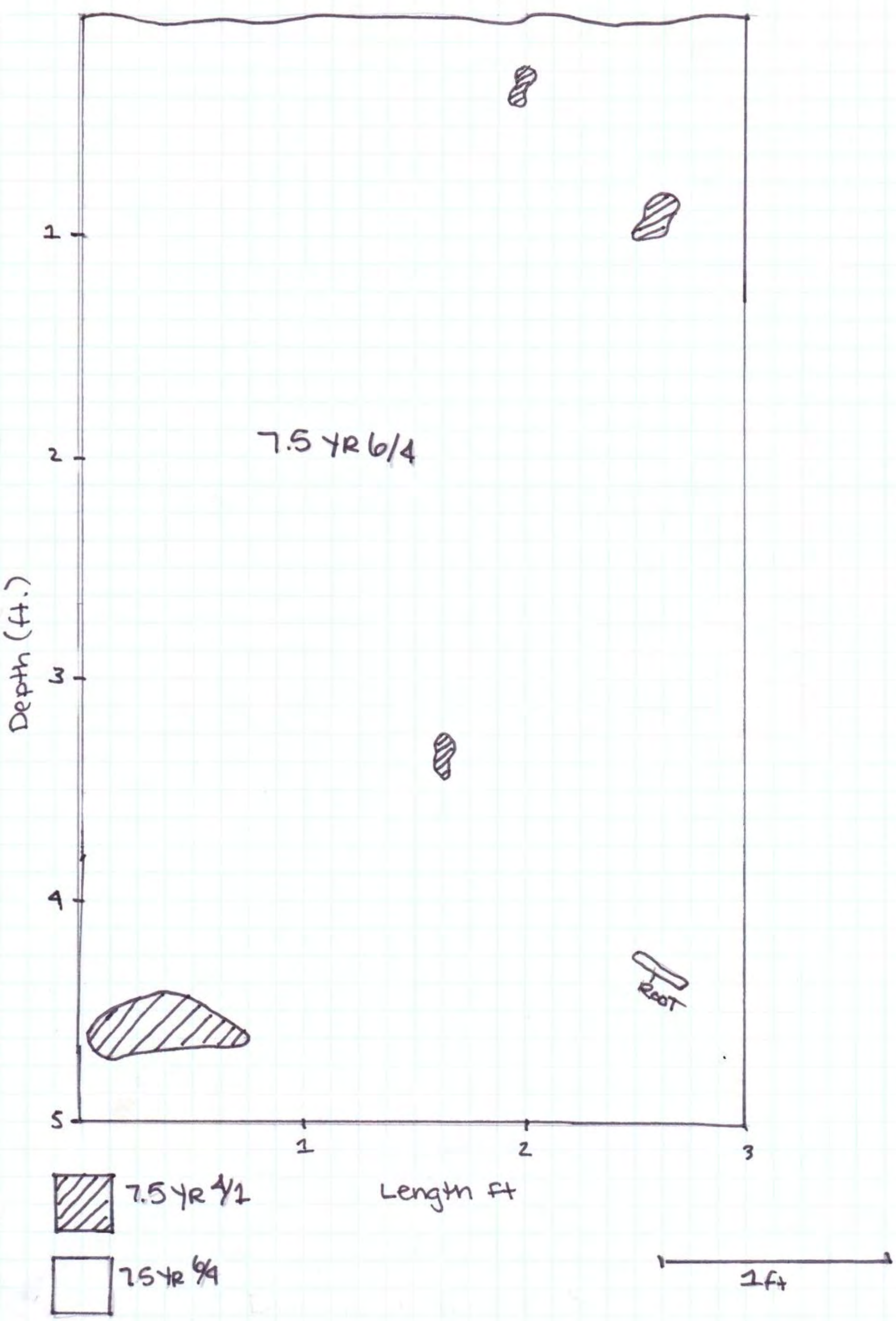
Cultural Constituents

Level	Artifacts (quantity and type)	Uncollected Items
N/A	No cultural Materials were recovered.	N/A

Comments: Sandy Silty Soil with minor clay and vegitation inclusions

Form Continues? ☐ Yes ☑ No

EAST SIDE WALL TRENCH # 3



Rincon Consultants

SHOVEL TEST PIT/AUGER TEST RECORD

Site: XPI Survey	Date: 2-17-15	Project: 14-00624
STP/AT No: 4	STP/AT Size: 10ft x 2ft	Maximum Depth: 5ft
Screen Size: ☐ Wet ☐ Dry Photographs? ☒ Yes ☐ No ☒ Digital ☐ Film Frame(s):	Excavators: Tim ; Ashley Ginther Excavation Method: Back hoe	

Soil Description

Level	Soil Type/Texture	Soil Color (Munsell)	Disturbance/Inclusions
1	Sandy Silty Soil	7.5YR 6/4	Clay (7.5yr 4/1) & vegitation
2	Sandy Silty Soil	7.5 YR 6/4	Clay (7.5yr 4/1) & Rodent hole (7.5yr 8/8) inclusions
3	Sandy Silty Soil	7.5 YR 6/4	N/A
4	Sandy Silty Soil	7.5 YR 6/4	clay (7.5yr 4/1) inclusions
5	Sandy Silty Soil	7.5YR 6/4	vegitation and clay (7.5yr 4/1) inclusions

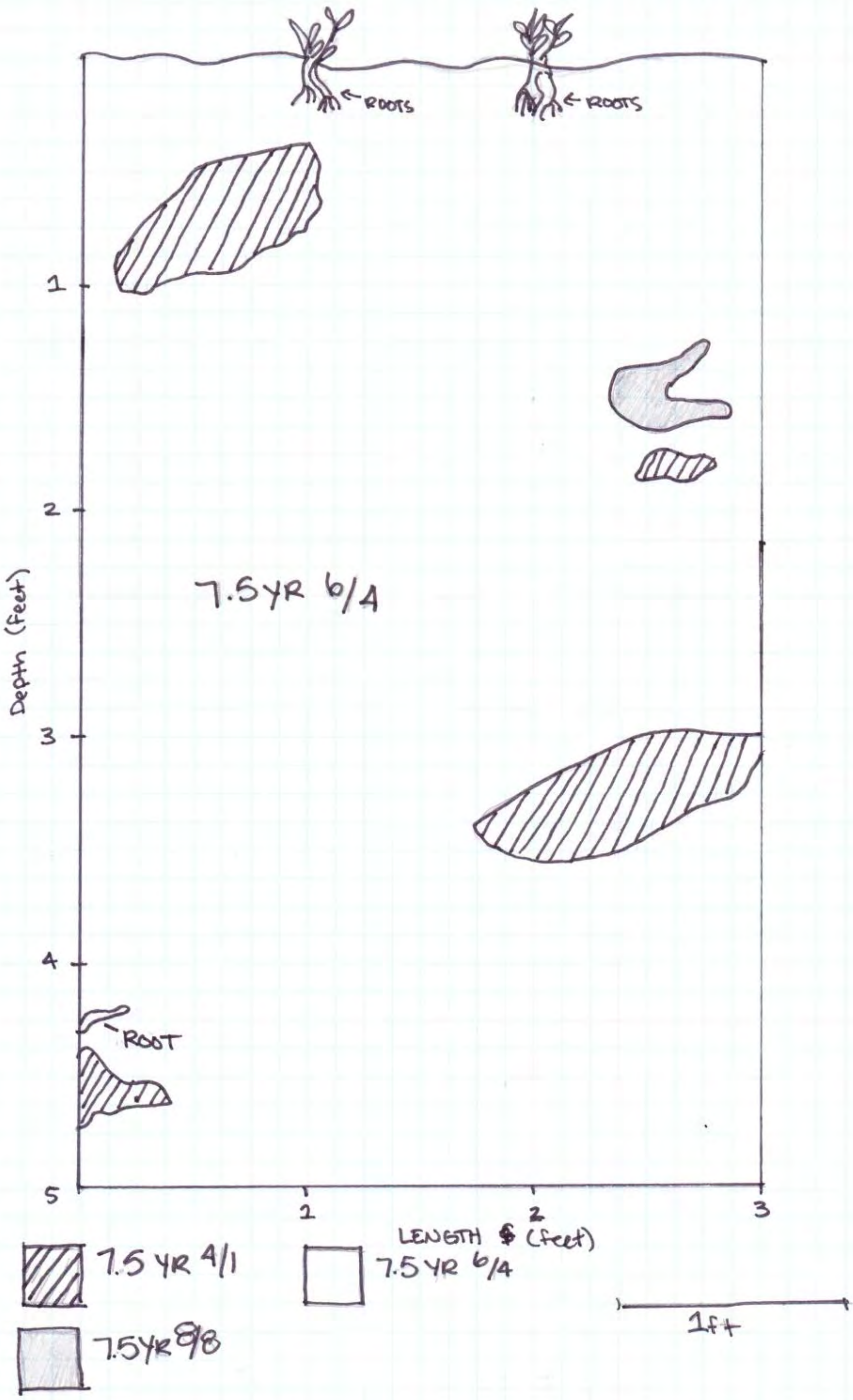
Cultural Constituents

Level	Artifacts (quantity and type)	Uncollected Items
N/A	No cultural materials were Recovered from this trench.	N/A

Comments: Sandy silty soil with some orangish soil inclusions, possible these could be Rodent holes. Some clay inclusions as is usual for this trench.

Form Continues? ☐ Yes ☒ No

EAST SIDE WALL TRENCH #4



Rincon Consultants

SHOVEL TEST PIT/AUGER TEST RECORD

Site: XPI Survey
STP/AT No: 5
Screen Size: ________ ☐ Wet ☐ Dry
Photographs? ☑ Yes ☐ No
☑ Digital ☐ Film Frame(s):

Date: 2-17-15
STP/AT Size: 10ft x 2ft
Excavators: Tim; Ashley Ginther
Excavation Method: Backhoe

Project: 14-00624
Maximum Depth: 5ft

Soil Description

Level	Soil Type/Texture	Soil Color (Munsell)	Disturbance/Inclusions
1	Sandy Silty Soil	7.5YR 6/4	Silt Clay (7.5YR 4/1) inclusions
2	Sandy Silty Soil	7.5YR 6/4	vegitation and clay (7.5YR 4/1) inclusions
3	Sandy Silty Soil	7.5YR 6/4	silte clay (7.5YR 4/1) inclusions
4	Sandy Silty Soil	7.5YR 6/4	silte clay (7.5YR 4/1) inclusions
5	Sandy Selty Soil	7.5YR 6/4	vegitation and clay inclusions

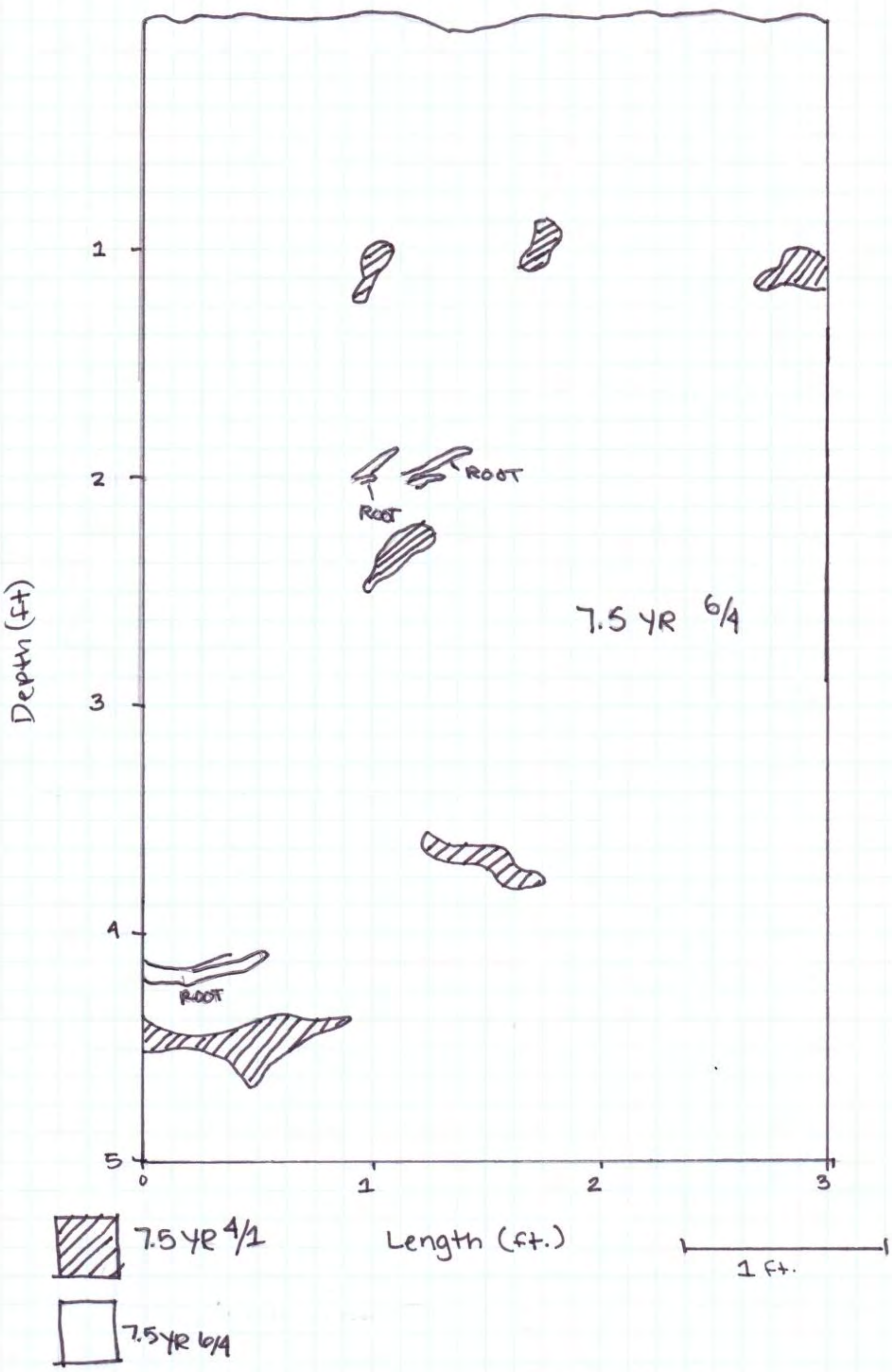
Cultural Constituents

Level	Artifacts (quantity and type)	Uncollected Items
N/A	No cultural Material identified or recovered at this trench.	N/A

Comments: Sandy Silty Soil with minor clay and vegitation included among the layers of Soil.

Form Continues? ☐ Yes ☑ No

NORTH SIDE WALL OF TRENCH #5



Rincon Consultants

SHOVEL TEST PIT/AUGER TEST RECORD

Site: XPI survey
STP/AT No: 6
Screen Size: ________ ☐ Wet ☐ Dry
Photographs? ☑ Yes ☐ No
☑ Digital ☐ Film Frame(s):

Date: 2-17-15
STP/AT Size: 10ft x2ft
Excavators: TIM; Ashley Ginther
Excavation Method: Backhoe

Project: 14-00624
Maximum Depth: 5ft

Soil Description

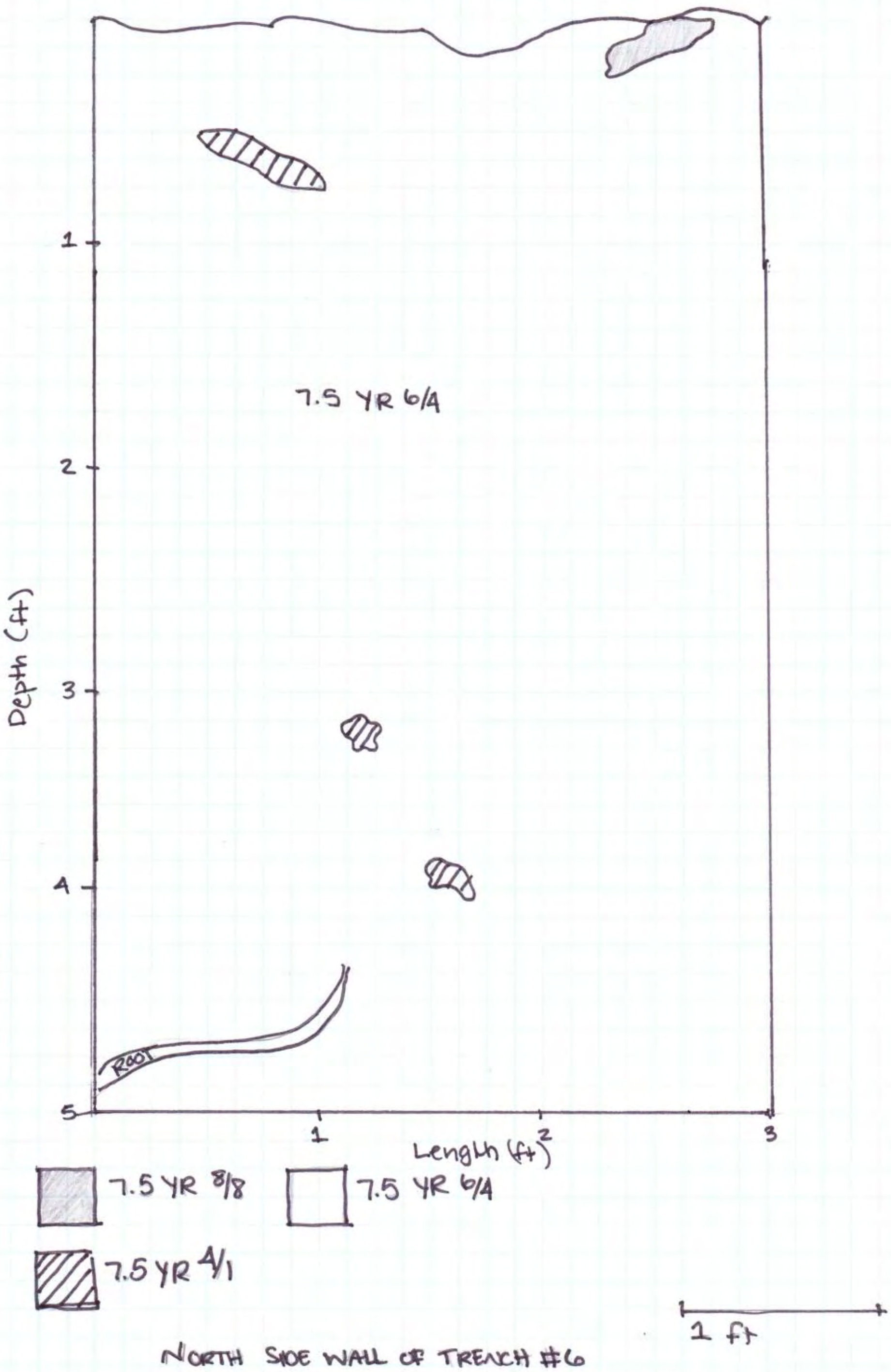
Level	Soil Type/Texture	Soil Color (Munsell)	Disturbance/Inclusions
1	Silty Sandy Soil	7.5YR 6/4	Clay and rodent hole intrusion
2	Silty Sandy Soil	7.5YR 6/4	N/A
3	Sandy Silty Soil	7.5YR 6/4	N/A
4	Sandy Silty Soil	7.5YR 6/4	Small Clay (7.5yr 4/1) inclusion
5	Sandy Silty Soil	7.5YR 6/4	small clay 7.5yr 4/1 inclusion w/ vegitation

Cultural Constituents

Level	Artifacts (quantity and type)	Uncollected Items
N/A	No cultural Materials Recovered from this trench.	N/A

Comments: Sandy Silty Soil with Rodent hole inclusion leaving an orange soil signiture. Small vegitation & clay inclusions with in layers of soil.

Form Continues? ☐ Yes ☒ No



NORTH SIDE WALL OF TRENCH #6

Rincon Consultants

SHOVEL TEST PIT/AUGER TEST RECORD

Site: XPI Survey
STP/AT No: 7
Screen Size: ______ ☐ Wet ☐ Dry
Photographs? ☑ Yes ☐ No
☑ Digital ☐ Film Frame(s):

Date: 2-17-15
STP/AT Size: 10ft x 2ft
Excavators: Tim; Ashley Ginther
Excavation Method: Back hoe

Project: 14-00624
Maximum Depth: 5ft

Soil Description

Level	Soil Type/Texture	Soil Color (Munsell)	Disturbance/Inclusions
1	Sandy Silty Soil	7.5 YR 6/4	Clay (7.5YR 4/1) inclusion
2	Sandy Silty Soil	7.5 YR 6/4	Clay (7.5YR 4/1) inclusion
3	Sandy Silty Soil	7.5 YR 6/4	" " "
4	Sandy Silty Soil	7.5 YR 6/4	vegitation & Clay inclusions
5	Sandy Silty Soil	7.5 YR 6/4	Clay (7.5YR 4/1) inclusions

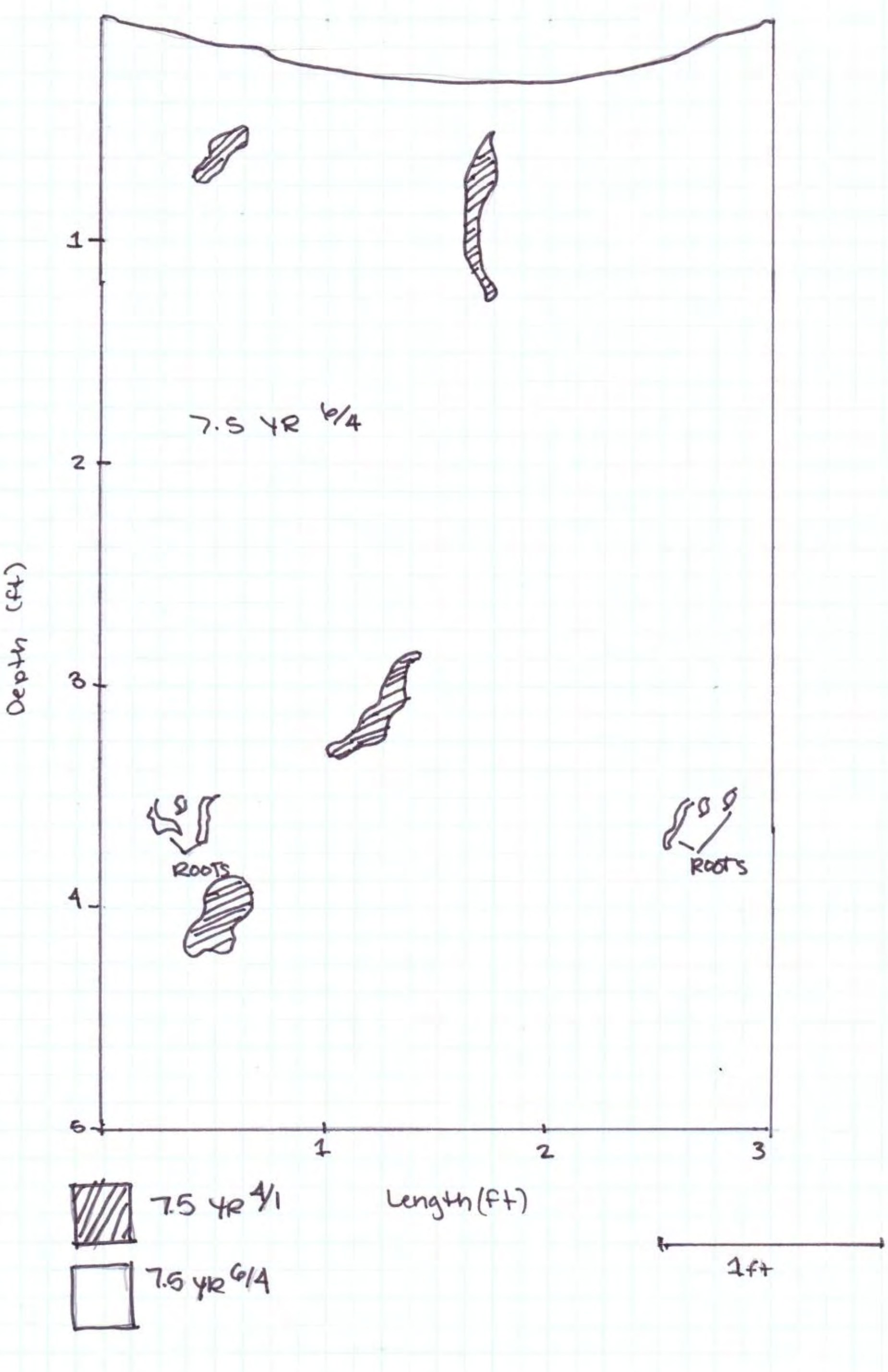
Cultural Constituents

Level	Artifacts (quantity and type)	Uncollected Items
N/A	No cultural materials were identified or recovered in this trench.	N/A

Comments: Silty Sandy Soil with minor Clay and vegitation inclusion with in the soil layers.

Form Continues? ☐ Yes ☒ No

EAST SIDE WALL TRENCH #7



Rincon Consultants

SHOVEL TEST PIT/AUGER TEST RECORD

Site: XPI Survey
STP/AT No: 8
Screen Size: ______ ☐ Wet ☐ Dry
Photographs? ☑ Yes ☐ No
☑ Digital ☐ Film Frame(s):

Date: 2-17-15
STP/AT Size: 10ft x 2ft
Excavators: Tim; Ashley Ginther
Excavation Method: Backhoe

Project: 14-00624
Maximum Depth: 5ft

Soil Description

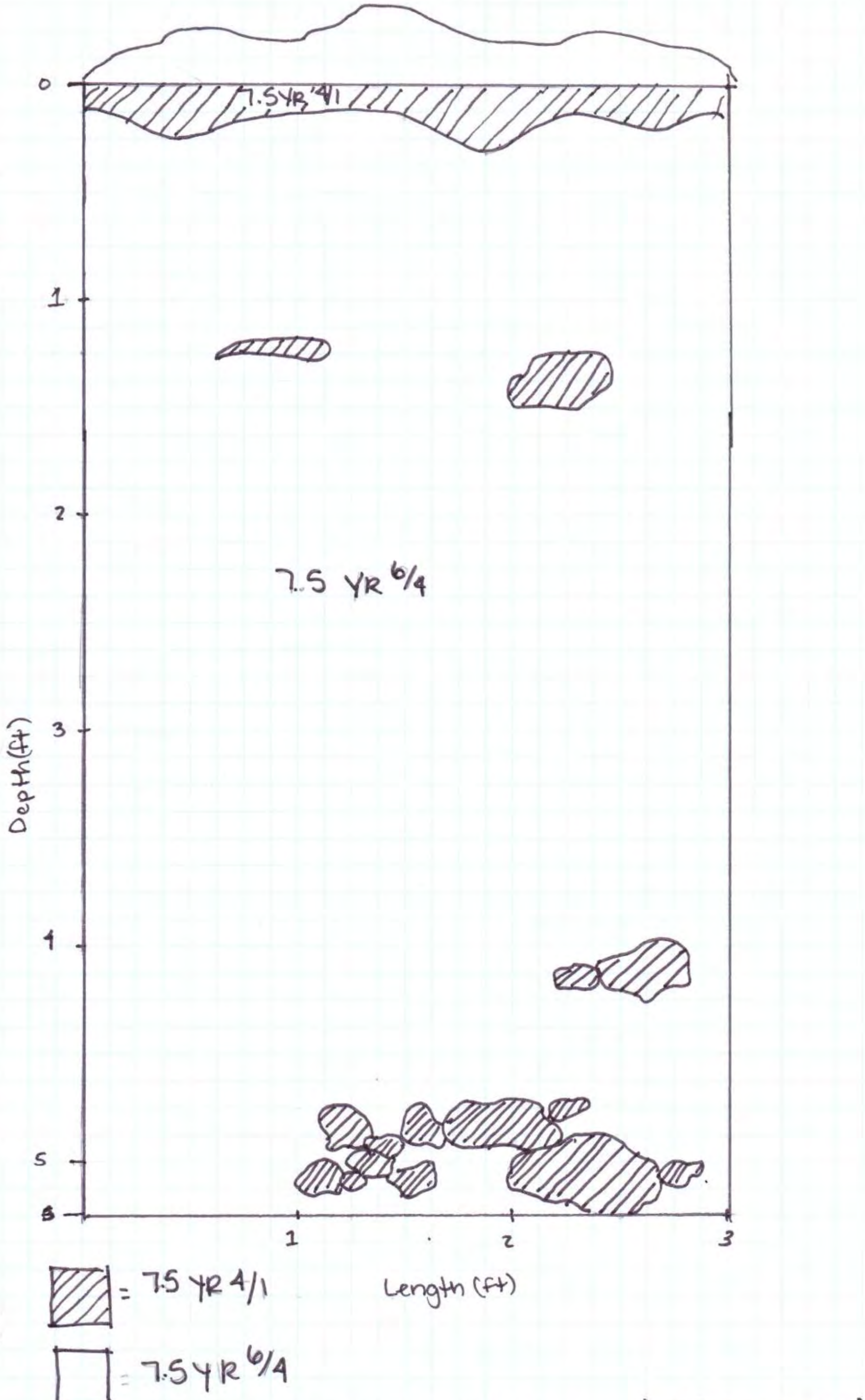
Level	Soil Type/Texture	Soil Color (Munsell)	Disturbance/Inclusions
1	Topsoil(silty) Sandy Silty Soil	7.5 YR 4/1 / 7.5 YR 6/4	Dark Top Soil under Sandy Silty Soil (7.5YR 4/1)
2	Sandy Silty Soil	7.5YR 6/4	Clay inclusions
3	Sandy Silty Soil	7.5YR 6/4	N/A
4	Sandy Silty Soil	7.5YR 6/4	Clay (7.5 YR 4/1) inclusions
5	Sandy Silty Soil	7.5 YR 6/4	Clay (7.5YR 4/1) inclusions

Cultural Constituents

Level	Artifacts (quantity and type)	Uncollected Items
N/A	no cultural materials were identified OR Recovered in this trench.	N/A

Comments: Heavy Rich Top Soil covered this area. Once the top Soil was breached typical Sandy silty Soil occured. Minor clay inclusions in layers of this trench.

Form Continues? ☐ Yes ☒ No



EAST WALL TRENCH 8

Appendix F

Geotechnical Engineering Study

advanced geotechnical services, inc.

April 25, 2014
Client Number 4429
Report Number 9404

Dansk Investments
c/o Lauterbach and Associates
300 Montgomery Avenue
Oxnard, California 93036

Geotechnical Engineering Study
Proposed Senior Living and Apartment Complex
2250 East Pleasant Valley Road
Oxnard, California

In accordance with our proposal and your authorization, Advanced Geotechnical Services, Inc., (AGS) has prepared this geotechnical engineering study report for the proposed two to three story senior living and apartment complex at the subject site. This report presents the results of our data research, subsurface exploration, laboratory testing, and our professional opinions regarding the geotechnical engineering factors that may affect the proposed development.

Based on the results of our geotechnical study, it is our opinion that the site is *suitable* for construction of the proposed improvements, provided recommendations of this report are properly incorporated in the design and implemented during construction.

This opportunity to be of service is sincerely appreciated. This report should be read from cover to cover to understand its limitations and to avoid taking a recommendation out-of-context. If you have any questions, or if we may be of any further assistance, please do *not* hesitate to call. We look forward to being of continued service.

Respectfully submitted,
Advanced Geotechnical Services, Inc.

Kenneth J. Palos
President

Brett Wanner, CEG
Principal Engineering Geologist

PROFESSIONAL GEOLOGIST
BRETT M. WANNER
No. 2450
CERTIFIED ENGINEERING GEOLOGIST
STATE OF CALIFORNIA

Scott Moore, GE
Principal Engineer

REGISTERED PROFESSIONAL ENGINEER
SCOTT W. MOORE
No. 2560
Exp. 12/31/14
GEOTECHNICAL
STATE OF CALIFORNIA

Enclosure: *Report No. 9404*

cc: (5) Addressee (1) File Copy

5251 Verdugo Way, Suite L, Camarillo, California 93012
Ph 805.388.6162 / Fx 805.388.6167
info@advancedgeotechnical.com

advanced geotechnical services, inc.

GEOTECHNICAL ENGINEERING STUDY

Proposed Senior Living and Apartment Complex
2250 East Pleasant Valley Road
City of Oxnard, County of Ventura, California

Report to
Dansk Investments
c/o Lauterbach and Associates
300 Montgomery Avenue
Oxnard, California

April 25, 2014
Client Number 4429
Report Number 9404

Contents

List of Appendices

1. INTRODUCTION

1.1 General Remarks

This geotechnical engineering study report has been prepared for the proposed senior living and apartment complex to be constructed at the subject site. The complex will consist of a two story senior living structure, and a three story apartment complex. Surface parking and access driveways will surround the structures. The purposes of this study, in addition to evaluating the seismicity of the site, are to (1) identify on-site soil conditions that may affect the proposed project, and (2) provide geotechnical recommendations for site preparation, temporary excavations, foundation design, slabs-on-grade, pavement design, and drainage. This report presents the findings of our data review, subsurface exploration, laboratory testing, engineering analyses and evaluations, and our conclusions and recommendations.

Appendices are attached following the main report. Appendix A includes field exploration and logs, Appendix B includes laboratory test results, Appendix C includes the results of the seismicity study, Appendix D includes the results of the liquefaction evaluation, and Appendix E includes the citations of references used in this study and mentioned within this report. Figures referenced in this report are included in Appendix F.

1.2 Site Description and Proposed Development

The site of the proposed development is located at 2250 E. Pleasant Valley Road, in the City of Oxnard, County of Ventura, California. The topography of the subject site is roughly level to gently southerly sloping. At the time of our field program, the site was an operating avocado orchard, with onsite structures consisting of a single-story residential structure, and a few barns and equipment sheds. A swimming pool was located adjacent to the existing residence. During the course of the field exploration, most of the existing avocado trees were cut down and removed from the site. The surrounding developments consist of existing single-family residences and a trailer park to the east, a cemetery to the west, E. Pleasant Valley Road to the North, and Etting Road to the south. Vegetation on the site consisted of the avocado trees, and various other domestic shrubs and trees.

We understand that the proposed improvements include a new two story senior living building measuring roughly 240 by 225 feet in largest plan dimensions, and a new three story apartment building measuring about 530 by 220 feet in plan dimensions. New surface parking, access driveways, walkways and landscaping will surround the proposed structures. Maximum loads are expected to be in the range of 3 to 4 kips per foot for wall loads, and 100 kips for columns.

Grading plans were not available at the time this report was prepared, however, site grading is expected to consist of removal and recompaction of the upper site soils for support of the proposed structures and pavement, backfill of related new utilities, and only minor modifications to the existing site topography of less than a few feet to establish grade for the building pads and site drainage.

1.3 Scope of Services

This geotechnical engineering study included:

a. Site observation and review of geotechnical and geologic data of the general study area. A *Site Location Map* is provided as Figure 1, and an *Existing Site Plan* is provided as Figure 2.

b. Reconnaissance of the site and the immediate vicinity of the subject site.

c. Drilling, sampling, and logging of eight borings, and eight test pits to depths between approximately 6 and 51.5 feet below the existing ground surface. The exploratory excavations were located in the field using a tape measure and approximate reference points. Thus, the actual locations of the exploratory excavations may deviate slightly from the locations on the *Existing Site Plan*, (Figure 1), and *Proposed Site Plan* (Plate 1). The logs are included in Appendix A, along with a general description of the field operations.

d. Laboratory testing of selected samples to determine the engineering properties of on-site soils. The results of laboratory testing are presented in Appendix B and on the boring logs in Appendix A. Soil samples will be *discarded* 30 days after the date of this report, unless this office receives a specific request and fee to retain the samples for a longer period of time.

e. Determination of seismic parameters for potential on-site ground motion.

f. Engineering analysis of the data and information obtained from our field study, laboratory testing, and literature review.

g. Development of geotechnical recommendations for site preparation and grading, and geotechnical design criteria for building foundations, floor slabs, underground utility trenches, temporary excavations, pavement and drainage.

h. Preparation of this report summarizing our findings, conclusions, and recommendations regarding the geotechnical aspects of the project site.

The scope of this geotechnical study did *not* include environmental issues or detailed assessments of soil corrosivity.

2. GEOLOGIC SETTING

2.1 Geology

Geologic conditions beneath the subject property have been interpreted and characterized based upon our review of published and unpublished references, our observations of isolated earth material exposures onsite, and our subsurface exploration. Our interpretations involve projections of data and require that geologic conditions are reasonably constant between points of exposure. Work should continue under the review of the Geotechnical Engineer to ensure that geologic conditions different from those described below are recognized and evaluated as soon as possible. Certain subsurface conditions such as groundwater levels and the consistency of near-surface soils will vary with the seasons.

The subject site is located within the Oxnard USGS 7.5-minute quadrangle. According to Seismic Hazard Zone Report 052 of the Oxnard Quadrangle (CDMG, 2002), the subject site is underlain by younger alluvial materials.

2.2 Faulting

Southern California is a tectonically active region subject to hazards associated with earthquakes and faulting. Faults are classified as either active, potentially active, or inactive. Active faults are defined by the State of California as a fault that has exhibited surface displacement within the last 11,000 years. Potentially active faults are defined by the State of California as those with a history of movement between 11,000 and 1.6 million years. Alquist-Priolo Earthquake Fault Zones are zones that have been established by the State as areas that contain active faults, and projects that are located within these zones require that a fault investigation be performed to determine if active faulting affects the site. The site is *not* located in an Alquist-Priolo Earthquake Fault Zone, and therefore a detailed subsurface fault investigation is not required.

3. EARTH MATERIALS AND SUBSURFACE CONDITIONS

3.1 Artificial Fill (af)
Artificial fill consisting of agricultural fill (soil disturbed from agricultural activities) was encountered in the exploratory excavations to depths of approximately 2 to 2.5 feet below the existing site grade. The fill consists of a brown to yellowish-brown to dark brown silty sand, with varying amounts of organics such as roots and wood chips. This fill will be removed and recompacted for support of the proposed structures, and other miscellaneous site improvements.

3.2 Alluvium (Qa)
Alluvium was encountered in the exploratory borings below the fill material, to the maximum depth explored, 51.5 feet. This material consists of silty sand to depths of approximately 4 to 6.5 feet below the ground surface over the majority of the site, and extending in some areas to depths of as much as 10 feet below the existing ground surface. Sand was encountered below the silty sand, and extended to depths between 15 and 25 feet below the ground surface, where silty sand, silts and clays were then encountered. Detailed descriptions of the earth materials encountered are provided on the enclosed boring and test pit logs.

3.3 Soil Parameters

3.3.1 Compaction
Compaction curves were developed in this study for representative samples of the upper site soils. The maximum dry densities were 114.5 and 115 pcf, at optimum moisture contents of 9.5 and 9.0%, respectively. The upper site soils should be removed and recompacted for support of the proposed structures and other miscellaneous site improvements, as discussed later in this report.

3.3.2 Compressibility
Consolidation tests were performed on representative undisturbed samples of the onsite soils, below the zone to be removed and recompacted. The consolidation test results showed only a slight tendency to hydroconsolidate and a low potential of compressibility on the undisturbed samples.

3.3.3 Expansion Category
The potential of the soil to swell or expand increases with an increase in soil density, a decrease in initial moisture content (low percent saturation), an increase in clay content, and an increase in the activity of the clay content. Expansive soils change in volume (shrink or swell) due to changes in the soil moisture content. The risk of soil expansion increases with an increase in expansion index. The expansion index of the upper site soils was found to be 10, which is in the *very low* expansion category.

3.4 Groundwater
At the time of our field exploration, groundwater was encountered at depths ranging from approximately 7 to 10 feet below the existing ground surface. Based on the *Depth to Historically High Groundwater* Map, Figure 3 (CDMG 2002), the historically highest groundwater level below the site was approximately 7 feet below the existing ground surface. Groundwater elevations are dependent on seasonal precipitation, irrigation, land use, climatic conditions, among other factors, and as a result fluctuate. Therefore, water levels at the time of construction and during the life of the facility may vary from the observations or conditions at the time of our field exploration.

3.5 Field Percolation Testing
A total of six percolation test pits were excavated onsite. The approximate locations of these percolation test pits are indicated on the enclosed *Existing Site Plan*, Figure 2, and *Proposed Site Plan*, Plate 1. The percolation test pits were excavated to depths of 5 feet below the existing ground surface with a backhoe and a 12-inch wide by

12-inch long by 12-inch deep test hole was excavated in the bottom of each test pit with hand equipment. The test holes were pre-saturated 24 hours before the start of the test.

Percolation testing was performed in general conformance with the methods specified on pages 9-10 of the County of Los Angeles Administrative Manual GS200.1 (as recommended by representatives of the City of Oxnard), by filling the test holes with water and recording the drop in the water surface at regular time intervals. Readings were taken at 1 to 2 minute intervals within Test Pits TP-1 and TP-3 due to the rapid infiltration rates, and readings within Test Pits TP-2, and TP-4 through TP-6 were taken at 10 minute intervals for the first 30 minutes, and 30-minute intervals thereafter. The test results are included on Figures 4 and 5 and in the table below. The field percolation test results were then adjusted using the reduction factor equation specified on page 10 of the County of Los Angeles Administrative Manual GS200.1 to determine the percolation rate excluding the influence of the test pit side walls.

Test Pit Number	TP-1	TP-2	TP-3	TP-4	TP-5	TP-6
Stabilized Field Rate (minutes per inch)	0.17	5	0.17	5	13.3	30
Stabilized Field Rate (Inches per Hour)	352.9	12	352.9	12	4.5	2
Adjusted Stabilized Rate (Inches per Hour)	245.1	8.33	245.1	8.33	2.83	1.10

4. SEISMICITY

4.1 Seismicity Study

Based on the 2008 USGS Interactive Deaggregation (Beta) computer program, the computed site peak ground acceleration and magnitude for a 50-year exposure and 10% exceedance is 0.469g and 6.9, respectively. The results of the analysis are presented in Appendix C.

4.2 Seismic Design Criteria

The 2013 California Building Code (CBC) is utilized in the seismic design of structures, and is based on the *Maximum Considered Earthquake Ground Motion*. The earth materials underlying the site are classified based on parameters such as shear wave velocity, standard penetration test resistance, undrained shear strength, and earth material type. The maximum considered earthquake spectral response accelerations are then adjusted for general type of earth materials underlying the site, or *Site Class*. The remaining seismic parameters used in structural analyses are computed and derived from those shown below by the Structural Engineer.

The following seismic design coefficients and parameters for the project site have been determined utilizing the U.S. Seismic Design Maps web program developed by the United States Geologic Survey (2014). The program incorporates seismic provisions set forth in the 2013 California Building Code (CBC) and 2012 International Building Code (IBC) procedures. Printout data generated by the USGS program is included in Appendix C of this report for reference.

Site Class	Spectral Accelerations 0.2-Second Period S_s	Spectral Accelerations 1-Second Period S_1	Site Coefficient F_a	Site Coefficient F_v	Adjusted Spectral Accelerations 0.2-Second Period S_{MS}	Adjusted Spectral Accelerations 1-Second Period S_{M1}	Adjusted Spectral Accelerations 0.2-Second Period S_{DS}	Adjusted Spectral Accelerations 1-Second Period S_{D1}
D	2.293	0.797	1.0	1.5	2.293	1.196	1.528	0.797

Conformance to these criteria for seismic excitation does *not* constitute any kind of guarantee or assurance that significant structural damage or ground failure will *not* occur if a maximum level earthquake occurs. The primary goal of seismic design is to protect life and *not* to avoid all damage, since such design may be economically prohibitive.

4.3 Earthquake Effects

The intensity of ground shaking during an earthquake can result in a number of phenomena classified as ground failure, which include ground rupture due to faulting, landslides, liquefaction, and seismically induced settlement. Other seismic hazards include Seiches and tsunamis. Descriptions of each of these phenomenon and an assessment of each, as it affects the proposed site, are included in the following paragraphs. The Seismic Hazards Mapping Act of 1990, which became effective in 1991, requires mitigation of seismic hazards to a level that does *not* cause collapse of the building intended for human occupancy, but it does *not* require mitigation to a level of no ground failure or structural damage.

4.3.1 Shallow Ground Rupture

Ground surface rupture occurs when movement along a fault is sufficient to cause a gap or rupture where the upper edge of the fault zone intersects the ground surface. Where associated with reverse faults, such ruptures rarely occur as single breaks or are confined to a narrow zone. More commonly, ground rupture associated with faulting is characterized by relatively short segments of faulting that occur over a broad area of the upper plate. In some cases, particularly in unconsolidated alluvial sediments, *secondary ground ruptures* can develop from a number of causes not necessarily related directly to surface rupture of the causative fault. The secondary processes may include ground shaking, seismic settlement, landslides, and liquefaction.

Since there are *no* known active or potentially active faults passing through the site, the potential of on-site ground rupture due to movement on an underlying fault in *not* considered a significant hazard, although it is a possibility at any site. The potential for ground rupture due to other causes is discussed in the following paragraphs.

4.3.2 Earthquake-Induced Landsliding

Landslides are slope failures that occur where the horizontal seismic forces act to induce soil failure. Seismic Hazard Maps have been released by the California Geological Survey that delineate areas that have been subject to, or are potentially subject to landsliding or permanent ground displacement as a result of earthquake-induced ground shaking. As the site is relatively flat, on-site earthquake-induced landsliding is *not* considered to be a hazard.

4.3.3 Seiches and Tsunamis

Seiches are an oscillation of the surface of an inland body of water that varies in period from a few minutes to several hours. Seismic excitations can induce such oscillations. Tsunamis are large sea waves produced by submarine earthquakes or volcanic eruptions. Since the site is *not* located close to an inland body of water and is at an elevation sufficiently above sea level to be outside the zone of a tsunami runup, the risk of these two hazards is *not* pertinent to this site. The subject site is also not located in an area considered subject to flooding, tsunami or seiche, according to Figure IX-3 of the *Safety Element* of the City of Oxnard *General Plan.*

4.3.4 Evaluation of Liquefaction Potential

Liquefaction is a phenomenon in which soils below the groundwater level lose strength as a result of ground shaking due to earthquakes. The site is located in an area designated as potentially liquefiable on the *Seismic Hazard Zones Map* of the Oxnard Quadrangle, attached as Figure 6 (CDMG, 2002). The results of field exploration and laboratory testing conducted as part of this investigation indicate that the subject site meets the criteria of being potentially susceptible to liquefaction. A liquefaction analysis was performed to further evaluate the potential and extent of possible liquefaction at this site. The results of this analysis along with other geologic information about the area were then used to evaluate the potential for the occurrence of the different liquefaction-induced phenomena mentioned herein.

Exploratory Borings B-1, B-2, B-3 and B-8 were excavated to depths of 51.5 feet to assess the liquefaction hazard potential at the site. The geotechnical data obtained from the borings and our laboratory test results, including standard penetration test data (SPT), percent fines, clay fraction and Atterberg Limit results, were utilized in our evaluation of liquefaction hazard potential at the site. Younger alluvial soils consisting of varying mixtures and interbedded layers of sand, silt and clay were encountered from the ground surface to the total depth of exploration, 51.5 feet.

At the time of our field exploration, groundwater was encountered and stabilized at depths ranging from approximately 7 to 10 feet below the existing ground surface, as indicated on the enclosed *Proposed Site Plan*, Plate 1, at the locations where groundwater was measured. Based on the *Depth to Historically Highest Groundwater Map* (CDMG 2002, Figure 3), the historically highest groundwater level below the existing ground surface at the site is approximately 7 feet. The liquefaction hazard analyses was performed utilizing the historically highest groundwater level of 7 feet below the ground surface.

The methods following the recommendations of the NCEER (Youd and Idriss, 1997; Youd et al, 2001) were used in the liquefaction analysis, supplemented by the recommendations of Bray and Sancio (2006), and Boulanger and Idriss (2006) in the analysis of fine grained soils (clays and silts). A design-level earthquake magnitude of 6.90, and a site acceleration of 1.02g (2/3 the value of SD_S) were utilized to perform the liquefaction evaluation.

Blow counts used for the liquefaction evaluation were based on the blow counts measured with the driven samplers. Blow counts using a modified California sampler are adjusted to equivalent blows of a standard penetration test sampler. A multiplier of ⅔ was used to convert blows from the California sampler to an equivalent SPT value. The measured blow counts were further adjusted for borehole diameter, rod length, sampling method and delivered energy (Youd and Idriss, 1997 and 2001) to correspond to a driving-energy level of 60% (N_{60}). The adjusted blow counts (N_{60}) were then adjusted for overburden pressure ($N_1|_{60}$).

The results of the liquefaction analysis indicate that the sandy earth materials underlying the site are potentially liquefiable between the depths of 7 feet (the historic high groundwater level) and 20 and 25 feet below the existing ground surface. Utilizing the procedures of Tokimatsu and Seed (1987), the maximum potential liquefaction induced settlement is anticipated to range from 2.33 to 3.56 inches. Potential differential settlement due to liquefaction may be up to approximately 1-¼ inch over a span of 30 feet.

Below depths of 20 to 25 feet, the remainder of the soils would be considered plastic, fine-grained soils (silts and clays), not susceptible to liquefaction-induced settlement. Based on the Atterberg Limits testing, however, some of these soils are within a particular range of plasticity (Plasticity Index greater than 18) where the potential exists that these fine-grained soils could be 'sensitive,' and susceptible to seismically induced deformations that can affect certain sites, when the onsite and/or nearby topography is conducive to such deformations. The site, however, is located on a relatively flat to only gently sloping alluvial plain, with no open channel faces or other slopes nearby, and the local topographic gradient is approximately 0.25 percent or less. Liquefaction-induced deformation, such as lateral spreading, is generally considered to occur in areas where the existing topographic gradient ranges from 0.3% to 5% (Bartlett and Youd, 1992). Therefore, it is the opinion of AGS that the potential for other liquefaction-induced deformations such as lateral spreading, is negligible at the subject site.

5. CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions and Design Requirements

Based on the findings of our data review, subsurface exploration, laboratory testing, field testing, and engineering analysis, and within the scope of this study, the proposed improvements are *feasible* from a geotechnical engineering viewpoint, provided the recommendations in this report are incorporated into the building plans and implemented during construction. The following paragraphs discuss conditions that should be anticipated, and provides specific recommendations for mitigation during the design and construction phase of improvements.

5.1.1 Faults / Seismicity
Although no known active faults traverse through the subject site, like most of Southern California, the site lies within a seismically active area. Earthquake resistant structural design is recommended. Designing structures to be earthquake-proof is generally considered to be impractical, especially for private projects, due to cost limitations. Significant damage to structures may be unavoidable during large earthquakes. Structural design based on the 2013 CBC (California Building Code) structural analysis procedures calls for the seismic parameters given previously in the *Seismic Design Criteria* section. These minimum code values are intended to protect life and may not provide an acceptable level of protection against significant cosmetic damage and serious economic loss. Significantly higher than code parameter values may be necessary to further reduce potential economic loss during a major seismic event.

5.1.2 Hazardous Materials
AGS has *not* been retained to provide any type of environmental assessment of the subject property, *nor* to provide recommendations with respect to any contamination that might be present.

5.1.3 Fill Slopes
No fill slopes are proposed to be constructed at the subject site.

5.1.4 Foundation Type
Based on the potential for liquefaction affecting the subject site, and the resulting potential for liquefaction-induced settlement, it is recommended that a mat foundation be utilized for support of the proposed structures. The proposed mat foundation should be underlain by a minimum of 3 feet of newly placed compacted fill.

5.1.5 Removal Depths / Expansion Potential
Our exploration indicated that the upper site soils in the vicinity of the proposed structures consist of agricultural fill material in the upper 2 to 2-1/2 feet, underlain by relatively soft native alluvial soils. Based on these considerations, and in order to provide better and more uniform foundation support, it is recommended that the upper site soils be removed and recompacted for support of the proposed structures. Recommendations for minimum removal and recompaction depths are given below in the *Site Preparation* section. Greater removal depths, however, may be required, depending on the actual conditions encountered at any given location.

The upper site soils are in the *very low* expansion range, with an expansion index of 10. Special considerations due to expansive soils are therefore not required.

5.1.6 Site Grade Adjustments
Grading for the proposed structures is expected to consist of removal and recompaction of the upper site soils for support of the structures, and modification of the topography to provide proper site drainage. A grading plan was not available as of the date of this report, however the finished building pad elevations are expected to be within approximately 1 to 3 feet of the existing grade at the site.

5.1.7 Excavation Characteristics
Difficult excavation of the onsite earth materials should not be anticipated.

5.1.8 Shrinkage
Shrinkage results when the soil being placed as fill is compacted to a dry density greater than the in-place source materials. Based on experience, we estimate an average shrinkage factor of about 15% resulting from recompaction of on-site soils or fills. This estimate is based on an average relative compaction of 92% for

recompacted materials and average densities of the undisturbed ring samples. The above shrinkage figures do not account for the effects of losses due to clearing, grubbing and stripping operations, or uncertainty in the density of the in-place materials. If the actual average degree of compaction differs from that used to estimate shrinkage, the actual shrinkage may also differ. Variations in the estimated shrinkage factors should be anticipated and provisions for such variations should be included in the project specifications.

5.1.9 Drainage

All surface runoff must be carefully controlled and must remain a crucial element of site maintenance. Proper drainage and irrigation are important to reduce the potential for excessive infiltration adjacent to foundations. Final grading should provide positive drainage away from footings. All pad drainage shall be collected and diverted away from proposed buildings and foundations in non-erosive devices. Gutters and roof drains should be provided, properly maintained, and discharge directly into glue-joined, watertight subsurface piping. All drainage piping should be watertight and discharge to an appropriate location, as determined by the project Civil Engineer.

All underground plumbing fixtures should be absolutely leak-free. As part of the maintenance program, utility lines should be checked for leaks for early detection of water infiltrating the soils that could cause detrimental soil movements. Detected leaks should be promptly repaired. Proper drainage shall also be provided away from the building footings during construction. This is especially important when construction takes place during the rainy season.

Seepage of surface irrigation water or the spread of extensive root systems into the subgrade of footings, slabs, concrete flatwork or pavements can cause differential movements and consequent distress in these structural elements. Trees and large shrubbery should *not* be planted so that roots grow under foundations and flatwork when they reach maturity. Landscaping and watering schedules should be planned with consideration for these potential problems.

Drainage systems should be well maintained, and care should be taken to *not over* or *under* irrigate the site. Landscape watering should be held to a minimum while maintaining a uniformly moist condition without allowing the soil to dry out. During extreme hot and dry periods, adequate watering may be necessary to keep soil from separating or pulling back from the foundations. Cracks in paved surfaces should be sealed to limit infiltration of surface waters.

5.1.10 Plan Review

When final Grading Plans become available, they should be reviewed by AGS *prior* to submittal to regulatory agencies for approval. Additional analysis *may* be required at that time depending on specific details of the proposed grading and improvements. Approval by this office will be indicated on the plans by *manual* signature and stamp.

Please be aware that the contract fee for our services to prepare this report does not include additional work that may be required, such as grading observation and testing, footing observations, plan review, or responses to governmental (regulatory) plan reviews associated with you obtaining a building permit. Where additional services are requested or required, you will be billed on an hourly basis for consultation or analysis. AGS requests a minimum of 24 hours be provided for plan reviews. Please anticipate additional time for plan corrections if all of our geotechnical recommendations have not been added to the plans, prior to our approving and stamping the plans.

5.1.11 Additional Recommendations

The following additional geotechnical recommendations should be incorporated into final design and construction plans. All such work and design should be in conformance with applicable governmental regulations or the recommendations contained herein, whichever are more restrictive. The following recommendations have *not* been reviewed or approved by any governing agency at this time. These recommendations may change based on obtaining approval from the City. Design of the proposed project should be made following approval from the City.

5.2 Site Preparation

The area of the proposed new structures should be prepared so that foundations are founded entirely within new structural fill with a relatively uniform thickness. General guidelines are presented below to provide a basis for quality control during site grading. We recommend that all structural fills be placed and compacted with engineering control under continuous observation and testing by the Geotechnical Engineer and/or his field representative, and in accordance with the following requirements.

5.2.1 Removals

a. When demolishing the existing improvements in the vicinity of the proposed structures, the contractor should locate all existing foundations, floor slabs, debris pits, uncontrolled fill, and subsurface trash which may be present. These soils and structures should be completely removed. The resulting excavations should be cleaned of all loose or organic material, the exposed native soils should be scarified to a depth of 8 inches and compacted, and the excavation backfilled with compacted fill. In areas to receive fill or to support the proposed structure, deeper removals will be required, as discussed below.

b. Remove all vegetation and loose soil *prior* to fill placement. The general depth of stripping should be sufficiently deep to remove any root systems or organic topsoil which may be present. A careful search shall be made for subsurface trash, abandoned masonry, abandoned tanks and septic systems, and other debris (including uncertified fill) during grading. All such materials, which are *not* acceptable fill material, shall be removed *prior* to fill placement. The removal of trees and large shrubs should include complete removal of their root structures, where applicable.

c. The proposed building areas should be over-excavated to a minimum depth of 5 feet below the existing site grade, or a minimum of 3 feet below the bottom of the proposed mat foundations, whichever is deeper. The limits of over-excavation should extend a minimum of 5 feet beyond the outside perimeter of foundations. The excavated earth materials should be removed and replaced as compacted fill, as described below.

d. In areas to receive new exterior hardscape or other miscellaneous improvements, all existing fill materials and any other loose or disturbed soil should be removed and recompacted. The depth of over-excavation in these areas should be a minimum of either 12 inches below existing grade, or 12 inches below the bottom of any improvements, or supporting aggregate base section, whichever is deeper.

e. A careful search shall be made for any deeper areas of existing fill or loose soil during grading operations. If encountered, these loose spots should be properly removed to the firm underlying soil and properly backfilled and compacted as directed by a field representative of the Project Geotechnical Engineer.

f. The exposed bottom of removal areas should be scarified, mixed, and moisture conditioned to a minimum depth of 8 inches. This thickness of scarification is included in the thickness of removal and recompaction mentioned above, unless the bottom is unstable and requires stabilization. The scarified soil shall be moisture conditioned to at least optimum moisture and compacted to a minimum of 90% of the laboratory maximum dry density as determined by ASTM D1557. Additional lifts should *not* be placed until the present lift has been tested and shown to meet the compaction requirements.

5.2.2 ***Bottom Stabilization***

a. Due to the high groundwater level, it is possible that the bottom of over-excavation may be prone to 'pumping' in some areas due to influence from the groundwater below, although it is not anticipated due to the presence of primarily sandy soils. Should it occur, however, in areas where very fine grained sands or silty sands may be present at or near the groundwater level, additional stabilization of the bottom of over-excavation with gravel may be required, and/or the use of track-mounted equipment and/or excavators may be necessary.

5.2.3 ***Suitable Fill Material***

a. The excavated site soils, cleaned of deleterious material, can be re-used for fill. Rock larger than 6 inches should *not* be buried or placed in compacted fill. Rock fragments less than 6 inches may be used provided the fragments are *not* placed in concentrated pockets, and a sufficient percentage of finer grained material surrounds and infiltrates the rock voids. Furthermore, the placement of any rock must be under the continuous observation of the Geotechnical Engineer, and/or his field representative.

b. Rock fragments greater than 3 inches may *not* be used within 6 inches of final grade.

c. Imported material should generally have engineering properties similar to, or more favorable than those on the subject site. Imported material will require testing to verify the engineering properties, and must be approved by the Geotechnical Engineer *prior* to placement on the site.

5.2.4 ***Placement of Compacted Fill***

a. All fill materials should be placed in controlled, horizontal layers *not* exceeding 6 to 8 inches thick, and moisture conditioned to at least optimum moisture but no more than 5% above optimum. Fill materials should be compacted to a minimum 90% of the laboratory maximum dry density, as determined by ASTM D1557. If either the moisture content or relative compaction does *not* meet these criteria, the Contractor should rework the fill until it does meet the criteria. If the fill materials pump (flex) under the weight of construction equipment, difficulties in obtaining the required minimum compaction may be experienced. Therefore, if soil pumping occurs, it may be necessary to control the moisture content to a closer tolerance (e.g., 2 to 3% above optimum) or use construction equipment that is not as prone to cause pumping.

b. The field test methods to be used to determine the in-place dry density of the compacted fill shall be in conformance with either ASTM D1556 (sand cone test method) or ASTM D2922 (nuclear gauge method).

c. Subgrade for the support of exterior asphalt or concrete pavement shall be moisture conditioned as required, to obtain a moisture content of at least optimum, but no more than 5% above optimum, and be recompacted to at least 95% of the maximum dry density to a depth of at least 12 inches.

5.2.5 ***Testing of Compacted Fill***

a. At least one compaction test shall be performed for every 500 yd^3 of the fill material. In addition, at least one test shall be performed for every 2 feet of fill thickness.

5.2.6 *Inclement Weather and Construction Delays*

a. If construction delays or the weather result in the surface of the fill drying, the surface should be scarified and moisture conditioned before the next layer of fill is added. Each new layer of fill should be placed on a rough surface so planes of weakness are not created in the fill.

b. During periods of wet weather and before stopping work, all loose material shall be spread and compacted, surfaces shall be sloped to drain to areas where water can be removed, and erosion protection or drainage provisions shall be made in accordance with the plans provided by the Civil Engineer. After the rainy period, the Geotechnical Engineer and or his field representative shall *review* the site for authorization to resume grading and to provide any specific recommendations that may be required. As a minimum, however, surface materials previously compacted before the wet weather shall be scarified, brought to the proper moisture content, and recompacted *prior* to placing additional fill.

c. During foundation construction, including any concrete flatwork, construction sequences should be scheduled to reduce the time interval between subgrade preparation and concrete placement to avoid drying and cracking of the subgrade or the surface should be covered or periodically wetted to prevent drying and cracking.

5.2.7 *Responsibilities*

a. Representative samples of material to be used as compacted fill should be analyzed in the laboratory by the Geotechnical Engineer to determine the physical properties of the materials. If any materials other than those previously tested are encountered during grading, the appropriate analysis of this material shall be conducted by the Geotechnical Engineer as soon as practicable. Any imported soil from off-site sources shall be approved *prior* to placement.

b. All grading work shall be observed and tested by the Project Geotechnical Engineer or their field representative to confirm proper site preparation, excavation, scarification, compaction of on-site soil, selection of satisfactory fill materials, and placement and compaction of fill. All removal areas and footing excavations shall be observed by the field representative of the Project Geotechnical Engineer before any fill or steel is placed. *A half-size set of approved plans should be provided to the Project Geotechnical Engineer prior to site grading, and a full-size set of signed and approved plans should be available on-site for review.*

c. The lateral limits and the depths of the required over-excavation should be shown by the Civil Engineer on the grading plans.

d. The grading contractor has the ultimate responsibility to achieve uniform compaction in accordance with the geotechnical report and grading specifications.

5.3 Utility Trench Backfill

The on-site soils are suitable for backfill of utility trenches from 1-foot above the top of the pipe to the surface, provided the material is free of organic matter and deleterious substances. The natural soils should provide a firm foundation for site utilities, but any soft or unstable material encountered at pipe invert should be removed and replaced with an adequate bedding material.

The site Civil Engineer in accordance with manufacturer's requirements should specify the type of bedding materials. Granular soils will need to be imported for bedding or shading of utilities. Jetting of bedding materials should *not* be permitted unless appropriate drainage is provided and the bedding has a sand equivalent greater than 50.

Trench backfill should be placed in 6 to 8-inch lifts, moisture conditioned to at least optimum but no more than 5% above the optimum moisture content, and compacted to at least 90% of the maximum density as determined by ASTM D1557, with the exception of the 1 foot below subgrade in any areas subject to vehicular traffic, which should be compacted to a minimum of 95% of the maximum dry density. Jetting of trench backfill is *not* acceptable to compact the backfill.

In areas where utility trenches pass through an existing pavement section, the trench width at the surface shall be enlarged a minimum of 6 inches on each side to provide bearing on undisturbed material for the new base and paving section to match the existing section.

Major underground utilities shall *not* cross beneath buildings unless specifically approved by the Project Civil Engineer and respective utility company. If approved, trenches crossing building areas shall be backfilled with a select gravelly sand compacted to 95% relative compaction, and at a moisture content of at least optimum moisture, but no more than 5% above optimum moisture.

5.4 Temporary Excavations

Temporary excavations made as part of the required removal and recompaction operations may be made to a maximum vertical height of 5 feet, with that portion over 5 feet in height sloped back at a uniform 1:1 gradient. Excavations should *not* be allowed to become soaked with water or to dry out. Surcharge loads should *not* be permitted within a horizontal distance equal to the height of the excavation from the top of the excavation, unless the excavation is properly shored. Excavations that might extend below an imaginary plane inclined at 45 degrees below the edge of an existing foundation should be properly shored to maintain foundation support of the existing structure.

5.5 Foundation Design

Due to the presence of potentially liquefiable soils, and the potential for total and differential liquefaction-induced settlements of approximately 3.56 and 1-¼ inches, respectively, a mat foundation is recommended for support of the proposed structures. The proposed mat foundation should be underlain by a minimum of 3 feet of newly placed compacted fill.

It is recommended that the proposed mat foundation be a minimum of 24 inches thick, and be embedded a minimum of 24 inches in depth below the lowest adjacent grade, and 24 inches into the newly placed compacted fill. Where located adjacent to utility trenches, foundations shall extend below a 1:1 plane projected upward from the inside bottom of the trench.

5.5.1 Allowable Bearing Pressure and Lateral Resistance

The proposed mat foundations may be designed using a modulus of subgrade reaction of 200 kcf (kips per cubic foot). The allowable vertical and lateral bearing values given below may be utilized in the design of the mat foundation. The bearing capacity can be increased by ⅓ when considering short duration wind or seismic loads.

Support Material	Allowable Bearing Pressure, psf	Allowable Sliding Friction Coefficient	Allowable Passive Resistance, psf per foot of depth	Maximum Passive Resistance, psf
COMPACTED FILL	2000	0.3	225	2250

Resistance to lateral loads can be assumed to be provided by friction along the base of the foundations, and by passive earth pressure against the side of foundations. The allowable friction coefficient may be used with the vertical dead loads, and the allowable lateral passive pressure can be utilized for the sides of footings poured against newly placed compacted fill. These allowable values can be increased by a factor of 1.5 to convert from allowable to ultimate values. Where the soil on the resistance side of the passive wedge in not covered by a hard surface (e.g., concrete or pavement), however, the upper 1-foot of soil shall be neglected when computing resistance due to the potential for the material to become disturbed or degraded during the life of the structure.

5.5.2 Foundation Settlement
Static settlement of the proposed mat foundation due to dead and frequently applied live loads is not expected to exceed 1 inch under the assumed loading conditions, and is expected to occur upon initial application of loading. Differential settlement is not expected to exceed approximately ½-inch.

As described previously in this report, the maximum potential settlement due to liquefaction is anticipated to be between 2.33 and 3.56 inches, with differential settlement of up to approximately 1-¼ inches over a span of 30 feet.

5.5.3 Steel Reinforcement
Steel reinforcing for the proposed mat foundation should be designed by the project structural engineer.

5.5.4 Required Observations
Prior to placing concrete in the footing excavations, an observation should be made by the field representative of the Project Geotechnical Engineer to confirm that the footing excavations are free of loose and disturbed soils and are embedded in the recommended earth materials.

5.6 Slabs-On-Grade
It is anticipated that the surface of the proposed mat foundation will also be utilized as the proposed building floor slab. Any exterior concrete flatwork should be cast over properly compacted fill.

5.6.1 Structural Design
It is recommended that exterior concrete flatwork subject only to pedestrian traffic be a minimum of 4 inches thick, and be reinforced with a minimum of #3 steel bars placed a minimum of 18-inches on center each way.

Cracking of concrete flatwork can occur and is relatively common. Steel reinforcement and crack control joints are intended to reduce the risk of concrete slab cracking, as are the use of fiber reinforced concrete and proper concrete curing, but the occurrence of cracks in concrete flatwork cannot be totally eliminated.

5.7 Pavement Structural Section

5.7.1 Grading
All areas to be paved should be graded in accordance with the general recommendation for site grading as described in the *Site Preparation* section. Base materials are *not* required beneath curbs and gutters. However, if base materials are not utilized beneath the curbs and gutters, it is recommended at the subgrade soils be scarified 12 inches and recompacted to at least 95% relative compaction. Compaction tests will be required for the recommended asphalt concrete and aggregate base. A minimum relative compaction of 95% is required for the asphalt concrete, aggregate base, and upper 12 inches of subgrade soils. The aggregate base should have a minimum *R*-value of 78 and meet Caltrans Class II specifications. Base materials should be placed and compacted in lifts not exceeding 6 inches. Asphalt should *not* be placed if the base is pumping.

5.7.2 Confirmation of R-Value
Testing to determine the *R*-value of the subgrade soils in the parking areas should be performed during the grading of the site in order to determine a pavement structural section. It should be noted that the pavement structural section design recommendations presented in this report may change once the *R*-value of the subgrade soils is determined at the conclusion of the site grading.

5.7.3 Maintenance
Pavement section design assumes that proper maintenance practices, such as sealing and repair of localized areas of distress, are employed throughout the design life of the pavement.

5.7.4 Asphalt Concrete Pavements

Structural section calculations were performed for asphalt concrete pavement design for a range in traffic indices. Selection of the appropriate traffic index to use should be made by your Civil Engineer based on their knowledge of traffic flow and loadings.

The structural sections for asphalt concrete pavement were computed in general accordance with the Caltrans method (**California Department of Transportation Highway Design Manual**). The results of the analyses, using an assumed *R*-value of 30, are summarized in the following table:

Traffic Index	Thickness, Inches	
	Asphalt Concrete	Aggregate Base
4.5	3.0	4.5
5.0	3.0	5.5
6.0	3.0	8.5

5.7.5 Concrete Pavements

Considering the higher pavement stresses in trash enclosure loading zones or other areas subject to extensive wheel turning, we recommend that a concrete pavement section be used in these areas. The pavement section in this case should consist of a 4-inch thick Caltrans Class 2 base layer, a 6-inch thick, reinforced concrete layer with the concrete having a minimum 28-day compressive strength of 3000 psi. The minimum amount of reinforcement should consist of #4 bars at 18-inch spacing each way and suspended in the middle of the slab with chairs or other approved devices.

6. OBSERVATIONS AND TESTING

Prior to the start of site preparation and/or construction, *we recommend that a meeting be held with the Contractor to discuss the project*. We recommend that AGS be retained to perform the following tasks prior to, and/or during construction. Please *advise* AGS a minimum 24 hours *prior* to any required site visit. *All approved plans, permits, and geotechnical reports must be at the jobsite and be made available during inspections.*

a. *Review* grading, foundation, and drainage plans to *verify* that the recommendations contained in this report have been properly interpreted and are incorporated into the project specifications. *If we are not accorded the opportunity to review these documents, we can take no responsibility for misinterpretation of our conclusions and recommendations.*

b. *Observe and advise* during all grading activities, including site preparation, foundation and retaining wall excavation, and placement of fill, to *confirm* that suitable fill soils are placed upon competent material, and to allow design changes if subsurface conditions differ from those anticipated, *prior* to the start of construction.

c. *Observe* the installation of all drainage devices.

d. *Test* all fill placed for engineering purposes to *confirm* that suitable fill materials are used and properly compacted.

7. LIMITS AND LIABILITY

All building sites are subject to elements of risk that cannot be wholly identified and/or entirely eliminated. Building sites are subject to many detrimental geotechnical hazards, including but *not* limited to the effects of water infiltration, erosion, concentrated drainage, total settlement, differential settlement, expansive soil movement, seismic shaking, fault rupture, landsliding, and slope creep. The risks from these hazards can be reduced by employing subsurface exploration, laboratory testing, analyses, and experienced geotechnical judgment. Many geotechnical hazards, however, are highly dependent on the property owner properly maintaining the site, drainage facilities, and slope and by correcting any deficiencies found during occupancy of the property in a timely manner. Even with a thorough subsurface exploration and testing program, significant variability between test locations and between sample intervals may exist. Ultimately, geotechnical recommendations are based on the experience and judgment of the geotechnical professionals in evaluating the available data from site observations, subsurface exploration, and laboratory tests. Latent defects can be concealed by earth materials, deposition, geologic history, and existing improvements. If such defects are present, they are beyond the evaluation of the geotechnical professionals. No warranty, expressed or implied, is made or intended in connection with this report, by furnishing of this report, or by any other oral or written statement. Owners and developers are responsible for retaining appropriate design professionals and qualified contractors in developing their property and for properly maintaining the property. Retaining the services of a geotechnical consultant should *not* be construed to relieve the Owner, Developer, or Contractors of their responsibilities or liabilities.

The analysis and recommendations submitted in this report are based in part on our subsurface exploration, laboratory testing, site observations, and provided data on geology and the proposed site development. Our descriptions and the boring logs may show distinctions between fill and native soils, between native (e.g., alluvium, colluvium, slopewash) and bedrock formation, and between soil type (e.g., sands and silty sands). Such distinctions were based on geologic information, grading plans when available, intermittent recovered soil/bedrock samples, and judgment. Delineations between these categories of materials may not be perfect and may be subject to change as more information becomes available. For example, judgments may be clouded when recovered samples are intermittent and small in comparison to the volume of soil under study, and macrostructure that would aid the identification process are not as apparent as they would be when the borehole is geologically downhole logged by entering the excavation. When the age of the fill is old, the difference between the structure of the fill and native materials may be less pronounced, or the degree of bedrock formation weathering sometimes makes it difficult to distinguish between overlying alluvium, colluvium, or slopewash and weathered bedrock formational material. In general, our recommendations are based more on the properties of the materials than on the category of the material type such as fill, alluvium, colluvium, slopewash, or bedrock formation. Furthermore, the actual stratigraphy may be more variable than shown on the logs.

Although this report may comment on or discuss construction techniques or procedures for the design engineer's guidance, this report should *not* be interpreted to prescribe or dictate construction procedures or to relieve the contractor in any way of their responsibility for the construction.

Please be aware that the contract fee for our services to prepare this report does not include additional work that may be required, such as grading observation and testing, footing observations, plan review, or responses to governmental (regulatory) plan reviews associated with you obtaining a building permit. Where additional services are requested or required, you will be billed for any equipment costs and on an hourly basis for consultation or analysis.

The Geotechnical Engineer's actual scope of work during construction is very limited and does *not* assume the day-to-day physical direction of the work, minute examination of the elements, or responsibility for the safety of the contractor's workers. Our scope of services during construction consists of taking soil tests and making visual observations, sometimes on only an intermittent basis, relating to earthwork or foundation excavations for the project. We do *not* guarantee the contractor's performance, but rather look for general conformance to the intent of the plans and geotechnical report. Any discrepancy noted by us regarding earthwork or foundations will be referred to the Owner, project Engineer, Architect, or Contractor for action.

This report is issued with the understanding that it is the responsibility of the Owner, or of their representative, to ensure that the information and recommendations contained herein are called to the attention of the Architect and Engineers for the project and incorporated into the plan and that the necessary steps are taken to see that the Contractor carry out such recommendations in the field. Advanced Geotechnical Services, Inc., (AGS) has prepared this report for the exclusive use of the Client and authorized agents, and this report should *not* be considered transferable. We do recommend, however, that the report be given to future property Owners for the sole purpose of disclosing the report findings.

Findings of this report are valid as of the date of issuance. Changes in conditions of a property may occur with the passage of time whether attributable to natural processes or works of man on this or adjacent properties. Furthermore, changes in applicable or appropriate standards occur due, for example, to legislation and broadening of knowledge. Accordingly, findings of this report may be invalidated wholly or partially by changes outside our control. Therefore, *this report is subject to our review and remains valid for a maximum period of one year*, unless we issue a written opinion of its continued applicability thereafter.

In the event that any changes in the nature and design (including structural loadings different from those anticipated), or other improvements are planned, the conclusions and recommendations contained in this report shall *not* be considered valid unless the changes are reviewed and conclusions of this report modified or verified in writing.

This report may be subject to review by controlling agencies, and any modifications they deem necessary should be made a part thereof, subject to our technical acceptance of such modifications. All submissions of this report should be in its entirety. Under no circumstances should this report be summarized and synthesized to be quoted out of context for any purpose.

Test findings and statements of professional opinion do *not* constitute a guarantee or warranty, and *no* warranties, either expressed or implied, are made as to the professional advice provided under the terms of this agreement. We have strived, however, to provide our services in accordance with generally accepted geotechnical engineering practices in this community at the time of this report.

Appendix A

Field Exploration and Boring Logs

Appendix A
Field Exploration and Boring Logs

The field exploration included a site reconnaissance and subsurface exploration. During the site reconnaissance, the surface site conditions were noted, and the approximate locations of any exploration points were determined. The following descriptions of exploration methods are generic and may include methods not used on this project. Reference to the boring logs can be made to determine which methods are applicable to this project, and any differences between what is described below and actually occurred is described on the boring logs or in the main body of the report.

The test borings were advanced by either hand digging, digging with a backhoe, or drilling. In the case of drilling, a truck-mounted rotary drilling rig with a hollow-stem auger or bucket was used to advance the borings. When we expect to encounter shallow groundwater, a wet rotary drilling operation is usually used. The method actually used is noted on the boring logs. For geologic studies when the need for visual examination of the bedding and other stratigraphic features is needed along with engineering data, the larger bucket augers are used to allow a geologist to enter the excavation for visually logging the hole. When geologically logging borings and trenches, the sides are scraped prior to logging. A prefix B is used to designate a boring made with a drilling rig. When hand dug, the boring numbers have a prefix HB. When a backhoe was used, prefixes TP (test pit) or T (trench) are used. The difference between a trench and test pit being the length of the exploration; a trench being a long narrow exploration, most commonly used for fault studies. In each case, the soils were logged by technical personnel from our office and visually classified in the field in general accordance with the Unified Soil Classification system. The field descriptions have been modified as appropriate to reflect laboratory results when preparing the final boring logs.

Relatively undisturbed samples of the subsurface materials were obtained at appropriate intervals in the borings using a steel drive sampler (2.5-inches inside diameter, 3-inches outside diameter) lined with brass, one-inch-high sample rings with a diameter of 2.4 inches. This is referred to as a modified California sampler. The boring may be advanced by drilling with a hollow-stem auger or with a wet rotary operation. If below the groundwater, the hollow-stem is filled with water or drilling mud to counteract the fluid pressure of the groundwater. The sampler was usually driven into the bottom of the borehole with successive drops of a 140-pound safety hammer connected to the sampler with either A or AW rod and falling 30 inches. An automatic hammer is usually used when drilling with a CME dill rig, and a Safe-T-Driver is used when drilling with a Mobile drill rig. When above the groundwater level, a downhole Safe-T-Driver is usually used. Studies have shown that hammer efficiencies of the automatic hammer is over 90% while that of the Safe-T-Driver is about 70%, based on impact velocities. When a bucket auger is used to advance the boring, the driving weights change with depth, depending on the weight characteristics of the telescoping kelley bar, but the height of fall is usually 18 inches. Sampler driving resistance, expressed as blows per 6 inches of penetration, is presented on the boring logs at the respective sampling depths. When the borings or trenches are excavated with a backhoe, the sampler is pushed into the soil with the force of the backhoe. A hand sampler is used when the borings or trenches are advanced by hand digging or in some cases when a backhoe is used to make the excavation. This hand sampler is similar to the conventional California sampler, but lighter weight. An approximately 8-pound hammer falling about 18 inches is used to drive the hand sampler about 6 inches into the bottom of the exploration. The type of sampler used is noted on the boring logs. In some cases the hammer weight and falling distance deviate from those given above. The actual conditions are shown on the boring logs and supersede the conditions given above.

Ring samples were retained in close-fitting, moisture tight containers for transport to our laboratory for testing. Bulk samples, which were collected from cuttings, were placed in bags and transported to our laboratory for testing.

When noted on the boring logs, standard penetration test (SPT) samples were obtained using either a 20-inch or a 32-inch long split-barrel sampler with a 2-inch outside diameter and a 1.375-inch inside diameter when liners are used (1.5-inch inside diameter without liners). Unless noted otherwise, liners are used. This sampler is driven into the soil with successive drops of a 140-pound, safety hammer falling 30 inches. The blows are recorded for each 6 inches of penetration for a total penetration of 18 or 24 inches. The sum of the number of blows for the last 12 inches of an 18-inch penetration or the middle 12 inches of a 24-inch penetration is referred to as the *N* value.

Logs, which are presented on Plates at the end of this Appendix, include a description and classification of each stratum, sample locations, blow counts, groundwater conditions encountered during drilling, results from selected types of laboratory tests, and drilling information. Keys to *Soil and Bedrock Symbols and Terms* are included on Plate A-1 and Plate A-2.

Each boring or trench, unless noted otherwise, was backfilled with cuttings at the completion of the logging and sampling. The backfill, however, may settle with time, and it is the responsibility of our client to ensure that such settlement does *not* become a liability.

Advanced Geotechnical Services

Key to Soil Symbols and Terms

Major Divisions			USCS Group Symbols	Typical Names
Coarse-Grained Soils (More than half of material is larger than No. 200 sieve)	Gravels (More than half of coarse fraction is larger than No. 4 sieve)	Clean gravels (Little or no fines)	GW	Well-graded gravels, gravel-sand mixtures, little or no fines
			GP	Poorly graded gravels, gravel-sand mixtures, little or no fines
		Gravels with fines (Appreciable amount of fines)	GM	Silty gravels, gravel-sand-silt mixtures
			GC	Clayey gravels, gravel-sand, clay mixtures
	Sands (More than half of coarse fraction is smaller than No. 4 sieve)	Clean sands (Little or no fines)	SW	Well-graded sands, gravelly sand, little or no fines
			SP	Poorly graded sands, gravelly sands little or no fines
		Sands and fines (Appreciable amount of fines)	SM	Silty sands, sand-silt mixtures
			SC	Clayey sands, sand-clay mixtures
Fine-Grained Soils (More than half of material is smaller than No. 200 sieve)	Silts and Clays Liquid Limit < 50		ML	Silts and very fine sands, rock-flour, silty or clayey fine sands, or clayey silts with slight plasticity
			CL	Inorganic clays of low or medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
			OL	Organic silts and organic silty clays of low plasticity
	Silts and Clays Liquid Limit > 50		MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts
			CH	Inorganic clays of high plasticity, fat clays
			OH	Organic clays of medium to high plasticity, organic silts
	Highly Organic Soils		Pt	Peat and other highly organic soils

Legend of Laboratory Tests

G - Grain Size
A - Atterberg Limits
P - Compaction
S - Swell/Expansion
C - Consolidation
DS - Direct Shear
U - Unconfined
T - Triaxial
PP - Pocket Penetrometer
CH - Chemical

Sampler Type

Modified California
Hand Sampler
SPT
Shelby Tube
Rock Core
Bulk
No Recovery

Terms used in this report for describing soils according to their texture or grain size distributions are generally in accordance with the Unified Soil Classification System.

Terms Describing Density and Consistancy

Coarse Grained soils (major portion retained on No. 200 sieve) include (1) clean gravels, (2) silty or clayey gravels, and (3) silty, clayey, or gravelly sands. Relative density is related to SPT blow count corrected for overburden pressure or drive energy.

Density		SPT *N* Value Blows/Ft	Relative Density %
Very Loose	vl	0 to 4	0 to 15
Loose	l	4 to 10	15 to 35
Medium Dense	md	10 to 30	35 to 65
Dense	d	30 to 50	65 to 85
Very Dense	vd	> 50	85 to 100

Fine Grained soils (major portions passing No. 200 sieve) inlcude (1) inorganic and organic silts and clays, (2) gravelly, sandy, or silty clays, and (3) clayey silts. Consistency is rated according to shear strength as indicated by penetrometer readings, direct shear, or SPT blow count.

Consistency	Shear Strength, ksf	SPT *N* Value
Very Soft	< 0.25	0 to 2
Soft	0.25 to 0.50	2 to 4
Firm	0.50 to 1.00	4 to 8
Stiff	1.00 to 2.00	8 to 16
Very Stiff	2.00 to 4.00	16 to 32
Hard	> 4.00	> 32

Terms Characterizing Soil Structure

Slickensided	Having inclined planes of weakness that are slick and glossy in appearance.
Fissured	Containing shrinkage cracks, frequently filled with fine sand or silt; usually more or less vertical.
Laminated	Composed of thin layers of varying color and texture.
Interbedded	Composed of alternate layers of different soil types.
Calcareous	Containing appreciable quantities of calcium carbonate.
Well Graded	Having wide range in grain sizes and substantial amounts of intermediate particle sizes.
Poorly Graded	Predominately one grain size, or having a range of grain sizes with some intermediate sizes missing.
Porous	Having visibly apparent void spaces through which water, air, or light may pass.

Soil Moisture

From low to high, the moisture content is indicated by:

Dry	D
Slightly Moist	Sl M
Moist (near optimum for compaction)	M
Very Moist	V M
Wet	W

Size Proportions

Designation	Percent by Weight
Trace	< 5
Few	5 to 10
Little	15 to 25
Some	30 to 45

Grain Size Distribution

Clay | Silt | Sand: Fine, Medium, Coarse | Gravel: Fine, Coarse

Sieve Size Number: 200, 40, 10, 4, 3/4", 2", 3"

0.005 0.01 0.05 0.1 0.5 1.0 5.0 10.0 50 100

Particle Diameter in Millimeters

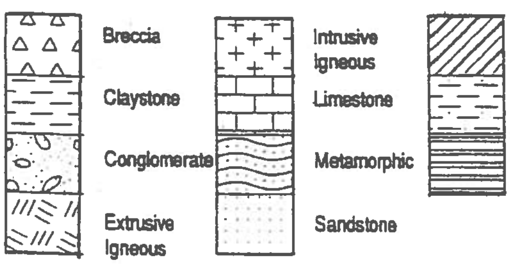
Degree of Weathering
Diagnostic Feature

Descriptive Term	Discoloration Extent	Fracture Condition	Surface Characteristics	Original Texture	Grain Boundary Condition
Unweathered	None	Closed or discolored	Unchanged	Preserved	Tight
Slightly Weathered	Less 20% of fracture spacing on both sides of fracture	Discolored, may contain thin filling	Partial discoloration	Preserved	Tight
Moderately Weathered	Greater than 20% of fracture spacing on both sides of fracture	Discolored, may contain thick filling, cemented rock	Partial to complete discoloration, not friable except poorly cemented rocks	Preserved	Partial Opening
Highly Weathered	Throughout		Friable and possibly pitted	Mainly Preserved	Partial Separation
Completely Weathered	Throughout		Resembles a soil	Partly Preserved	Complete Separation

Discontinuity Spacing

Description for Structural Feature: Bedding, Foliation, or Flow Banding	Spacing		Description for Joints, Faults, or Other Fractures
Very Thickly (Bedded, Foliated, or Banded)	More than 2 m	More than 6 ft	Very Widely (Fractured or Jointed)
Thickly	60 cm to 2 m	2 to 6 ft	Widely
Moderately	20 to 60 cm	8 to 24 in.	Medium
Thinly	60 to 200 mm	2.5 to 8 in.	Closely
Very Thinly	20 to 60 mm	0.75 to 2.5 in.	Very Closely
Description for Microstructural Features: Bedding, Foliation, or Cleavage			
Intensely (Laminated, Foliated, or Cleaved)	6 to 20 mm	0.25 to 0.75 in.	Extremely Close
Very Intensely	< 6 mm	< 0.25 in.	

Graphic Symbols - Bedrock



Rock Hardness

Classification	Field Test
Very Weak	Can be dug by hand and crushed with fingers.
Weak	Friable, can be gouged deeply with a knife and will crumble readily under light hammer blows.
Moderately Strong	Can be peeled with a knife. Material crumbles under firm blows with the sharp end of a geologic pick.
Strong	Cannot be scaped or peeled with a knife point. Hand held specimen breaks with firm blows of the pick.
Very Strong	Difficult to scratch with knife point. Cannot break hand held specimen.

Separation of Fracture Walls

Description	Separation of Walls, mm
Closed	0
Very Narrow	0 to 0.1
Narrow	0.1 to 1.0
Wide	1.0 to 5.0
Very Wide	> 5.0

Fracture Filling

Description	Definition
Clean	No fracture filling material
Stained	Discoloration of rock only. No recognizable filling material.
Filled	Fracture filled with recognizable filling material.

Surface Roughness

Description	Classification
Smooth	Appears smooth and is essentially smooth to the touch. May be slickensided.
Slightly Rough	Asperities on the fracture surfaces are visible and can be distinctly felt.
Medium Rough	Asperites are clearly visible and fracture surface feels abrasive to the touch.
Rough	Large angular asperites can be seen. Some ridge and high-side angle steps evident.
Very Rough	Near vertical steps and ridges occur on the fracture surface.

Where slickensides are observed, the direction of the slickensides should be recorded after the standard discontinuity surface description.

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Boring Log B-1

Sheet 1 of 2

Project: Dansk Investments
Client No.: 4429
Date Drilled: 3/4/14

Comment: 2250 E Pleasant Valley Road, Oxnard

Drilling Company/Driller: Icon Drilling / Brad and Gordon
Equipment: Mud Rotary

Driving Weight (lbs): 140
Average Drop (in.): 30
Hole Diameter (in.): 3 7/8

Elevation ____ ft
Depth to Water ____ ft After ____ hrs on ____
Logged By: BW

Description of Material

This log, which is part of the report prepared by Advanced Geotechnical Services, Inc. for the named project, should be read together with that report for complete interpretation. This summary applies only at this boring location and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.

Depth, ft	Sample	Blows/6"	Description of Material	Attitudes	Dry Unit Weight, pcf	Moisture Content, %	-#200, %	Other Tests
			Agricultural Fill (af) Moderate yellowish brown fine grained Silty SAND, mixed in organics near surface, moist, dense					
			Alluvium (Qa) Yellowish gray medium grained SAND, moist, dense					
5		6 6 7			99.1	10.5	35.0	
			Yellowish gray coarse grained gravelly SAND, wet, dense					
10		4 5 7				17.5	4.8	
			abundant cobble and gravel @ 12 ft.					
15		5 7 9				19.5		
20		5 6 7	Gray medium to coarse grained Clayey, Silty SAND with gravel, wet, medium dense			22.8	44.1	
25		Push 1 2	Moderate yellowish brown Silty CLAY, very moist, soft			43.1	96.0	

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Boring Log B-1

Sheet 2 of 2

Project: Dansk Investments | Client No. 4429 | Date Drilled 3/4/14

Comment: 2250 E Pleasant Valley Road, Oxnard

Drilling Company/Driller: Icon Drilling / Brad and Gordon | Equipment: Mud Rotary

Driving Weight (lbs) 140 | Average Drop (in.) 30 | Hole Diameter (in.) 3 7/8

Elevation ____ ft | Depth to Water ____ ft After ____ hrs on ____ | Logged By BW

Depth, ft	Sample	Blows/6"	Graphic Symbol	Description of Material This log, which is part of the report prepared by Advanced Geotechnical Services, Inc. for the named project, should be read together with that report for complete interpretation. This summary applies only at this boring location and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.	Attitudes	Dry Unit Weight, pcf	Moisture Content, %	-#200, %	Other Tests
	X	6 7 9		Moderate yellowish brown to light gray, moist, stiff			18.2	67.3	
35	X	Push 3 7		Light gray			38.5	96.9	
40	X	9 8 9		stiff			31.4		
45	X	8 6 10		Olive brown			31.3	65.9	
50	X	1 2 3		Light gray, soft			46.5		
55				Total Depth Explored = 51.5 ft. Backfilled with Spoils 3/4/2014					

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Boring Log B-2

Sheet 1 of 2

Project: **Dansk Investments** Client No. **4429** Date Drilled **3/4/14**

Comment: **2250 E Pleasant Valley Road, Oxnard**

Drilling Company/Driller: **Icon Drilling / Brad and Gordon** Equipment: **Mud Rotary**

Driving Weight (lbs): **140** Average Drop (in.): **30** Hole Diameter (in.): **3 7/8**

Elevation ____ ft Depth to Water ____ ft After ____ hrs on ____ Logged By **BW**

Description of Material

This log, which is part of the report prepared by Advanced Geotechnical Services, Inc. for the named project, should be read together with that report for complete interpretation. This summary applies only at this boring location and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.

Depth, ft	Sample	Blows/6"	Graphic Symbol	Description of Material	Attitudes	Dry Unit Weight, pcf	Moisture Content, %	-#200, %	Other Tests
				Agricultural Fill (af) Moderate yellowish brown Silty SAND, mixed in organics near surface, moist, dense					
				Alluvium (Qa) Yellowish gray medium to coarse grained SAND with gravel, moist, dense					
5		4 7 11					4.3		
				abundant cobble and gravel @ 7 ft.					
10		6 9 9					19.2		
15		9 12 13		Yellowish gray medium to coarse grained SAND, wet, dense			23.0	7.8	
				Dark gray Silty SAND, with gravel, wet, soft					
20		5 3 5					21.5	30.3	
				no gravel					
				Moderate yellowish brown					
25		Push 2 2		Dark gray Silty CLAY, very moist, slightly stiff			44.3	90.1	

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Boring Log B-2

Project: Dansk Investments | Client No.: 4429 | Date Drilled: 3/4/14

Comment: 2250 E Pleasant Valley Road, Oxnard

Drilling Company/Driller: Icon Drilling / Brad and Gordon | Equipment: Mud Rotary

Driving Weight (lbs): 140 | Average Drop (in.): 30 | Hole Diameter (in.): 3 7/8

Elevation ____ ft | Depth to Water ____ ft After ____ hrs on ____ | Logged By: BW

Description of Material

This log, which is part of the report prepared by Advanced Geotechnical Services, Inc. for the named project, should be read together with that report for complete interpretation. This summary applies only at this boring location and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.

Depth, ft	Sample	Blows/6"	Graphic Symbol	Description of Material	Attitudes	Dry Unit Weight, pcf	Moisture Content, %	-#200, %	Other Tests
	X	5 4 5		Moderate yellowish brown			37.1	66.0	
35	X	4 6 4		Light gray			31.6	95.0	
40	X	9 8 7		Dark gray			32.5	74.0	
45	X	5 5 7		Olive brown			30.3	87.6	
50	X	4 3 4					33.7		
55				Total Depth Explored = 51.5 ft. Backfilled with Spoils 3/4/2014					

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Boring Log B-3

Sheet 1 of 2

Project: Dansk Investments Client No.: 4429 Date Drilled: 3/5/14

Comment: 2250 E Pleasant Valley Road, Oxnard

Drilling Company/Driller: Icon Drilling / Brad and Gordon Equipment: Mud Rotary

Driving Weight (lbs): 140 Average Drop (in.): 30 Hole Diameter (in.): 3 7/8

Elevation ____ ft Depth to Water ____ ft After ____ hrs on ____ Logged By: BW

Description of Material

This log, which is part of the report prepared by Advanced Geotechnical Services, Inc. for the named project, should be read together with that report for complete interpretation. This summary applies only at this boring location and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.

Depth, ft	Sample	Blows/6"	Graphic Symbol	Description of Material	Attitudes	Dry Unit Weight, pcf	Moisture Content, %	-#200, %	Other Tests
				Agricultural Fill (af) Moderate yellowish brown Silty SAND, with entrained organics, moist, dense					
				Alluvium (Qa) Moderate yellowish brown medium to coarse grained Silty SAND, moist, moderately dense					
5		4 7 6				95.9	14.7	35.0	
10		3 6 8		Light brown medium to coarse grained SAND, moist, moderately dense			25.8		
15		6 7 9		Moderate yellowish brown medium to coarse grained Silty SAND, moist, moderately dense			23.4	21.0	
20		3 4 6		Dark gray Clayey SILT, very moist, soft			21.5		
25		3 3 2		Light gray			29.1	64.6	

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Boring Log B-3

Project: Dansk Investments Client No.: 4429 Date Drilled: 3/5/14

Comment: 2250 E Pleasant Valley Road, Oxnard

Drilling Company/Driller: Icon Drilling / Brad and Gordon Equipment: Mud Rotary

Driving Weight (lbs): 140 Average Drop (in.): 30 Hole Diameter (in.): 3 7/8

Elevation ____ ft Depth to Water ____ ft After ____ hrs on ____ Logged By: BW

Description of Material

This log, which is part of the report prepared by Advanced Geotechnical Services, Inc. for the named project, should be read together with that report for complete interpretation. This summary applies only at this boring location and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.

Depth, ft	Sample	Blows/6"	Graphic Symbol	Description of Material	Attitudes	Dry Unit Weight, pcf	Moisture Content, %	-#200, %	Other Tests
	X	2 2 4		Dark gray			28.1		
35	X	2 2 3		Light gray Silty CLAY, moist, soft			37.2	92.3	
40	X	7 10 12					35.6		
45	X	3 6 9					37.0	88.8	
50	X	12 11 6					24.7		
				Total Depth Explored = 51.5 ft. Backfilled with Spoils 3/5/2014					
55									

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Boring Log B-4

Sheet 1 of 1

Project: **Dansk Investments** Client No. **4429** Date Drilled **3/5/14**

Comment: **2250 E Pleasant Valley Road, Oxnard**

Drilling Company/Driller: **Icon Drilling / Brad and Gordon** Equipment: **Hollow Stem Auger**

Driving Weight (lbs): **140** Average Drop (in.): **30** Hole Diameter (in.): **6**

Elevation ______ ft Depth to Water **10.0** ft After ______ hrs on ______ Logged By **BW**

Depth, ft	Sample	Blows/6"	Graphic Symbol	Description of Material This log, which is part of the report prepared by Advanced Geotechnical Services, Inc. for the named project, should be read together with that report for complete interpretation. This summary applies only at this boring location and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.	Attitudes	Dry Unit Weight, pcf	Moisture Content, %	-#200, %	Other Tests
				Agricultural Fill (af) Light brown to moderate yellowish brown Silty SAND, with mixed in organics, moist, moderately dense					
				Alluvium (Qa) Yellowish brown Silty SAND, moist, moderately dense					
5				Yellowish brown fine to medium grained SAND, moist, moderately dense			5.2		
							2.6		
10				▼ @ 10 ft., groundwater encountered grain size change to medium to coarse grained, wet, dense			22.4		
15							18.0		
				Total Depth Explored = 16.5 ft. Groundwater Encountered @ 10 ft. Lined with Perforated Pipe 3/5/2014					
20									
25									

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Boring Log B-5

Sheet 1 of 1

Project: Dansk Investments | Client No. 4429 | Date Drilled 3/5/14

Comment: 2250 E Pleasant Valley Road, Oxnard

Drilling Company/Driller: Icon Drilling / Brad and Gordon | Equipment: Hollow Stem Auger

Driving Weight (lbs): 140 | Average Drop (in.): 30 | Hole Diameter (in.): 6

Elevation ____ ft | Depth to Water 7.0 ft After ____ hrs on ____ | Logged By BW

Depth, ft	Sample	Blows/6"	Graphic Symbol	Description of Material	Attitudes	Dry Unit Weight, pcf	Moisture Content, %	-#200, %	Other Tests
				This log, which is part of the report prepared by Advanced Geotechnical Services, Inc. for the named project, should be read together with that report for complete interpretation. This summary applies only at this boring location and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.					
				Agricultural Fill (af) Moderate yellowish brown Silty SAND with abundant mixed in organics, moist, moderately dense					
				Alluvium (Qa) Moderate yellowish brown medium to coarse grained SAND, with occasional rounded gravel, moist, moderately dense					
5							1.8		
				▼ @ 7 ft., groundwater encountered			22.2		
10				@ 10 ft., heaving sands grain size change to coarse grained, with small rounded gravel, wet, moderately dense			15.0		
15				@ 15 ft., heaving sands			21.9		
				Total Depth Explored = 16.5 ft. Groundwater Encountered @ 7 ft. Lined with Perforated Pipe 3/5/2014					
20									
25									

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Boring Log B-6

Project: **Dansk Investments** — Client No.: **4429** — Date Drilled: **3/5/14**

Comment: **2250 E Pleasant Valley Road, Oxnard**

Drilling Company/Driller: **Icon Drilling / Brad and Gordon** — Equipment: **Hollow Stem Auger**

Driving Weight (lbs): **140** — Average Drop (in.): **30** — Hole Diameter (in.): **6**

Elevation ____ ft — Depth to Water **7.5** ft After ____ hrs on ____ — Logged By **BW**

Description of Material

This log, which is part of the report prepared by Advanced Geotechnical Services, Inc. for the named project, should be read together with that report for complete interpretation. This summary applies only at this boring location and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.

Depth, ft	Sample	Blows/6"	Graphic Symbol	Description of Material	Attitudes	Dry Unit Weight, pcf	Moisture Content, %	-#200, %	Other Tests
				Agricultural Fill (af) Moderate yellowish brown Silty SAND with gravel, mixed in organics, moist, moderately dense					
				Alluvium (Qa) Light brown Silty SAND, moist, moderately dense					
5				Moderate yellowish brown medium to coarse grained SAND with abundant rounded and sub rounded gravel, moist, moderately dense			10.3		
				▼ 7.5 ft., groundwater encountered			19.4		
10				@ 10 ft., heaving sand			17.8		
15				@ 15 ft., heaving sand			17.6		
				Total Depth Explored = 16.5 ft Groundwater Encountered @ 7.5 ft. Lined with Perforated Pipe 3/5/2014					
20									
25									

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Boring Log B-7

Sheet 1 of 1

Project: Dansk Investments | Client No.: 4429 | Date Drilled: 3/19/14

Comment: 2250 E Pleasant Valley Road, Oxnard

Drilling Company/Driller: Icon Drilling / Brad and Gordon | Equipment: Hollow Stem Auger

Driving Weight (lbs): 140 | Average Drop (in.): 30 | Hole Diameter (in.): 6

Elevation: ___ ft | Depth to Water: 8.0 ft After ___ hrs on ___ | Logged By: SM

Description of Material

This log, which is part of the report prepared by Advanced Geotechnical Services, Inc. for the named project, should be read together with that report for complete interpretation. This summary applies only at this boring location and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.

Depth, ft	Sample	Blows/6"	Graphic Symbol	Description of Material	Attitudes	Dry Unit Weight, pcf	Moisture Content, %	-#200, %	Other Tests
				Agricultural Fill (af) Dark brown fine grained Silty SAND, moist, medium dense					
				Alluvium (Qa) Brown fine grained Silty SAND, moist, medium dense					
5		3 5 7		Light brown fine grained SAND, moist, medium dense		94.6	7.3		
				▼ @ 8 ft., groundwater encountered					
10		7 11 13				109.2	16.3		
				heaving sands, no sample					
15									
				Total Depth Explored = 15 ft. Groundwater Encountered @ 8 ft. Backfilled with Spoils 3/19/2014					
20									
25									

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Boring Log B-8

Sheet 1 of 2

Project: **Dansk Investments** Client No. **4429** Date Drilled **3/19/14**

Comment: **2250 E Pleasant Valley Road, Oxnard**

Drilling Company/Driller: **Icon Drilling / Brad and Gordon** Equipment: **Mud Rotary**

Driving Weight (lbs): **140** Average Drop (in.): **30** Hole Diameter (in.): **3 7/8**

Elevation ____ ft Depth to Water ____ ft After ____ hrs on ____ Logged By **SM**

Depth, ft	Sample	Blows/6"	Graphic Symbol	Description of Material	Attitudes	Dry Unit Weight, pcf	Moisture Content, %	-#200, %	Other Tests
				This log, which is part of the report prepared by Advanced Geotechnical Services, Inc. for the named project, should be read together with that report for complete interpretation. This summary applies only at this boring location and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.					
				Agricultural Fill (af) Brown fine grained Silty SAND, moist, medium dense					
				Alluvium (Qa) Brown fine grained Silty SAND, moist, medium dense					
5		2 3 5		Light brown fine grained SAND, moist, medium dense			23.3		
10		6 8 6		fine to medium grained, wet, medium dense			15.2		
15		5 3 3		Grey brown fine grained Silty SAND, with thin interbedded black organic deposits, wet, medium dense			17.7	43.7	
20		4 5 6		Olive brown Silty CLAY, wet, medium firm			16.2	68.3	
25		1 2 2		dark brown to black, very moist			27.8		

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Boring Log B-8

Sheet 2 of 2

Project: Dansk Investments | Client No.: 4429 | Date Drilled: 3/19/14

Comment: 2250 E Pleasant Valley Road, Oxnard

Drilling Company/Driller: Icon Drilling / Brad and Gordon | Equipment: Mud Rotary

Driving Weight (lbs): 140 | Average Drop (in.): 30 | Hole Diameter (in.): 3 7/8

Elevation ___ ft | Depth to Water ___ ft After ___ hrs on ___ | Logged By: SM

Description of Material

This log, which is part of the report prepared by Advanced Geotechnical Services, Inc. for the named project, should be read together with that report for complete interpretation. This summary applies only at this boring location and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.

Depth, ft	Blows/6"	Description	Attitudes	Dry Unit Weight, pcf	Moisture Content, %	-#200, %	Other Tests
	4 4 6	olive brown, medium firm			19.1		
35	8 6 5	Olive brown Silty CLAY to Clayey SILT, very moist, medium firm			19.7	77.8	
40	3 7 7				24.3		
45	3 5 6	Greyish brown Silty CLAY, very moist, medium firm			32.7		
50	2 3 3				27.4	95.5	
55							

Total Depth Explored = 51.5 ft.
Backfilled with Spoils 3/4/2014

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Boring/Test Pit Log TP-1

Sheet 1 of 1

Project: **Dansk Investments** Client No. **4429** Date Drilled **3/4/14**

Comment: **2250 E Pleasant Valley Road, Oxnard, CA**

Drilling Company/Driller: **Buzza** Equipment: **Backhoe**

Driving Weight (lbs) ____ Average Drop (in.) ____ Hole Diameter (in.) **4x9**

Elevation ____ ft Depth to Water ____ ft After ____ hrs on ____ Logged By **OC**

Depth, ft	Sample	Blows/6"	Graphic Symbol	Description of Material This log, which is part of the report prepared by Advanced Geotechnical Services, Inc. for the named project, should be read together with that report for complete interpretation. This summary applies only at this boring location and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.	Attitudes	Dry Unit Weight, pcf	Moisture Content, %	-#200, %	Other Tests
				Agricultural Fill (af) Moderate yellowish brown fine grained Silty SAND, mixed in organics near surface, moist, moderately dense					
				Alluvium (Qa) Brown fine to medium grained Silty SAND, moist, moderately dense					
5				Yellowish gray medium to coarse grained grained SAND, moist, moderately dense					
10				Total Depth Explored = 6 ft. No Groundwater Encountered					

Trench Description

Depth, ft
1" = 5'

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Boring/Test Pit Log TP-2

Sheet 1 of 1

Project: Dansk Investments | Client No.: 4429 | Date Drilled: 3/4/14

Comment: 2250 E Pleasant Valley Road, Oxnard, CA

Drilling Company/Driller: Buzza | Equipment: Backhoe

Driving Weight (lbs): ______ | Average Drop (in.): ______ | Hole Diameter (in.): 3x8

Elevation ______ ft | Depth to Water ______ ft | After ______ hrs on ______ | Logged By: OC

Depth, ft	Sample	Blows/6"	Graphic Symbol	Description of Material This log, which is part of the report prepared by Advanced Geotechnical Services, Inc. for the named project, should be read together with that report for complete interpretation. This summary applies only at this boring location and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.	Attitudes	Dry Unit Weight, pcf	Moisture Content, %	-#200, %	Other Tests
				Agricultural Fill (af) Moderate yellowish brown fine grained Silty SAND, mixed in organics near surface, moist, moderately dense					
				Alluvium (Qa) Moderate yellowish brown fine grained Silty SAND, moist, moderately dense					
5				Yellowish gray medium grained SAND, moist, moderately dense					
				Total Depth Explored = 6 ft. No Groundwater Encountered					
10									

Trench Description

Depth, ft
1" = 5'

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Boring/Test Pit Log TP-3

Sheet 1 of 1

Project **Dansk Investments** Client No. **4429** Date Drilled **3/4/14**

Comment **2250 E Pleasant Valley Road, Oxnard, CA**

Drilling Company/Driller **Buzza** Equipment **Backhoe**

Driving Weight (lbs) ______ Average Drop (in.) ______ Hole Diameter (in.) **4x8**

Elevation ______ ft Depth to Water ______ ft After ______ hrs on ______ Logged By **OC**

Depth, ft	Sample	Blows/6"	Graphic Symbol	Description of Material This log, which is part of the report prepared by Advanced Geotechnical Services, Inc. for the named project, should be read together with that report for complete interpretation. This summary applies only at this boring location and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.	Attitudes	Dry Unit Weight, pcf	Moisture Content, %	-#200, %	Other Tests
				Agricultural Fill (af) Moderate yellowish brown fine grained Silty SAND, mixed in organics near surface, moist, moderately dense					
				Alluvium (Qa) Moderate yellowish brown fine grained Silty SAND, moist, moderately dense					
5				Yellowish gray medium to coarse grained SAND, moist, moderately dense					
				Total Depth Explored = 6 ft. No Groundwater Encountered					
10									

Trench Description

Depth, ft
1" = 5'

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Boring/Test Pit Log TP-4

Sheet 1 of 1

Project: **Dansk Investments** Client No.: **4429** Date Drilled: **3/4/14**

Comment: **2250 E Pleasant Valley Road, Oxnard, CA**

Drilling Company/Driller: **Buzza** Equipment: **Backhoe**

Driving Weight (lbs) ______ Average Drop (in.) ______ Hole Diameter (in.): **3x10**

Elevation ______ ft Depth to Water ______ ft After ______ hrs on ______ Logged By: **OC**

Depth, ft	Sample	Blows/6"	Graphic Symbol	Description of Material This log, which is part of the report prepared by Advanced Geotechnical Services, Inc. for the named project, should be read together with that report for complete interpretation. This summary applies only at this boring location and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.	Attitudes	Dry Unit Weight, pcf	Moisture Content, %	-#200, %	Other Tests
				Agricultural Fill (af) Moderate yellowish brown fine grained Silty SAND, mixed in organics near surface, moist, moderately dense					
				Alluvium (Qa) Greyish brown fine to medium grained Silty SAND, moist, moderately dense					
5				Yellowish gray fine to medium grained SAND, moist, moderately dense					
				Total Depth Explored = 6 ft. No Groundwater Encountered					
10									

Trench Description

Depth, ft
1" = 5'

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Boring/Test Pit Log TP-5

Sheet 1 of 1

Project: **Dansk Investments** Client No. **4429** Date Drilled **3/4/14**

Comment: **2250 E Pleasant Valley Road, Oxnard, CA**

Drilling Company/Driller: **Buzza** Equipment: **Backhoe**

Driving Weight (lbs) ______ Average Drop (in.) ______ Hole Diameter (in.) **3x8**

Elevation ______ ft Depth to Water ______ ft After ______ hrs on ______ Logged By **OC**

Depth, ft	Sample	Blows/6"	Graphic Symbol	Description of Material This log, which is part of the report prepared by Advanced Geotechnical Services, Inc. for the named project, should be read together with that report for complete interpretation. This summary applies only at this boring location and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.	Attitudes	Dry Unit Weight, pcf	Moisture Content, %	-#200, %	Other Tests
				Agricultural Fill (af) Moderate yellowish brown fine grained Silty SAND, mixed in organics near surface, moist, moderately dense					
				Alluvium (Qa) Yellowish gray fine to medium grained Silty SAND, moist, moderately dense					
5									
				Total Depth Explored = 6 ft. No Groundwater Encountered					
10									

Trench Description

Depth, ft
1" = 5'

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Boring/Test Pit Log TP-6

Sheet 1 of 1

Project: Dansk Investments | Client No.: 4429 | Date Drilled: 3/4/14

Comment: 2250 E Pleasant Valley Road, Oxnard, CA

Drilling Company/Driller: Buzza | Equipment: Backhoe

Driving Weight (lbs): ____ | Average Drop (in.): ____ | Hole Diameter (in.): 3x8

Elevation ____ ft | Depth to Water ____ ft After ____ hrs on ____ | Logged By: OC

Depth, ft	Sample	Blows/6"	Graphic Symbol	Description of Material This log, which is part of the report prepared by Advanced Geotechnical Services, Inc. for the named project, should be read together with that report for complete interpretation. This summary applies only at this boring location and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.	Attitudes	Dry Unit Weight, pcf	Moisture Content, %	-#200, %	Other Tests
				Agricultural Fill (af) Moderate yellowish brown fine grained Silty SAND, mixed in organics near surface, moist, moderately dense					
				Alluvium (Qa) Yellowish gray fine to medium grained Silty SAND, moist, moderately dense					
5									
				Total Depth Explored = 6 ft. No Groundwater Encountered					
10									

Trench Description

Depth, ft
1" = 5'

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Boring/Test Pit Log TP-7

Sheet 1 of 1

Project: Dansk Investments | Client No. 4429 | Date Drilled 3/4/14

Comment: 2250 E Pleasant Valley Road, Oxnard, CA

Drilling Company/Driller: Buzza | Equipment: Backhoe

Driving Weight (lbs): | Average Drop (in.): | Hole Diameter (in.): 4x10

Elevation ft | Depth to Water 7.0 ft After hrs on | Logged By OC

Depth, ft	Sample	Blows/6"	Graphic Symbol	Description of Material	Attitudes	Dry Unit Weight, pcf	Moisture Content, %	-#200, %	Other Tests
				This log, which is part of the report prepared by Advanced Geotechnical Services, Inc. for the named project, should be read together with that report for complete interpretation. This summary applies only at this boring location and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.					
				Agricultural Fill (af) Moderate yellowish brown fine grained Silty SAND, mixed in organics near surface, moist, moderately dense					
				Alluvium (Qa) Moderate yellowish brown fine grained Silty SAND, moist, moderately dense					
5				Yellowish gray medium to coarse grained SAND, moist, moderately dense					
				becomes very coarse grained, friable at 6 ft.					
10				Total Depth Explored = 8 ft. Groundwater Encountered @ 7.5 ft.					

Trench Description

Depth, ft
1" = 5'

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Boring/Test Pit Log TP-8

Sheet 1 of 1

Project: Dansk Investments   Client No. 4429   Date Drilled 3/4/14

Comment: 2250 E Pleasant Valley Road, Oxnard, CA

Drilling Company/Driller: Buzza   Equipment: Backhoe

Driving Weight (lbs) ______   Average Drop (in.) ______   Hole Diameter (in.) 4x9

Elevation ______ ft   Depth to Water 10.0 ft After ______ hrs on ______   Logged By OC

Depth, ft	Sample	Blows/6"	Graphic Symbol	Description of Material This log, which is part of the report prepared by Advanced Geotechnical Services, Inc. for the named project, should be read together with that report for complete interpretation. This summary applies only at this boring location and at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with the passage of time. The data presented is a simplification of actual conditions encountered.	Attitudes	Dry Unit Weight, pcf	Moisture Content, %	-#200, %	Other Tests
				Agricultural Fill (af) Moderate yellowish brown fine grained Silty SAND, mixed in organics near surface, moist, moderately dense					
				Alluvium (Qa) Yellowish gray fine to medium grained Silty SAND, moist, moderately dense					
5									
				Yellowish gray very coarse grained SAND, friable, moist, moderately dense Heavy caving below 7 ft.					
10				▼					
				Total Depth Explored = 11 ft. Groundwater Encountered @ 10 ft.					

Trench Description

Depth, ft
1" = 5'

Appendix B

Laboratory Testing

Appendix B
Laboratory Testing

A laboratory test program is designed for each project to evaluate the physical and mechanical properties of the soil and bedrock materials encountered at the site during our field exploration program. Laboratory tests were conducted on representative samples for the purpose of classification and determining their properties for use in analyses and evaluations. The most common laboratory tests include moisture-density, Atterberg limits, grain-size analyses (sieve and hydrometer analyses), sand equivalent, direct shear, consolidation, compaction, expansion index, and *R*-values. The following descriptions of test methods are generic and may include methods not used on this project. Reference to the boring logs and test results on Plates attached to this appendix will show which tests were performed for this project. Laboratory testing is performed in general accordance with the most recent ASTM (2007) test designations available at the time of testing.

Classification Tests

Classification testing is performed to identify differences in material behavior and to correlate the results with shear strength and volume change characteristics of the materials. Classification testing includes unit weight (e.g., dry density), moisture content, Atterberg limits, grain size analyses (sieve and hydrometer), and sand equivalent.

Moisture-Density Test

Site soils were classified in the laboratory in accordance with the Unified Soil Classification System. Moisture contents are performed in general accordance with ASTM Test Designation D2216 and unit weights were determined in general accordance with ASTM Test Designation D2937. Field moisture contents and dry unit weights were determined for the ring samples obtained in the field. Field moisture contents and dry unit weights are shown on the boring logs in Appendix A.

Sieve Analysis

Sieve analysis tests were conducted on the on-site soils in general accordance with sieve analysis test procedure from ASTM Test Designation D422. This method covers the quantitative determination of the distribution of particle sizes in soils. If this test was performed, the results are presented on Plates attached to this appendix.

Hydrometer Test

Hydrometer tests were performed in general accordance with ASTM Test Designation D422. If this test was performed, the results are presented on Plates attached to this appendix. Samples with obviously little course material and a high percentage of fines were prepared with a wet method (ASTM Test Designation D2217) rather than air-drying the sample and pulverizing with a mortar and pedestal.

Shear Tests

Direct shear tests were performed in general accordance with ASTM D3080 to determine the shear strength parameters of undisturbed on-site soils or remolded soil specimens. The samples are usually tested in an artificially saturated condition. This is accomplished by soaking the specimens in a confined container for a period of one or 2 days, depending on the permeability of the material. The specimen, 1-inch-high and 2.4-inch-diameter, is placed in the shear device, and a vertical stress is applied to the specimen. The specimen is allowed to reach an equilibrium state (swell or consolidate). The specimen is then sheared under a constant rate of deformation. The rate of deformation for a slow test, sufficiently slow to presumably allow drainage, is selected from computed or measured consolidation rates to simulate full drainage (full dissipation of any tendency for pore water pressure changes) during shear. A rate of displacement of 0.005 inches per minute was used for the most tests. The process usually is repeated for 3 specimens, each under different vertical stresses. The results from the 3 tests are plotted on a diagram of shear stress and normal (vertical) stress at failure, and linear approximations are drawn of the failure curves to determine the angle of internal friction and cohesion. The first moisture content shown on the graphs (associated with peak values) is for either the in-situ condition or the remolded condition, and the second moisture content (associated with ultimate value) is for the soaked condition.

Consolidation Test

Consolidation tests were performed in general accordance with ASTM D2435 and D5333 on selected samples to evaluate the load-deformation characteristics of the earth soils. The tests were performed primarily on material that would be most susceptible to consolidation under anticipated foundation loading. The soil specimen, contained in a 2.4-inch-diameter, 1.0-inch-high sampling ring, is placed in a loading frame under a seating pressure of 0.1 ksf. Vertical loads are applied to the samples in several geometric increments, and the resulting deformations were recorded at selected time intervals. When the pressure reaches a preselected effective overburden pressure (often 2 ksf) and the specimen has consolidated under that pressure, the laboratory technician adds water to the test cell and records the vertical movement. After the specimen reaches equilibrium with the addition of water, the technician continues the loading process, usually up to a pressure of about 8 ksf. The specimen is then unloaded in increments, and the test is dismantled. The results of the test are presented in terms of percent volume change versus applied vertical stress. If this test was performed, the results are presented on Plates attached to this appendix.

Compaction Test

Compaction tests provide information on the relationship between moisture content and dry density of the soil compacted in a given manner. The maximum density is obtained for a given compaction effort at an optimum moisture content. Specifications for earthwork are in terms of the unit weight (or dry density) expressed as a percentage of the maximum density, and the moisture content compared to the optimum moisture content. Compaction tests were performed in general accordance with ASTM Test Designation D1557 to determine the maximum dry densities and optimum moisture contents of the on-site soils. If this test was performed, the results are presented on Plates attached to this appendix.

Expansion Index Test

The expansion index test provides an assessment of the potential for expansion or heave that could be detrimental to foundation or slab performance. Expansion Index tests are performed on shallow on-site soils in general accordance with expansion test procedures in ASTM D4829. In this test, a specimen is compacted at a degree of saturation between 45% and 55% in a 4.01-inch-diameter, 1.0-inch-high ring. The specimen is subjected to a seating pressure of 144 psf, water is added to the test cell, and swell is monitored until the expansion stops. The volume of swell is converted to an expansion index. Any test results are summarized on the boring logs in Appendix A.

Sample Remolding

In some cases remolded samples are used when performing direct shear tests and consolidation tests. Samples are remolded to a specified moisture and density by compacting the soil in a 2.42-inch-diameter sample ring. The specified moisture content is either at optimum or a few percentage points above optimum. The specified dry density is usually at a relative compaction of 90%. The required moisture is added to and mixed with dry soil, providing a homogeneous mixture. A 2.42-inch-diameter ring is placed in a 6-inch-diameter compaction mold, and soil is placed in the mold to above the ring. The soil is then compacted with a 5.5-pound hammer with a free-fall drop of 12 inches. The sample is trimmed, and the dry density is determined. If the dry density deviates more than about one pound per cubic foot from the specified dry density, the process is repeated with the number of blows altered to better achieve the specified dry density.

Job No. **4429** Date **4/25/2014**

Project **Dansk Investments - 2250 E Pleasant Valley Road, Oxnard, CA**

Source of Material **B-4 0.0**

Description of Material **Light brown Silty SAND**

Test Method **1557A**

Test Results

Maximum Dry Density **114.5 pcf**

Optimum Water Content **9.5 %**

Atterberg Limits

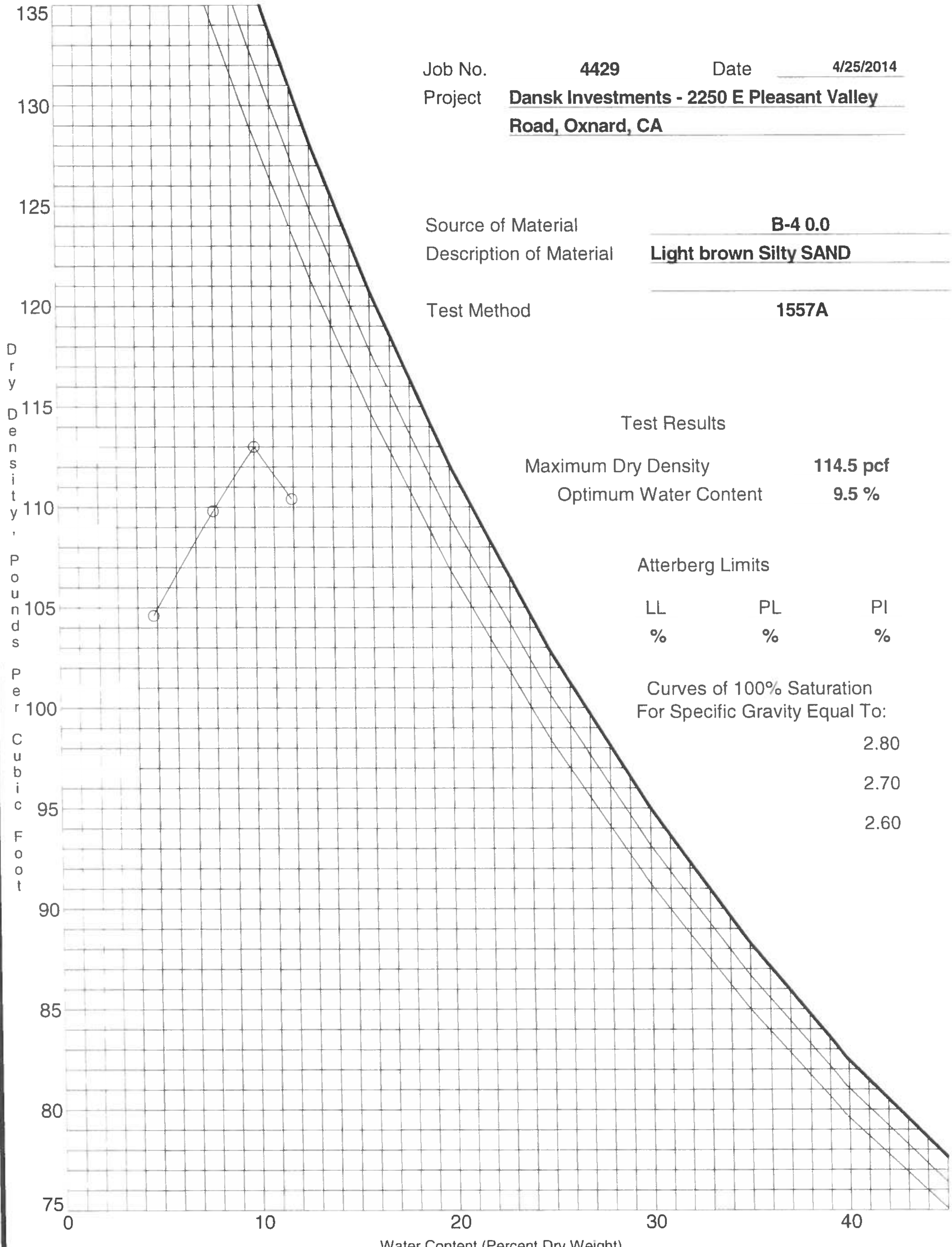
LL	PL	PI
%	%	%

Curves of 100% Saturation
For Specific Gravity Equal To:

2.80

2.70

2.60



Moisture-Density Relationship

Advanced Geotechnical Services, Inc.

Plate B- 3

Job No. **4429** Date **4/25/2014**

Project **Dansk Investments - 2250 E Pleasant Valley Road, Oxnard, CA**

Source of Material **B-6 0.0**

Description of Material **Light brown Silty SAND**

Test Method **1557A**

Test Results

Maximum Dry Density **115.0 pcf**

Optimum Water Content **9.0 %**

Atterberg Limits

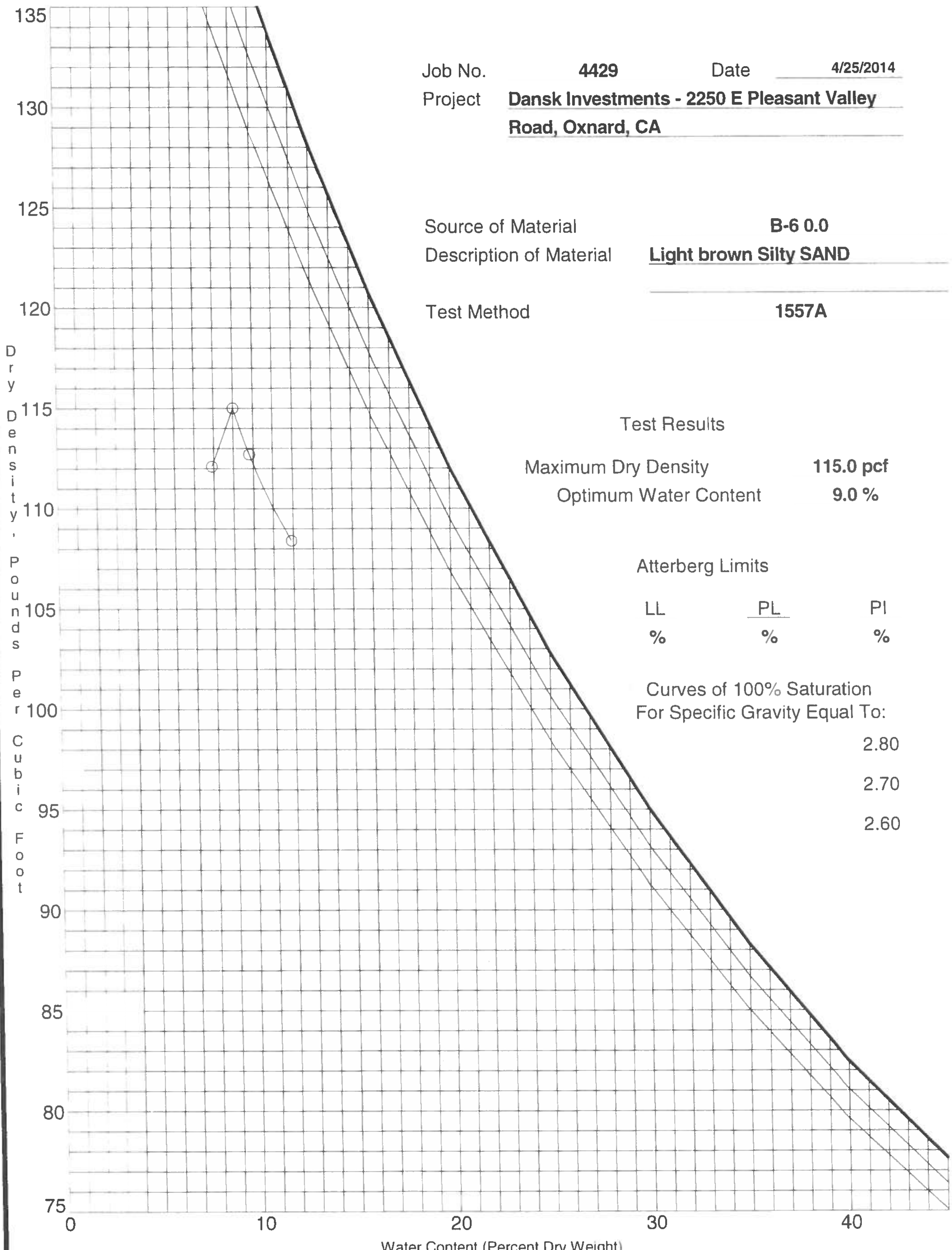
LL	PL	PI
%	%	%

Curves of 100% Saturation
For Specific Gravity Equal To:

2.80

2.70

2.60



Moisture-Density Relationship

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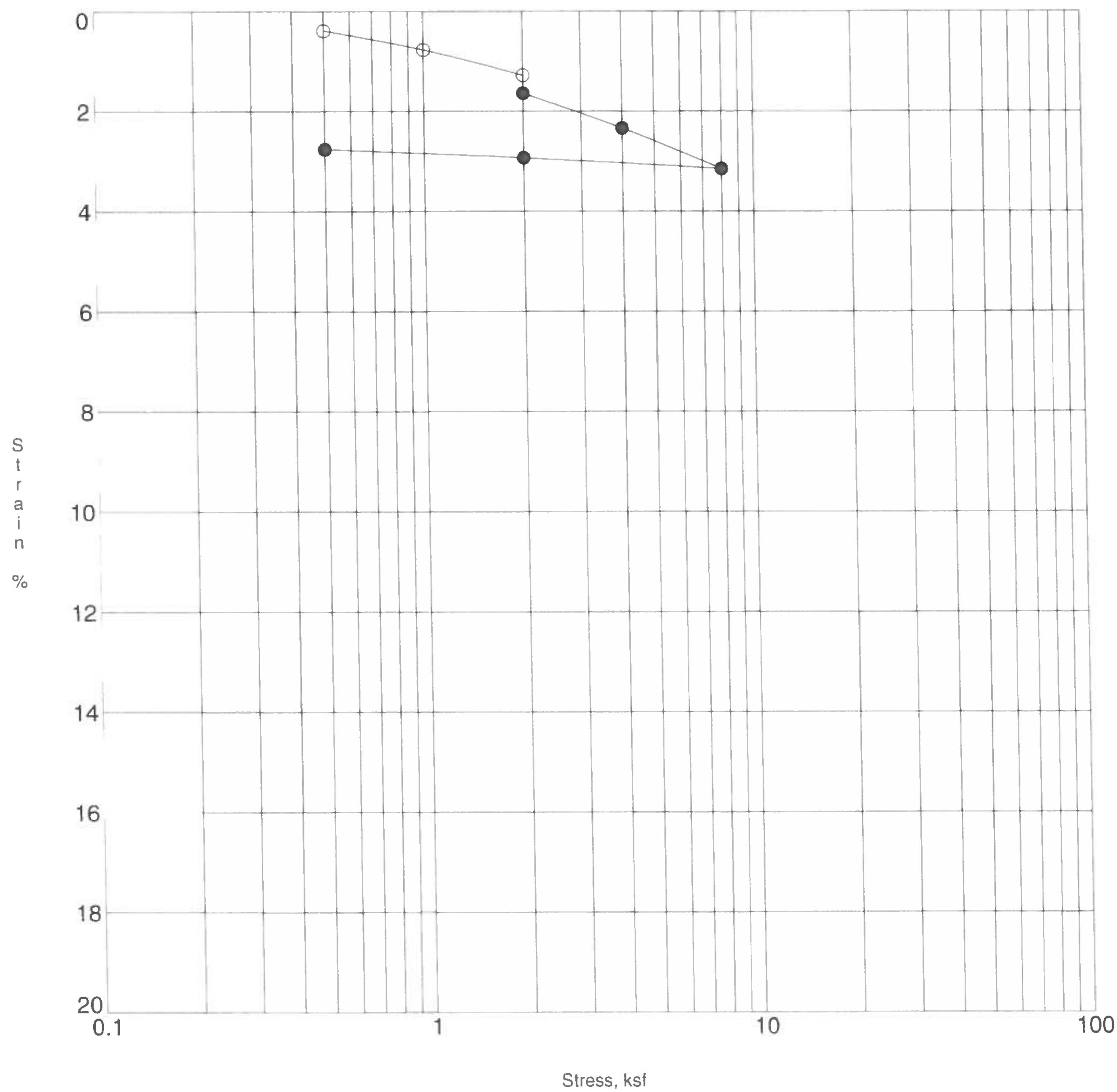
Plate B- 4



Open Symbol At Field Moisture, Solid Symbol After Submersion in Water

Specimen Identification			Classification	DD	MC%
	B-2	5.0	Yellowish gray medium grained SAND	95.2	13.0
●	B-2	5.0	(UNDISTURBED)		

Project	Dansk Investments - 2250 E Pleasant Valley Road, Oxnard, CA	Client No.	4429
		Date	4/25/14

Consolidation Test

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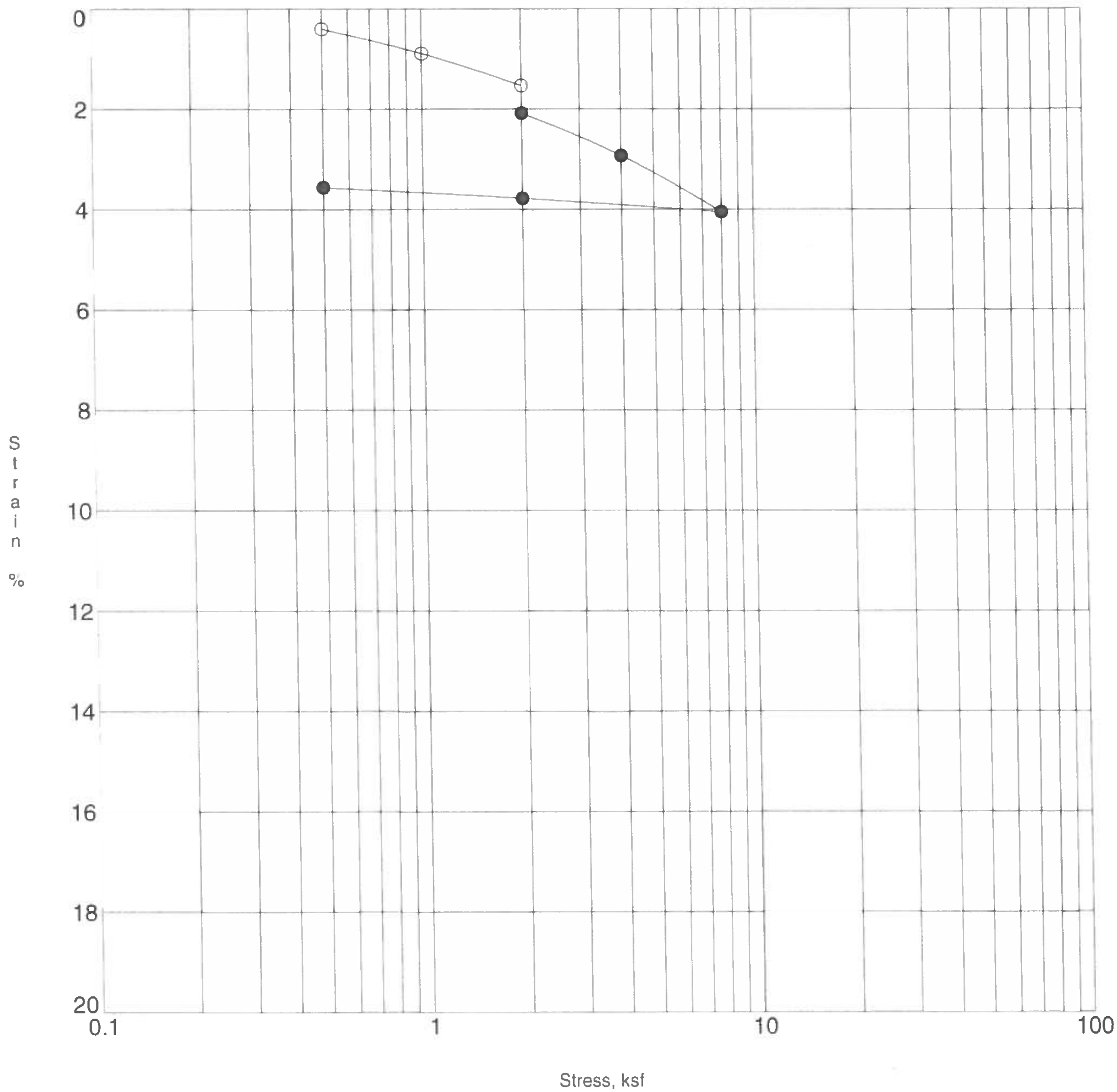
Plate B- 5



Open Symbol At Field Moisture, Solid Symbol After Submersion in Water

Specimen Identification			Classification	DD	MC%
○	B-4	5.0	Light brown Silty SAND	95.2	5.2
●	B-4	5.0	(UNDISTURBED)	98.7	17.4

Project	Dansk Investments - 2250 E Pleasant Valley Road, Oxnard, CA	Client No.	4429
		Date	4/25/14

Consolidation Test

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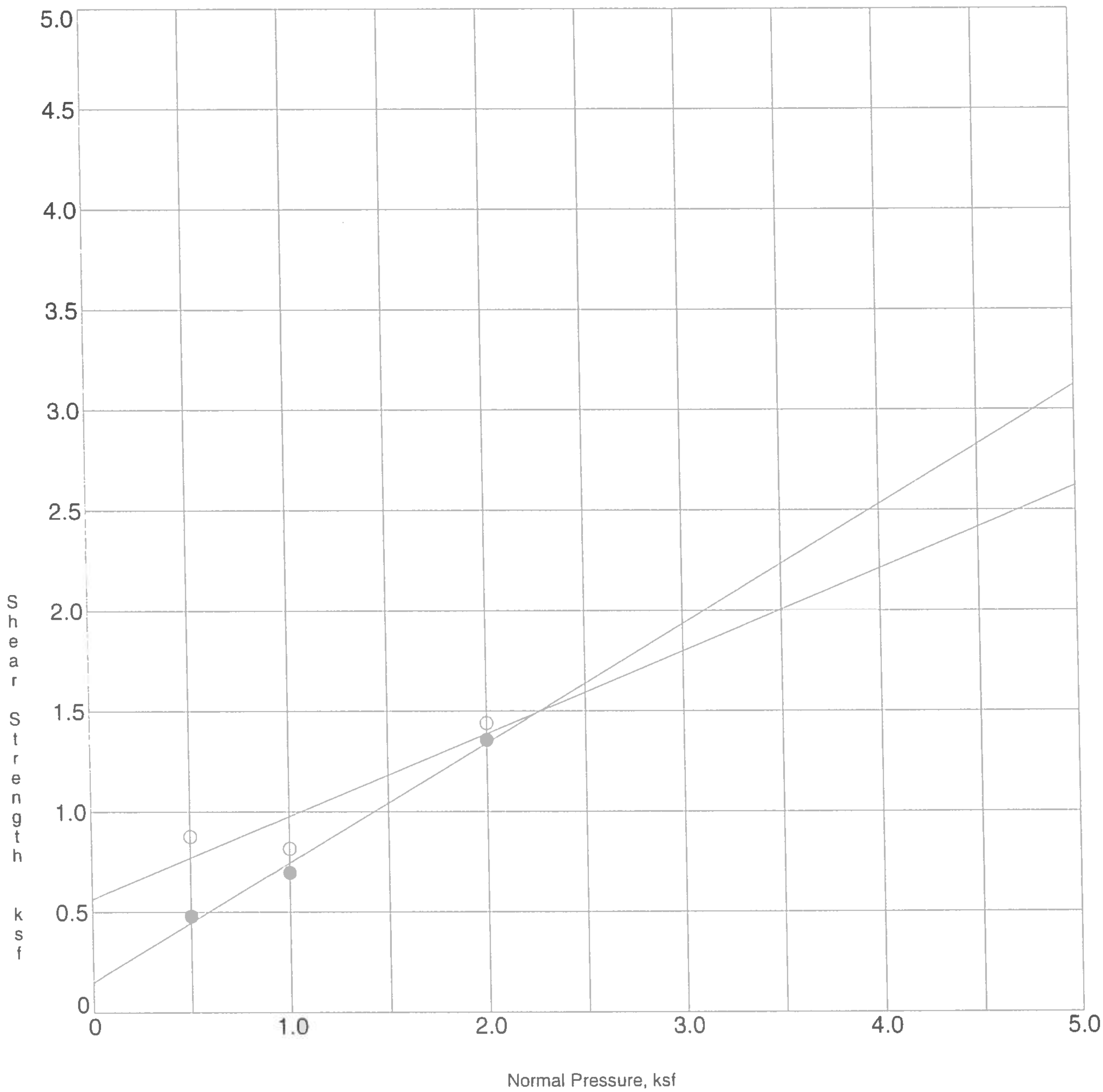
Plate B- 6



○ - Peak Shear ● - Ultimate Shear △ - Residual Shear

	Specimen Identification		Classification	DD	MC%	c, ksf	phi
	B-1	5.0	Yellowish gray medium grained SAND	102.9	10.5	0.56	22
●	B-1	5.0	(UNDISTURBED)	102.9	16.3	0.15	31

Project **Dansk Investments - 2250 E Pleasant Valley Road, Oxnard, CA**

Client No. **4429**
Date **4/25/14**

Shear Test Diagram

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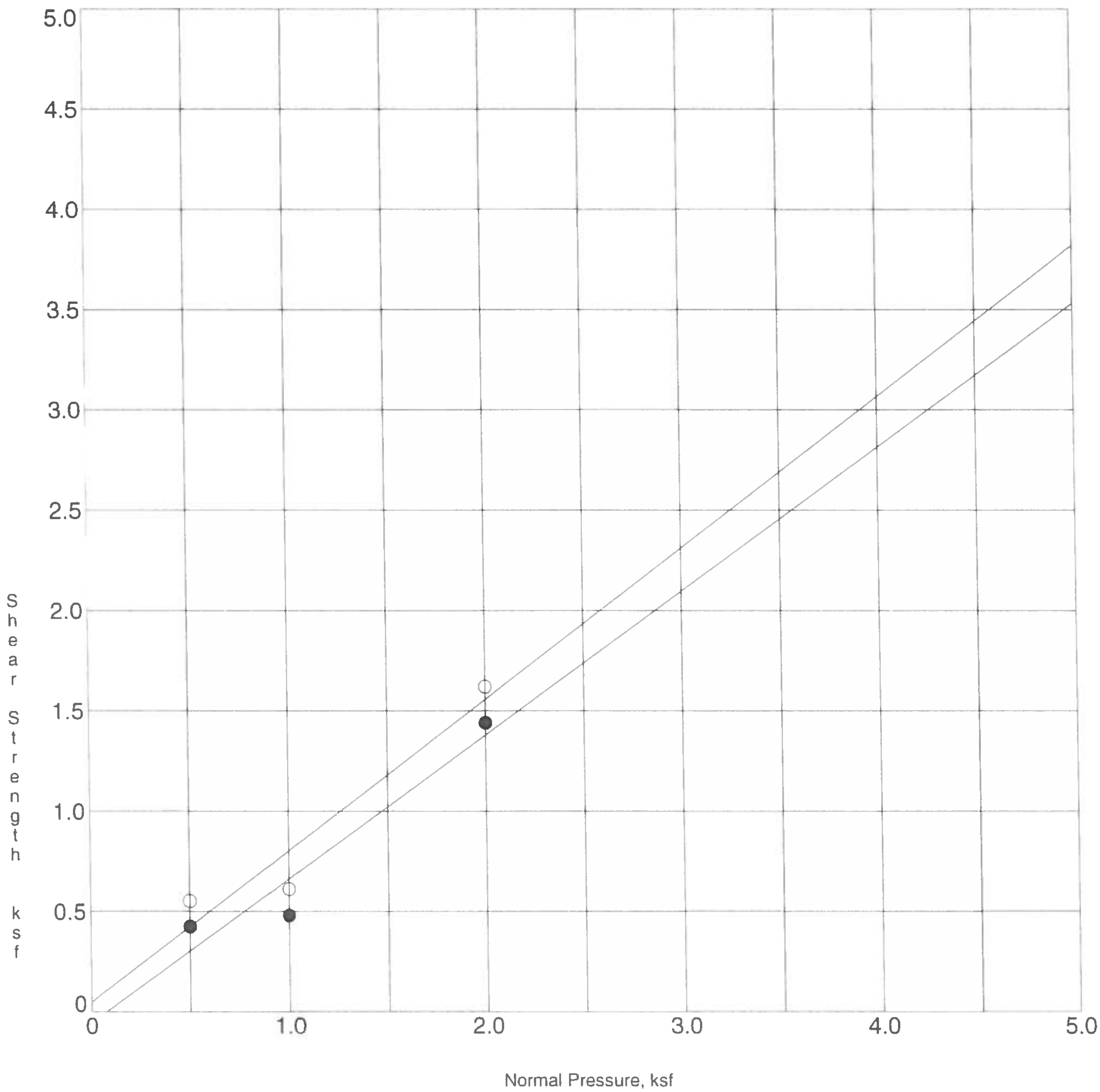
Plate B- 7



○ - Peak Shear ● - Ultimate Shear △ - Residual Shear

	Specimen Identification		Classification	DD	MC%	c, ksf	phi
○	B-6	5.0	Light brown Silty SAND	90.7	23.4	0.05	37
●	B-6	5.0	(UNDISTURBED)	90.7	26.7	0.00	34

Project **Dansk Investments - 2250 E Pleasant Valley Road, Oxnard, CA**

Client No. **4429**

Date **4/25/14**

Shear Test Diagram

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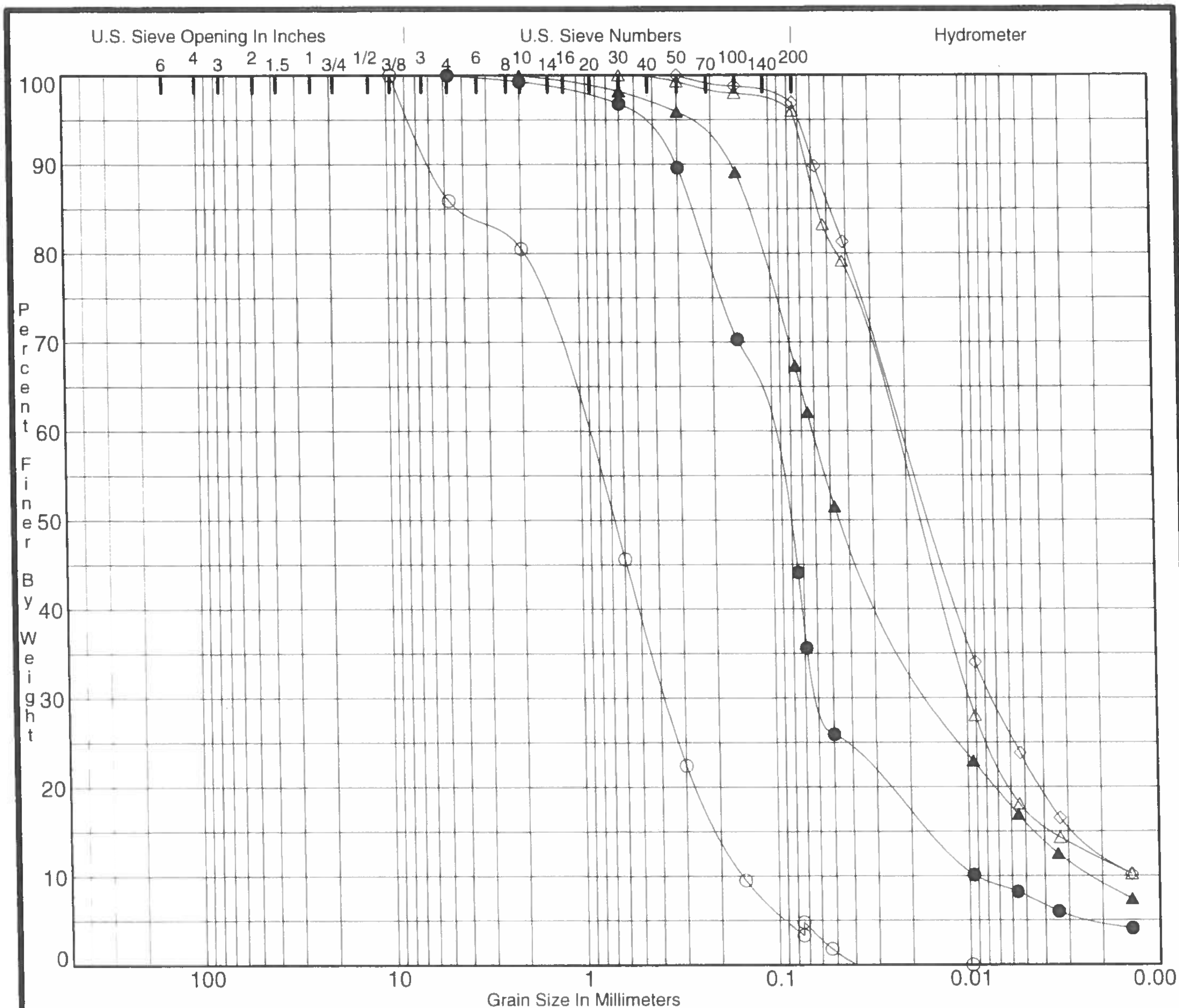
Plate B- 8



Cobbles	Gravel		Sand			Silt Or Clay
	coarse	fine	coarse	medium	fine	

	Specimen Identification		Classification	MC%	LL	PL	PI	Cc	Cu
	B-1	**10.0**	**SAND**					**0.93**	**6.4**
●	**B-1**	**20.0**	**Clayey, Silty SAND**					**3.10**	**12.4**
△	**B-1**	**25.0**	**Silty CLAY**		**44**	**25**	**19**		
▲	**B-1**	**30.0**	**Silty CLAY**					**1.47**	**27.9**
	B-1	**35.0**	**Clayey SILT**		**46**	**24**	**22**		

	Specimen Identification		D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
○	**B-1**	**10.0**	**9.50**	**0.99**	**0.376**	**0.1541**	**14.1**	**81.1**	**4.8**	
●	**B-1**	**20.0**	**4.75**	**0.11**	**0.057**	**0.0092**	**0.0**	**55.9**	**36.4**	**7.7**
	B-1	**25.0**	**0.60**	**0.02**	**0.010**		**0.0**	**4.0**	**78.5**	**17.5**
▲	**B-1**	**30.0**	**2.00**	**0.06**	**0.014**	**0.0022**	**0.0**	**32.7**	**51.3**	**16.0**
◇	**B-1**	**35.0**	**0.30**	**0.02**	**0.007**		**0.0**	**3.1**	**74.0**	**22.9**

Project **Dansk Investments - 2250 E Pleasant Valley Road, Oxnard, CA**

Client No. **4429**
Date **4/25/14**

Gradation Curves

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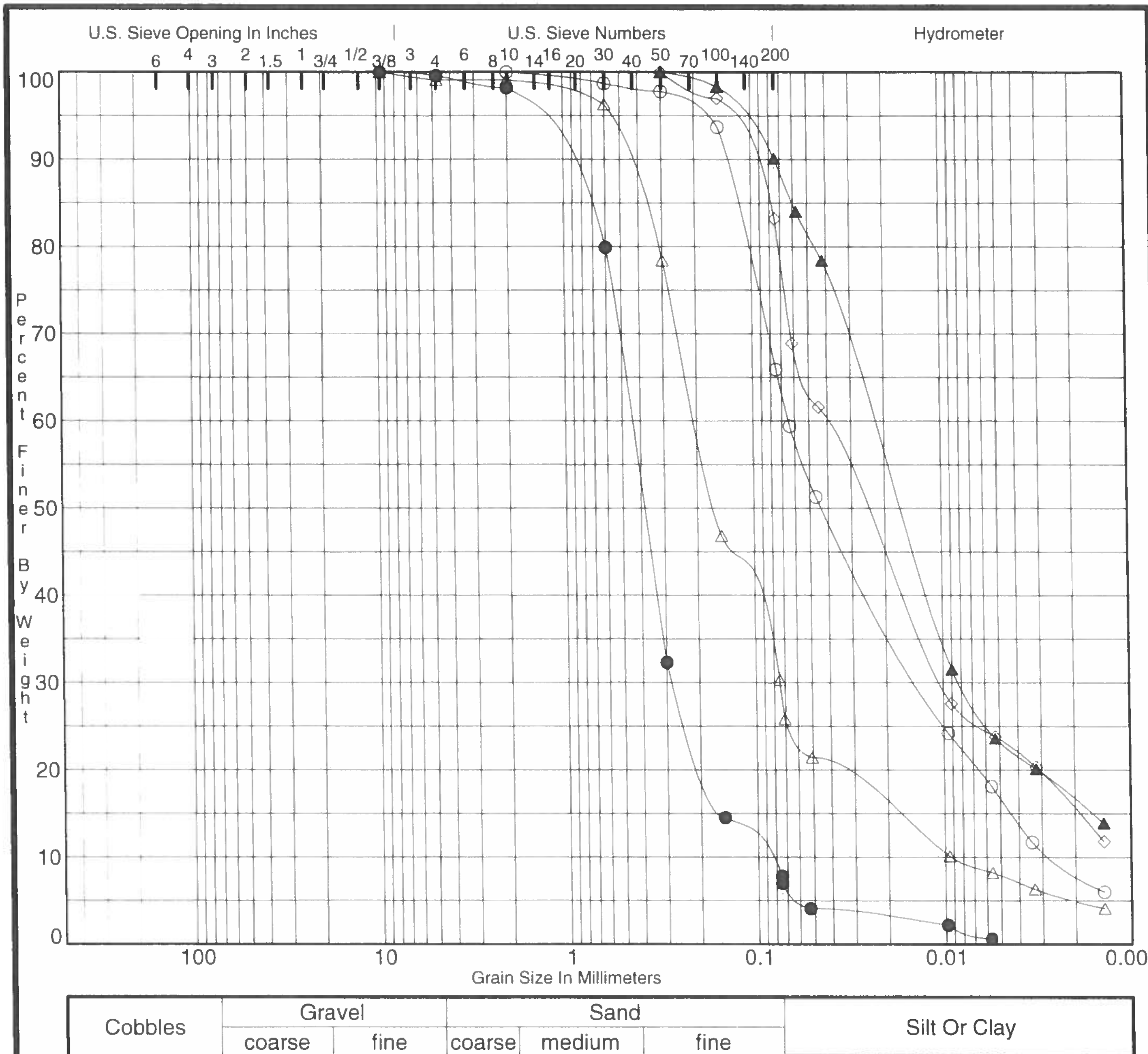
Plate B- 9



Specimen Identification			Classification	MC%	LL	PL	PI	Cc	Cu
○	B-1	45.0	Silty CLAY					1.06	24.8
●	B-2	15.0	SAND					1.78	4.8
△	B-2	20.0	Silty SAND					3.02	21.7
▲	B-2	25.0	Silty CLAY		52	24	28		
◇	B-2	30.0	Silty CLAY		39	19	19		

Specimen Identification			D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
○	B-1	45.0	2.00	0.06	0.013	0.0026	0.0	34.1	49.3	16.6
●	B-2	15.0	9.50	0.45	0.274	0.0942	0.4	91.8	7.8	
△	B-2	20.0	9.50	0.20	0.075	0.0092	0.9	68.8	22.5	7.8
▲	B-2	25.0	0.30	0.02	0.008		0.0	9.9	66.9	23.2
	B-2	30.0	0.30	0.04	0.010		0.0	16.8	59.8	23.4

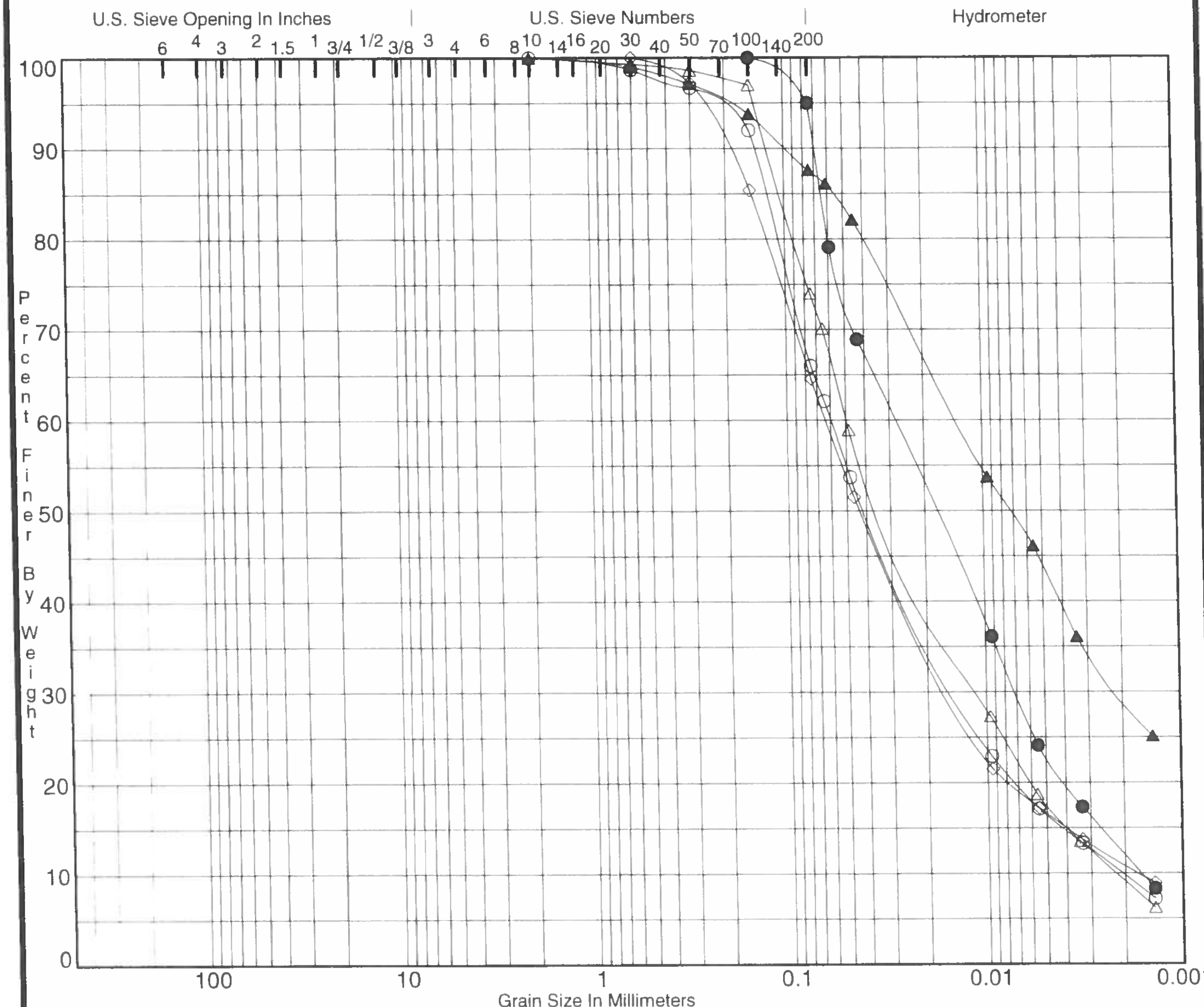
Project **Dansk Investments - 2250 E Pleasant Valley Road, Oxnard, CA**

Client No. **4429**
Date **4/25/14**

Gradation Curves

Advanced Geotechnical Services, Inc.

Plate B- 10



Cobbles	Gravel		Sand			Silt Or Clay
	coarse	fine	coarse	medium	fine	

Specimen Identification			Classification	MC%	LL	PL	PI	Cc	Cu
	B-2	35.0	**Silty CLAY**					1.53	28.9
●	B-2	40.0	**Silty CLAY**					1.08	17.4
	B-2	45.0	**Silty CLAY**		32	19	13	1.09	22.5
▲	B-2	50.0	**Silty CLAY**						
	B-3	25.0	**Dark gray Clayey SILT**					2.02	37.1

Specimen Identification			D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
	B-2	35.0	2.00	0.06	0.014	0.0021	0.0	34.0	49.6	16.4
●	B-2	40.0	0.15	0.03	0.007	0.0016	0.0	5.0	72.2	22.8
	B-2	45.0	2.00	0.05	0.011	0.0022	0.0	26.0	56.5	17.5
▲	B-2	50.0	2.00	0.01	0.002		0.0	12.4	43.8	43.8
	B-3	25.0	0.60	0.06	0.015	0.0017	0.0	35.4	48.1	16.5

Project **Dansk Investments - 2250 E Pleasant Valley Road, Oxnard, CA**

Client No. **4429**

Date **4/25/14**

Gradation Curves

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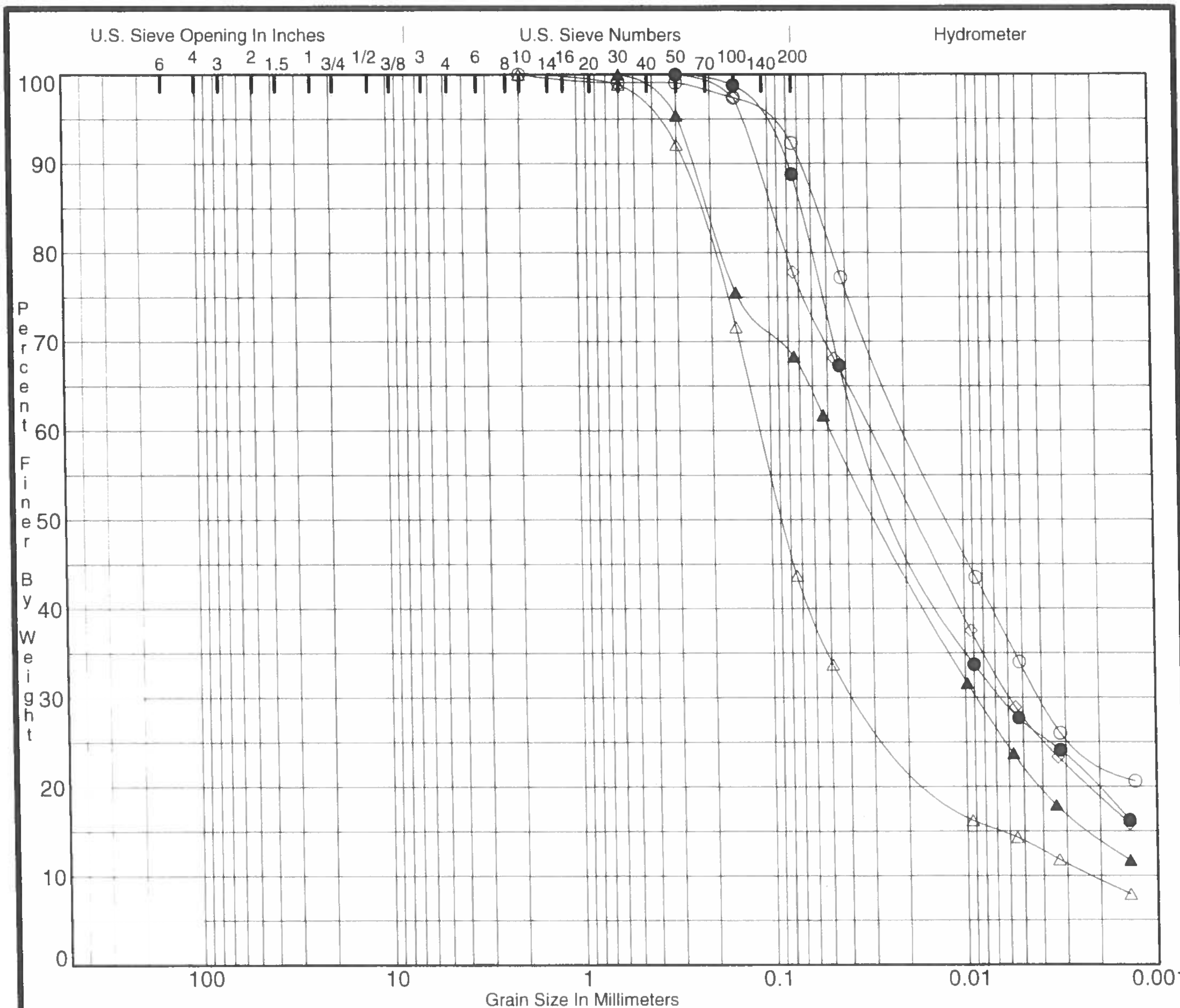
Plate B- 11



Cobbles	Gravel		Sand			Silt Or Clay
	coarse	fine	coarse	medium	fine	

	Specimen Identification		Classification	MC%	LL	PL	PI	Cc	Cu
○	**B-3**	**35.0**	**Light gray Silty CLAY**						
●	**B-3**	**45.0**	**Light gray Silty CLAY**						
△	**B-8**	**15.0**	**Silty SAND**					**4.81**	**50.6**
▲	**B-8**	**20.0**	**Silty CLAY**						
	B-8	**35.0**	**Silty CLAY to Clayey SILT**						

	Specimen Identification		D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
	B-3	**35.0**	**2.00**	**0.02**	**0.004**		**0.0**	**7.7**	**58.9**	**33.4**
●	**B-3**	**45.0**	**0.30**	**0.03**	**0.006**		**0.0**	**11.2**	**61.5**	**27.3**
△	**B-8**	**15.0**	**2.00**	**0.11**	**0.035**	**0.0022**	**0.0**	**56.3**	**29.9**	**13.8**
▲	**B-8**	**20.0**	**0.60**	**0.05**	**0.009**		**0.0**	**31.7**	**46.1**	**22.2**
	B-8	**35.0**	**0.30**	**0.03**	**0.006**		**0.0**	**22.2**	**49.9**	**27.9**

Project **Dansk Investments - 2250 E Pleasant Valley Road, Oxnard, CA**

Client No. **4429**
Date **4/25/14**

Gradation Curves

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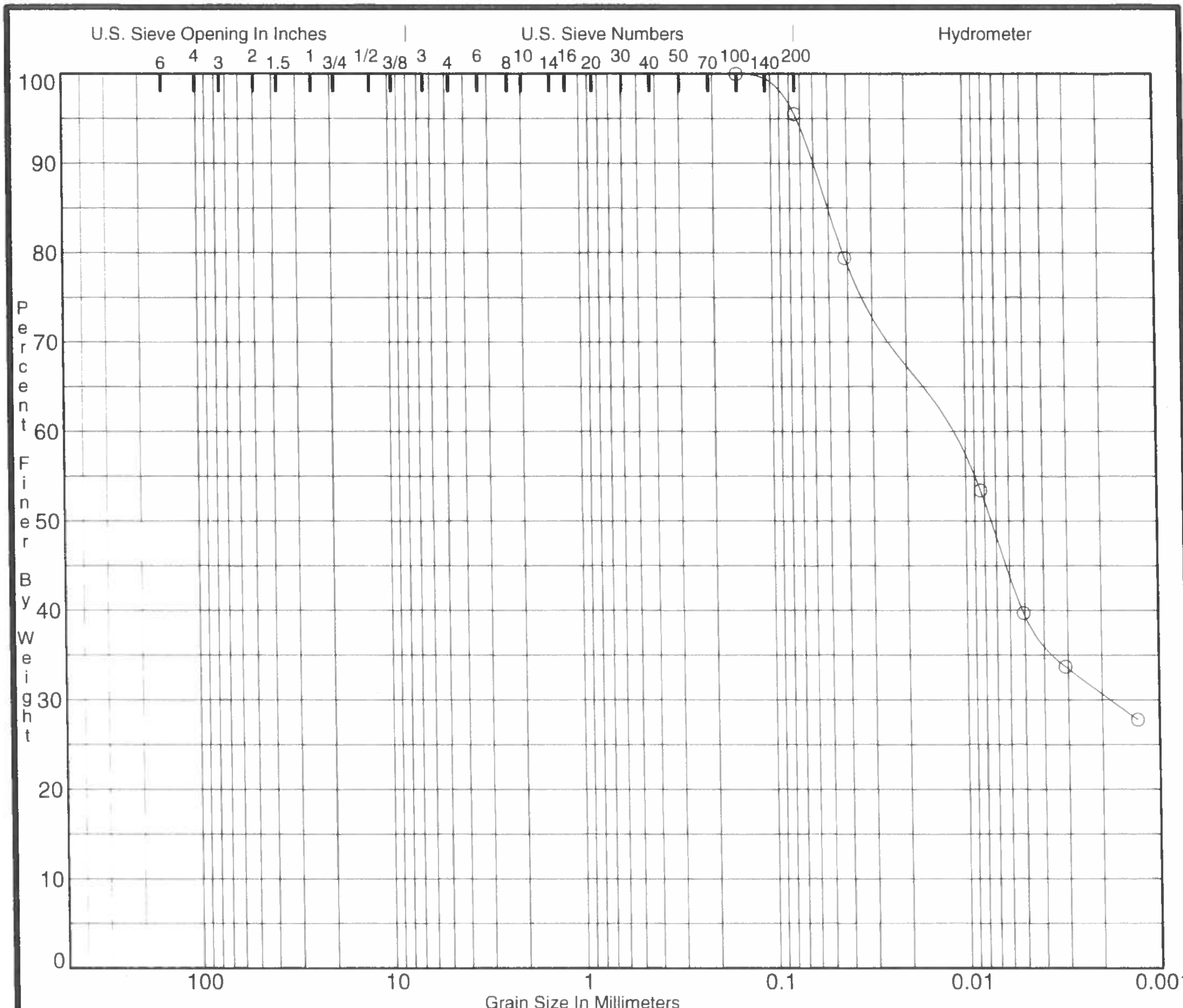
Plate B- 12



Cobbles	Gravel		Sand			Silt Or Clay
	coarse	fine	coarse	medium	fine	

Specimen Identification		Classification	MC%	LL	PL	PI	Cc	Cu
B-8	**50.0**	**Silty CLAY**		**62**	**21**	**40**		

Specimen Identification		D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
B-8	**50.0**	**0.15**	**0.01**	**0.002**		**0.0**	**4.5**	**56.0**	**39.5**

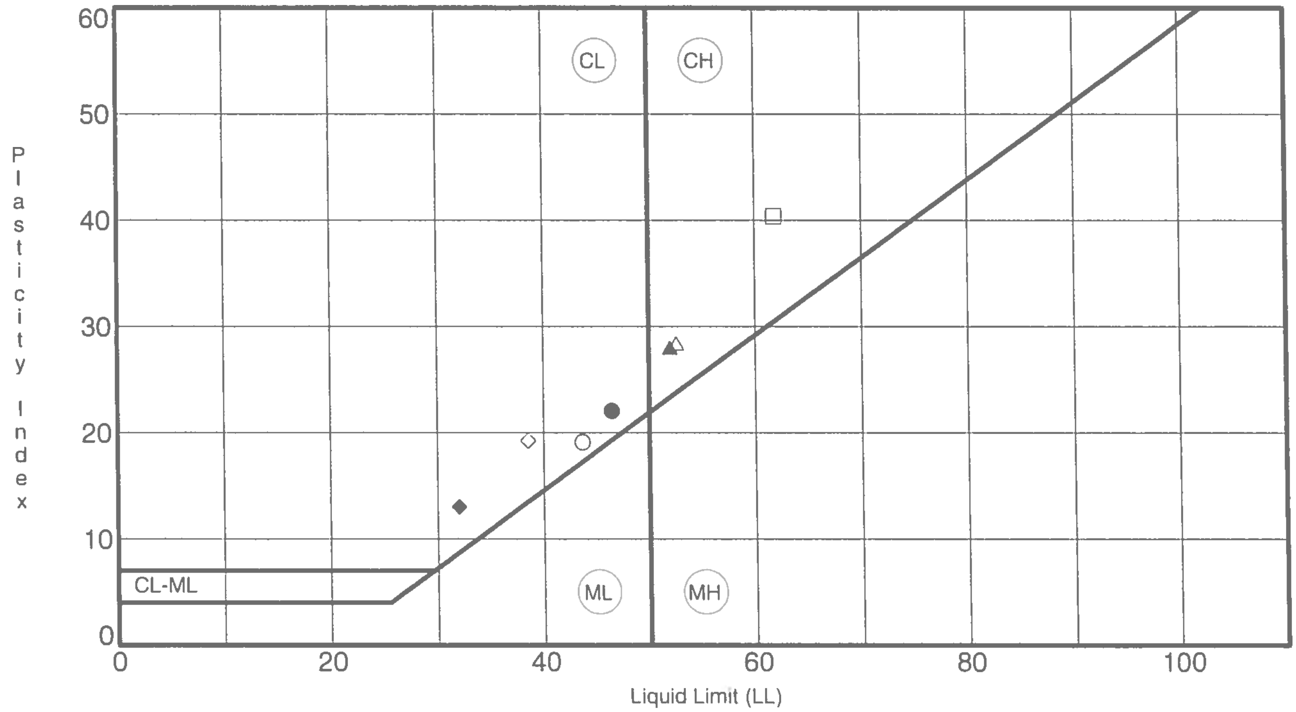
Project **Dansk Investments - 2250 E Pleasant Valley Road, Oxnard, CA**

Client No. **4429**
Date **4/25/14**

Gradation Curves

Advanced Geotechnical Services, Inc.

Plate B- 13



	Specimen Identification		LL	PL	PI	Fines	Classification
○	B-1	25.0	44	25	19		
●	B-1	35.0	46	24	22		
△	B-1	50.0	53	24	29		
▲	B-2	25.0	52	24	28		
◇	B-2	30.0	39	19	20		
◆	B-2	45.0	32	19	13		
	B-8	50.0	62	21	41		

Project: Dansk Investments - 2250 E Pleasant Valley Road, Oxnard, CA

Client No. 4429

Date 4/25/14

Atterberg Limits' Results

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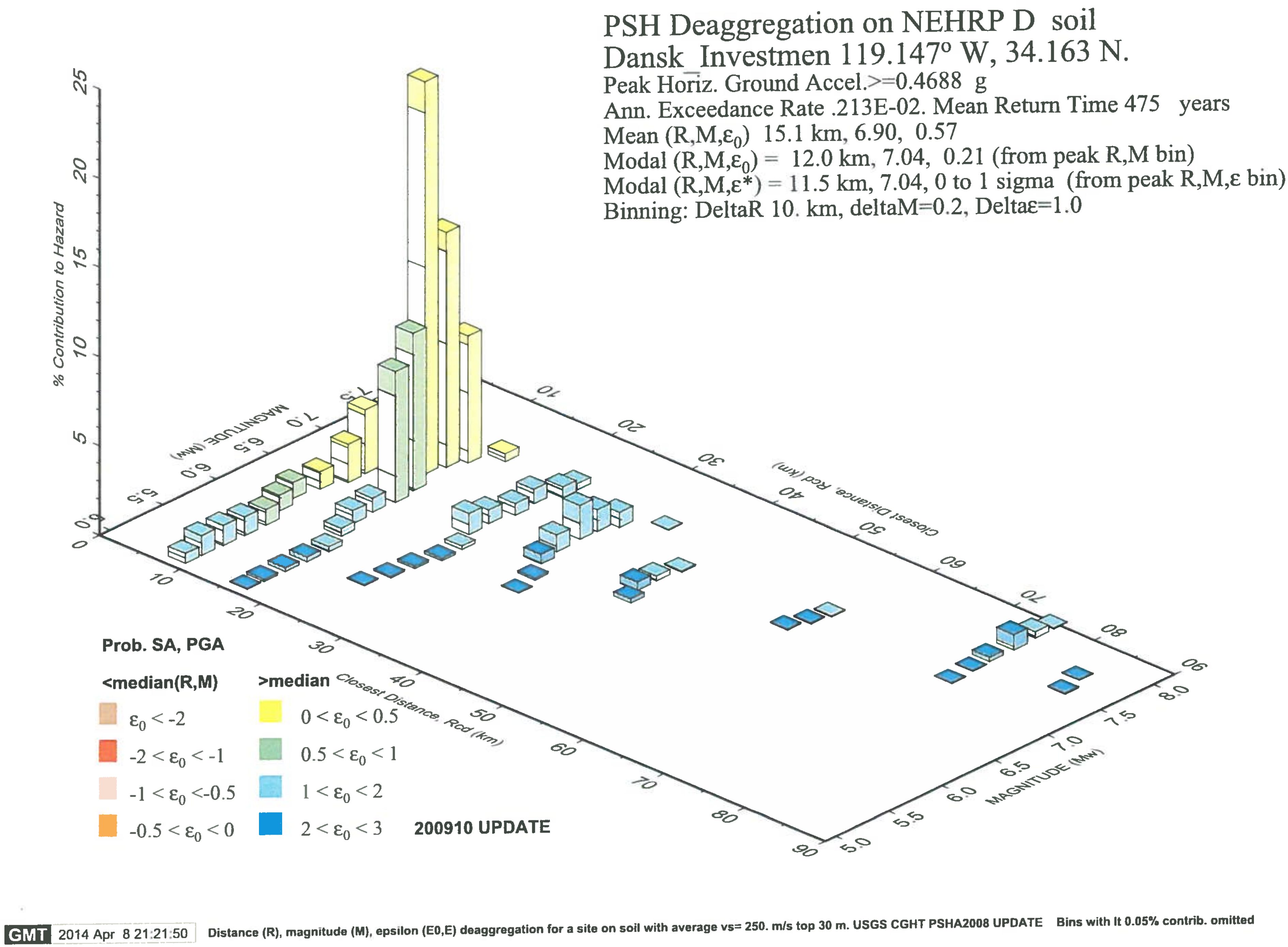
Plate B- 14

Appendix C

Seismicity Study


PSH Deaggregation on NEHRP D soil
Dansk_Investmen 119.147° W, 34.163 N.
Peak Horiz. Ground Accel.>=0.4688 g
Ann. Exceedance Rate .213E-02. Mean Return Time 475 years
Mean (R,M,ε0) 15.1 km, 6.90, 0.57
Modal (R,M,ε0) = 12.0 km, 7.04, 0.21 (from peak R,M bin)
Modal (R,M,ε*) = 11.5 km, 7.04, 0 to 1 sigma (from peak R,M,ε bin)
Binning: DeltaR 10. km, deltaM=0.2, Deltaε=1.0
% Contribution to Hazard
Closest Distance, Rcd (km)
MAGNITUDE (Mw)
Prob. SA, PGA
<median(R,M)
>median
ε0 < -2
-2 < ε0 < -1
-1 < ε0 <-0.5
-0.5 < ε0 < 0
0 < ε0 < 0.5
0.5 < ε0 < 1
1 < ε0 < 2
2 < ε0 < 3
200910 UPDATE
GMT 2014 Apr 8 21:21:50
Distance (R), magnitude (M), epsilon (E0,E) deaggregation for a site on soil with average vs= 250. m/s top 30 m. USGS CGHT PSHA2008 UPDATE
Bins with lt 0.05% contrib. omitted

USGS Design Maps Summary Report

User–Specified Input

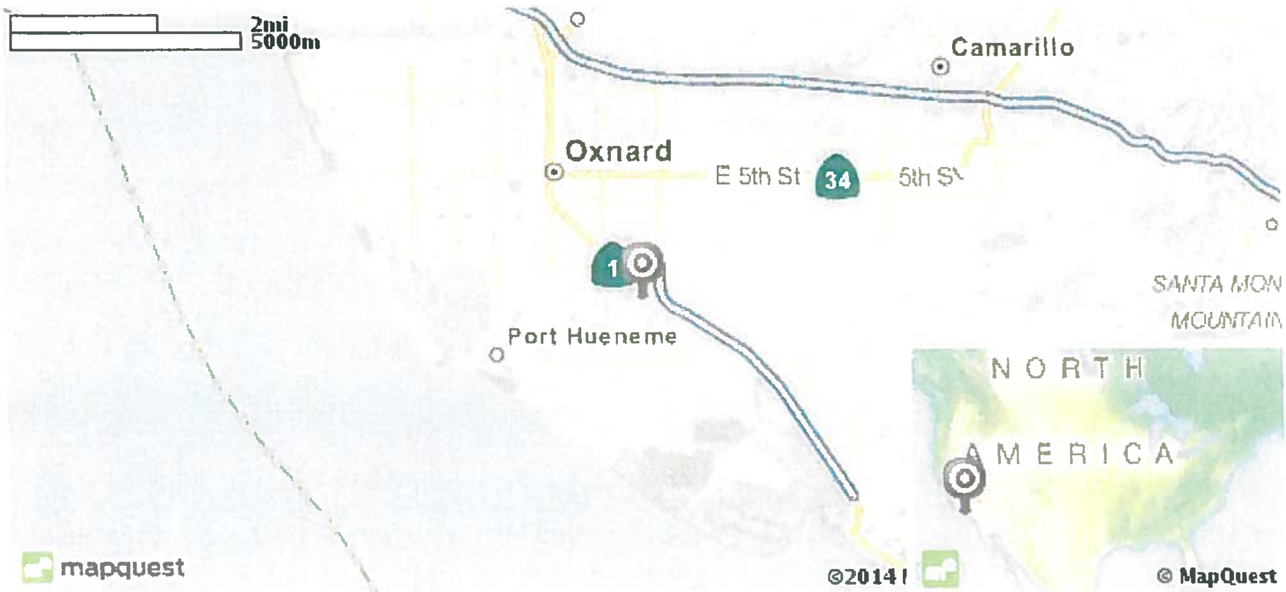
Report Title Dansk Investments
Tue April 8, 2014 21:24:08 UTC

Building Code Reference Document ASCE 7-10 Standard
(which utilizes USGS hazard data available in 2008)

Site Coordinates 34.16335°N, 119.14738°W

Site Soil Classification Site Class D – "Stiff Soil"

Risk Category I/II/III

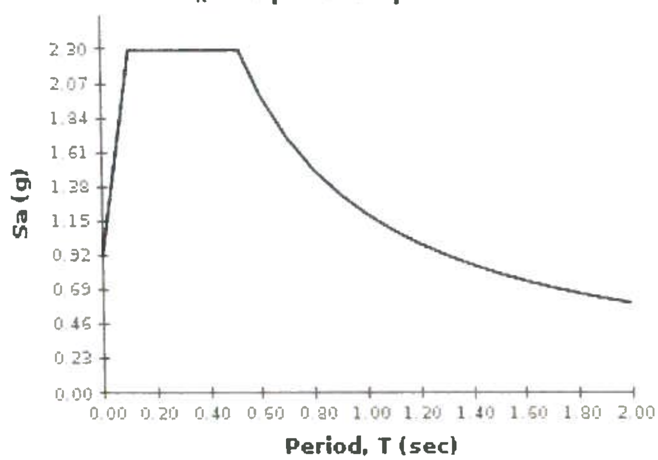


USGS–Provided Output

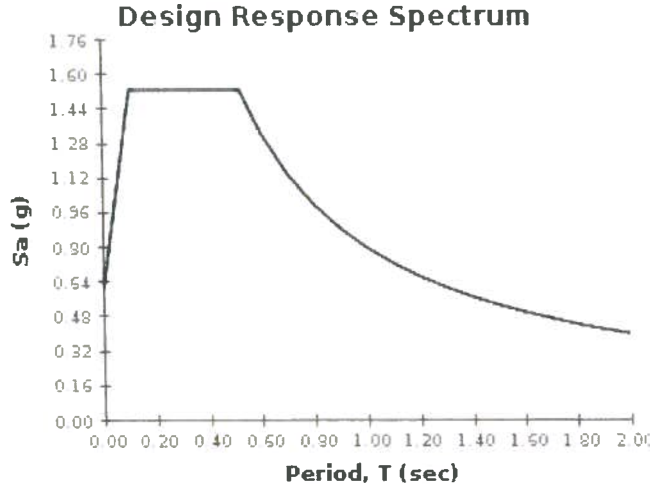
S_S =	2.293 g	S_{MS} =	2.293 g	S_{DS} =	1.528 g
S_1 =	0.797 g	S_{M1} =	1.196 g	S_{D1} =	0.797 g

For information on how the SS and S1 values above have been calculated from probabilistic (risk-targeted) and deterministic ground motions in the direction of maximum horizontal response, please return to the application and select the "2009 NEHRP" building code reference document.

MCE$_R$ Response Spectrum



Design Response Spectrum



For PGA$_M$, T_L, C_{RS}, and C_{R1} values, please view the detailed report

USGS Design Maps Detailed Report

ASCE 7-10 Standard (34.16335°N, 119.14738°W)

Site Class D – "Stiff Soil", Risk Category I/II/III

Section 11.4.1 — Mapped Acceleration Parameters

Note: Ground motion values provided below are for the direction of maximum horizontal spectral response acceleration. They have been converted from corresponding geometric mean ground motions computed by the USGS by applying factors of 1.1 (to obtain S_S) and 1.3 (to obtain S_1). Maps in the 2010 ASCE-7 Standard are provided for Site Class B. Adjustments for other Site Classes are made, as needed, in Section 11.4.3.

From Figure 22-1 [1] $S_S = 2.293$ g

From Figure 22-2 [2] $S_1 = 0.797$ g

Section 11.4.2 — Site Class

The authority having jurisdiction (not the USGS), site-specific geotechnical data, and/or the default has classified the site as Site Class D, based on the site soil properties in accordance with Chapter 20.

Table 20.3-1 Site Classification

Site Class	$\bar{v}_S$	$\bar{N}$ or $\bar{N}_{ch}$	$\bar{s}_u$
A. Hard Rock	>5,000 ft/s	N/A	N/A
B. Rock	2,500 to 5,000 ft/s	N/A	N/A
C. Very dense soil and soft rock	1,200 to 2,500 ft/s	>50	>2,000 psf
D. Stiff Soil	600 to 1,200 ft/s	15 to 50	1,000 to 2,000 psf
E. Soft clay soil	<600 ft/s	<15	<1,000 psf
	Any profile with more than 10 ft of soil having the characteristics: • Plasticity index $PI > 20$, • Moisture content $w \geq 40\%$, and • Undrained shear strength $\bar{s}_u < 500$ psf		
F. Soils requiring site response analysis in accordance with Section 21.1	See Section 20.3.1		

For SI: 1ft/s = 0.3048 m/s 1lb/ft² = 0.0479 kN/m²

Section 11.4.3 — Site Coefficients and Risk-Targeted Maximum Considered Earthquake (MCE_R) Spectral Response Acceleration Parameters

Table 11.4-1: Site Coefficient F_a

Site Class	Mapped MCE_R Spectral Response Acceleration Parameter at Short Period				
	$S_S \leq 0.25$	$S_S = 0.50$	$S_S = 0.75$	$S_S = 1.00$	$S_S \geq 1.25$
A	0.8	0.8	0.8	0.8	0.8
B	1.0	1.0	1.0	1.0	1.0
C	1.2	1.2	1.1	1.0	1.0
D	1.6	1.4	1.2	1.1	$\boxed{1.0}$
E	2.5	1.7	1.2	0.9	0.9
F	See Section 11.4.7 of ASCE 7				

Note: Use straight-line interpolation for intermediate values of S_S

For Site Class = D and S_S = 2.293 g, F_a = 1.000

Table 11.4-2: Site Coefficient F_v

Site Class	Mapped MCE_R Spectral Response Acceleration Parameter at 1-s Period				
	$S_1 \leq 0.10$	$S_1 = 0.20$	$S_1 = 0.30$	$S_1 = 0.40$	$S_1 \geq 0.50$
A	0.8	0.8	0.8	0.8	0.8
B	1.0	1.0	1.0	1.0	1.0
C	1.7	1.6	1.5	1.4	1.3
D	2.4	2.0	1.8	1.6	$\boxed{1.5}$
E	3.5	3.2	2.8	2.4	2.4
F	See Section 11.4.7 of ASCE 7				

Note: Use straight-line interpolation for intermediate values of S_1

For Site Class = D and S_1 = 0.797 g, F_v = 1.500

Equation (11.4-1): $S_{MS} = F_a S_S = 1.000 \times 2.293 = 2.293$ g

Equation (11.4-2): $S_{M1} = F_v S_1 = 1.500 \times 0.797 = 1.196$ g

Section 11.4.4 — Design Spectral Acceleration Parameters

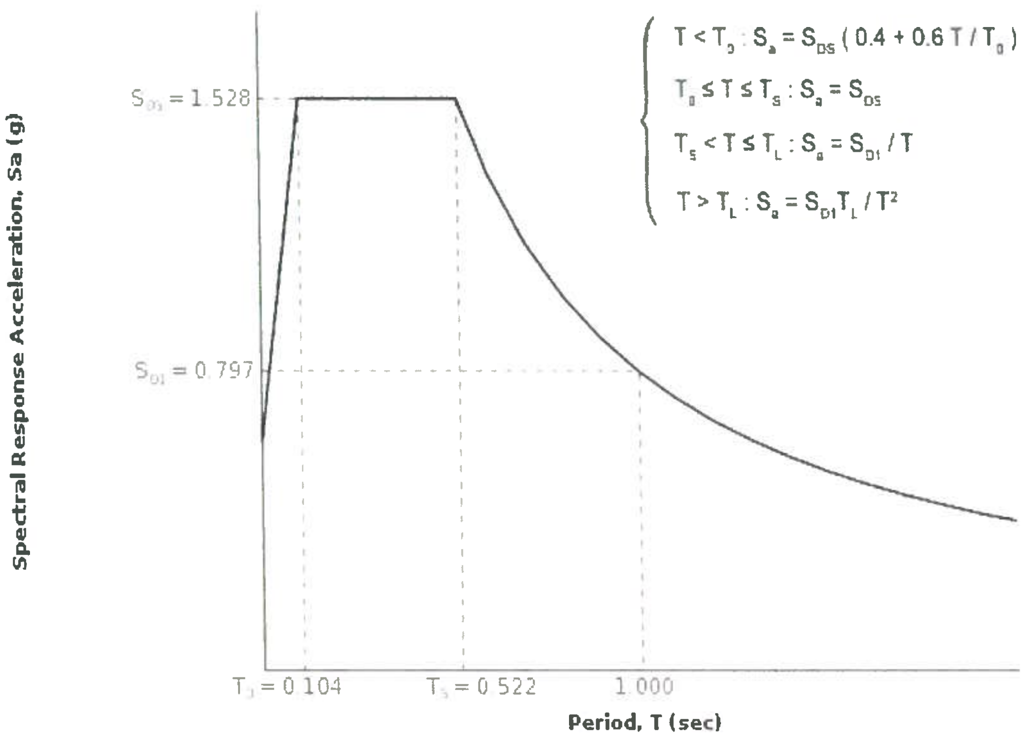
Equation (11.4-3): $S_{DS} = ⅔ S_{MS} = ⅔ \times 2.293 = 1.528$ g

Equation (11.4-4): $S_{D1} = ⅔ S_{M1} = ⅔ \times 1.196 = 0.797$ g

Section 11.4.5 — Design Response Spectrum

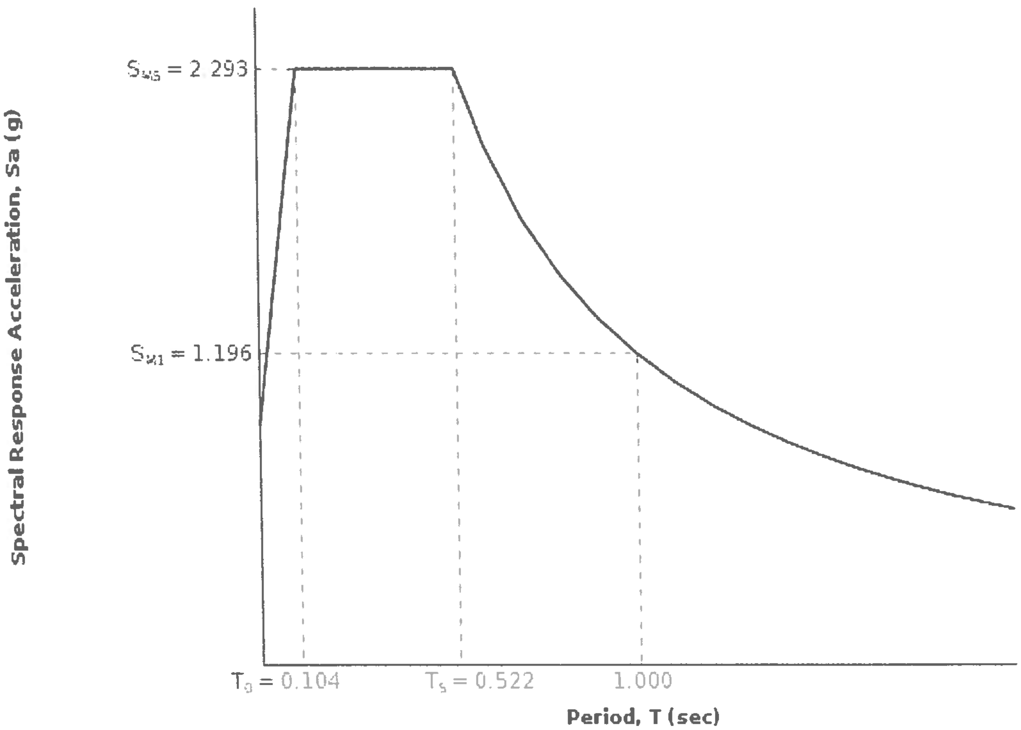
From Figure 22-12 [3] T_L = 8 seconds

Figure 11.4-1: Design Response Spectrum



Section 11.4.6 — Risk-Targeted Maximum Considered Earthquake (MCE_R) Response Spectrum

The MCE_R Response Spectrum is determined by multiplying the design response spectrum above by 1.5.



Section 11.8.3 — Additional Geotechnical Investigation Report Requirements for Seismic Design Categories D through F

From Figure 22-7 [4] PGA = 0.861

Equation (11.8-1): $PGA_M = F_{PGA}PGA = 1.000 \times 0.861 = 0.861$ g

Table 11.8-1: Site Coefficient F_{PGA}

Site Class	Mapped MCE Geometric Mean Peak Ground Acceleration, PGA				
	PGA ≤ 0.10	PGA = 0.20	PGA = 0.30	PGA = 0.40	PGA ≥ 0.50
A	0.8	0.8	0.8	0.8	0.8
B	1.0	1.0	1.0	1.0	1.0
C	1.2	1.2	1.1	1.0	1.0
D	1.6	1.4	1.2	1.1	1.0
E	2.5	1.7	1.2	0.9	0.9
F	See Section 11.4.7 of ASCE 7				

Note: Use straight-line interpolation for intermediate values of PGA

For Site Class = D and PGA = 0.861 g, F_{PGA} = 1.000

Section 21.2.1.1 — Method 1 (from Chapter 21 – Site-Specific Ground Motion Procedures for Seismic Design)

From Figure 22-17 [5] C_{RS} = 0.931

From Figure 22-18 [6] C_{R1} = 0.942

Section 11.6 — Seismic Design Category

Table 11.6-1 Seismic Design Category Based on Short Period Response Acceleration Parameter

VALUE OF S_{DS}	RISK CATEGORY		
	I or II	III	IV
$S_{DS} < 0.167g$	A	A	A
$0.167g \le S_{DS} < 0.33g$	B	B	C
$0.33g \le S_{DS} < 0.50g$	C	C	D
$0.50g \le S_{DS}$	D	D	D

For Risk Category = I and S_{DS} = 1.528 g, Seismic Design Category = D

Table 11.6-2 Seismic Design Category Based on 1-S Period Response Acceleration Parameter

VALUE OF S_{D1}	RISK CATEGORY		
	I or II	III	IV
$S_{D1} < 0.067g$	A	A	A
$0.067g \le S_{D1} < 0.133g$	B	B	C
$0.133g \le S_{D1} < 0.20g$	C	C	D
$0.20g \le S_{D1}$	D	D	D

For Risk Category = I and S_{D1} = 0.797 g, Seismic Design Category = D

Note: When S_1 is greater than or equal to 0.75g, the Seismic Design Category is **E** for buildings in Risk Categories I, II, and III, and **F** for those in Risk Category IV, irrespective of the above.

Seismic Design Category ≡ "the more severe design category in accordance with Table 11.6-1 or 11.6-2" = E

Note: See Section 11.6 for alternative approaches to calculating Seismic Design Category.

References

1. *Figure 22-1*: http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-1.pdf
2. *Figure 22-2*: http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-2.pdf
3. *Figure 22-12*: http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-12.pdf
4. *Figure 22-7*: http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-7.pdf
5. *Figure 22-17*: http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-17.pdf
6. *Figure 22-18*: http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-18.pdf

Appendix D

Liquefaction Evaluation

Input Data in Shaded Areas

Client Number	4429	**Client Name**	Dansk
Drill Date	3/4/14	**Boring**	B-1

a_{max}/g	1.02		N Adjustments - Liners	1.20	Field Groundwater Depth, Ft	7.5	(current)
Magnitude	6.90		N Adjustments - Hole Diameter	1.00	Method (S = SPT)	S	
Groundwater Depth, Ft	7.0	(historic high)	N Adjustments - Energy	1.00	Unit Weight of Water	0.0624	
Reference Pressure, p_a	2.00		Nc	10.08			

advanced geotechnical services, inc.

Soil Types ((terminology specific to this computer program): SM = Sandy Silt, MG = Silty Gravel, MS = Silty Sand, G = Clean Gravel, S = Clean Sand, C = Clay to Silt ('C' indicates not susceptible to liquefaction based on other testing)
One input depth corresponds to groundwater depth. NL = Not Susceptible to Liquefaction N values adjusted to SPT values

References

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Liquefaction Evaluation

Depth, Feet	Total Unit Weight, γ_t	Overburden Pressure, σ_v	LIQ Effective Overburden Pressure, σ_v'	Field Effective Overburden Pressure, σ_v'	C_N	r_d	$CSR_{M=7.5}$	Soil Type	% Fines	N	$(N_1)_{60}$	Adjusted for Fines Content $(N_1)_{60}$	Rod Length Adjust	K_s	$CRR_{M=7.5}$	Safety Factor, SPT Method	Volumetric Strain, %	Settlement, inch	Cumulative Settlement, inch
0.0		0.00	0.00	0.00															
3.5	0.110	0.38	0.38	0.38	1.70	0.99	0.532	MS	35.0	8.7	13.3	20.9	0.75	1.00	0.228	Above GWT	0.000	0.000	0.000
7.0		0.77	0.77	0.77															
8.5	0.125	0.95	0.86	0.89	1.50	0.98	0.584	MS	4.8	8.7	13.3	13.3	0.85	1.00	0.145	0.25	0.021	0.763	0.763
10.0		1.14	0.95	0.99															
12.5	0.125	1.45	1.11	1.14	1.32	0.97	0.683	MS	4.8	12.0	16.2	16.2	0.85	1.00	0.176	0.26	0.019	1.120	1.883
15.0		1.77	1.27	1.30															
17.5	0.125	2.08	1.42	1.46	1.17	0.96	0.753	MS	4.8	16.0	21.4	21.4	0.95	1.00	0.234	0.31	0.015	0.891	2.774
20.0		2.39	1.58	1.61															
22.5	0.125	2.70	1.74	1.77	1.06	0.95	0.748	MS	44.1	13.0	15.8	23.9	0.95	1.00	0.268	0.36	0.013	0.785	3.559
25.0		3.02	1.89	1.92															
27.5	0.125	3.33	2.05	2.08	0.98	0.93	0.761	C	96.0	3.0	3.5	9.2	1.00	1.00	0.102	NL	0.000	0.000	3.559
30.0		3.64	2.21	2.24															
32.5	0.125	3.95	2.36	2.39	0.91	0.91	0.763	C	67.3	16.0	17.5	26.1	1.00	0.98	0.300	NL	0.000	0.000	3.559
35.0		4.27	2.52	2.55															
37.5	0.125	4.58	2.68	2.71	0.86	0.87	0.760	C	96.9	10.0	10.3	17.4	1.00	0.97	0.183	NL	0.000	0.000	3.559
40.0		4.89	2.83	2.86															
42.5	0.125	5.20	2.99	3.02	0.81	0.83	0.751	C	96.9	17.0	16.6	24.9	1.00	0.95	0.270	NL	0.000	0.000	3.559
45.0		5.52	3.15	3.18															
47.5	0.125	5.83	3.30	3.33	0.77	0.78	0.740	C	65.9	16.0	14.9	22.8	1.00	0.94	0.237	NL	0.000	0.000	3.559
50.0		6.14	3.46	3.49															
50.8	0.125	6.24	3.51	3.54	0.75	0.74	0.732	C	65.9	5.0	4.5	10.4	1.00	0.93	0.105	NL	0.000	0.000	3.559
51.5		6.33	3.55	3.58															

Total, Inches = 3.56

Input Data in Shaded Areas

Client Number	4429	**Client Name**	Dansk
Drill Date	3/4/14	**Boring**	B-2

a_{max}/g	1.02	N Adjustments - Liners	1.20	Field Groundwater Depth, Ft	7	(current)
Magnitude	6.90	N Adjustments - Hole Diameter	1.00	Method (S = SPT)	S	
Groundwater Depth, Ft	7.0 (historic high)	N Adjustments - Energy	1.00	Unit Weight of Water	0.0624	
Reference Pressure, p_a	2.00	Nc	10.08			

advanced geotechnical services, inc.

Soil Types ((terminology specific to this computer program): SM = Sandy Silt, MG = Silty Gravel, MS = Silty Sand, G = Clean Gravel, S = Clean Sand, C = Clay to Silt ('C' indicates not susceptible to liquefaction based on other testing)
One input depth corresponds to groundwater depth. NL = Not Susceptible to Liquefaction N values adjusted to SPT values

References

Seed, H. B., Tokimatsu, K., (1985), *Influence of SPT Procedures in Soil Liquefaction Resistance Evaluations*, Journal of Geotechnical Engineering, ASCE, Vol. 111, No. 12, pp. 1425 - 1445.
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Youd, T. L. et al (2001), *Summary Report on Evaluation of Liquefaction Resistance of Soils, Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, Vol. 127, No. 10, pp. 817-833.

Liquefaction Evaluation

Depth, Feet	Total Unit Weight, γ_t	Overburden Pressure, σ_v	LIQ Effective Overburden Pressure, σ_v'	Field Effective Overburden Pressure, σ_v'	C_N	r_d	$CSR_{M=7.5}$	Soil Type	% Fines	N	$(N_1)_{60}$	Adjusted for Fines Content $(N_1)_{60}$	Rod Length Adjust	K_s	$CRR_{M=7.5}$	Safety Factor, SPT Method	Volumetric Strain, %	Settlement, inch	Cumulative Settlement, inch
0.0		0.00	0.00	0.00															
3.5	0.110	0.38	0.38	0.38	1.70	0.99	0.532	MS	0.0	12.0	18.4	18.4	0.75	1.00	0.200	Above GWT	0.000	0.000	0.000
7.0		0.77	0.77	0.77															
8.5	0.125	0.95	0.86	0.86	1.52	0.98	0.584	MS	5.0	12.0	18.7	18.7	0.85	1.00	0.203	0.35	0.017	0.618	0.618
10.0		1.14	0.95	0.95															
12.5	0.125	1.45	1.11	1.11	1.34	0.97	0.683	MS	5.0	18.0	24.6	24.7	0.85	1.00	0.280	0.41	0.013	0.752	1.370
15.0		1.77	1.27	1.27															
17.0	0.125	2.02	1.39	1.39	1.20	0.96	0.748	MS	7.8	25.0	34.2	34.8	0.95	1.00	0.551	NL	0.000	0.000	1.370
19.0		2.27	1.52	1.52															
22.0	0.125	2.64	1.71	1.71	1.08	0.95	0.746	MS	30.3	8.0	9.9	16.2	0.95	1.00	0.176	0.24	0.019	1.344	2.714
25.0		3.02	1.89	1.89															
27.5	0.125	3.33	2.05	2.05	0.99	0.93	0.761	C	83.2	4.0	4.7	10.7	1.00	1.00	0.117	NL	0.000	0.000	2.714
30.0		3.64	2.21	2.21															
32.5	0.125	3.95	2.36	2.36	0.92	0.91	0.763	C	66.0	9.0	9.9	16.9	1.00	0.98	0.181	NL	0.000	0.000	2.714
35.0		4.27	2.52	2.52															
37.5	0.125	4.58	2.68	2.68	0.86	0.87	0.760	C	95.0	10.0	10.4	17.4	1.00	0.97	0.184	NL	0.000	0.000	2.714
40.0		4.89	2.83	2.83															
42.5	0.125	5.20	2.99	2.99	0.82	0.83	0.751	C	74.0	15.0	14.7	22.7	1.00	0.95	0.239	NL	0.000	0.000	2.714
45.0		5.52	3.15	3.15															
47.5	0.125	5.83	3.30	3.30	0.78	0.78	0.740	C	87.6	12.0	11.2	18.4	1.00	0.94	0.188	NL	0.000	0.000	2.714
50.0		6.14	3.46	3.46															
50.8	0.125	6.24	3.51	3.51	0.76	0.74	0.732	C	87.6	7.0	6.3	12.6	1.00	0.93	0.127	NL	0.000	0.000	2.714
51.5		6.33	3.55	3.55															

Total, Inches = 2.71

Input Data in Shaded Areas

Client Number	4429	**Client Name**	Dansk
Drill Date	3/5/14	**Boring**	B-3

a_{max}/g	1.02		N Adjustments - Liners	1.20	Field Groundwater Depth, Ft	10	(current)
Magnitude	6.90		N Adjustments - Hole Diameter	1.00	Method (S = SPT)	S	
Groundwater Depth, Ft	7.0	(historic high)	N Adjustments - Energy	1.00	Unit Weight of Water	0.0624	
Reference Pressure, p_a	2.00		Nc	10.08			

Soil Types ((terminology specific to this computer program): SM = Sandy Silt, MG = Silty Gravel, MS = Silty Sand, G = Clean Gravel, S = Clean Sand, C = Clay to Silt ('C' indicates not susceptible to liquefaction based on other testing)
One input depth corresponds to groundwater depth. NL = Not Susceptible to Liquefaction N values adjusted to SPT values

References

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Youd, T. L. et al (2001), *Summary Report on Evaluation of Liquefaction Resistance of Soils, Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, Vol. 127, No. 10, pp. 817-833.

Liquefaction Evaluation

Depth, Feet	Total Unit Weight, γ_t	Overburden Pressure, σ_v	LIQ Effective Overburden Pressure, σ_v'	Field Effective Overburden Pressure, σ_v'	C_N	r_d	$CSR_{M=7.5}$	Soil Type	% Fines	N	$(N_1)_{60}$	Adjusted for Fines Content $(N_1)_{60}$	Rod Length Adjust	K_s	$CRR_{M=7.5}$	Safety Factor, SPT Method	Volumetric Strain, %	Settlement, Inch	Cumulative Settlement, inch
0.0		0.00	0.00	0.00															
3.5	0.110	0.38	0.38	0.38	1.70	0.99	0.532	MS	35.0	8.7	13.3	20.9	0.75	1.00	0.228	Above GWT	0.000	0.000	0.000
7.0		0.77	0.77	0.77															
8.5	0.125	0.95	0.86	0.95	1.45	0.98	0.584	MS	35.0	8.7	12.8	20.3	0.85	1.00	0.221	0.38	0.016	0.567	0.567
10.0		1.14	0.95	1.14															
12.5	0.125	1.45	1.11	1.30	1.24	0.97	0.683	MS	0.0	14.0	17.7	17.7	0.85	1.00	0.193	0.28	0.018	1.062	1.629
15.0		1.77	1.27	1.45															
17.5	0.125	2.08	1.42	1.61	1.11	0.96	0.753	MS	21.0	16.0	20.3	25.9	0.95	1.00	0.301	0.40	0.012	0.704	2.333
20.0		2.39	1.58	1.77															
22.5	0.125	2.70	1.74	1.92	1.02	0.95	0.748	C	64.6	10.0	11.6	18.9	0.95	1.00	0.206	NL	0.000	0.000	2.333
25.0		3.02	1.89	2.08															
27.5	0.125	3.33	2.05	2.24	0.95	0.93	0.761	C	64.6	4.0	4.5	10.4	1.00	1.00	0.114	NL	0.000	0.000	2.333
30.0		3.64	2.21	2.39															
32.5	0.125	3.95	2.36	2.55	0.89	0.91	0.763	C	64.6	6.0	6.4	12.7	1.00	0.98	0.136	NL	0.000	0.000	2.333
35.0		4.27	2.52	2.71															
37.5	0.125	4.58	2.68	2.86	0.84	0.87	0.760	C	92.3	5.0	5.0	11.0	1.00	0.97	0.117	NL	0.000	0.000	2.333
40.0		4.89	2.83	3.02															
42.5	0.125	5.20	2.99	3.18	0.79	0.83	0.751	C	92.3	22.0	20.9	30.1	1.00	0.95	0.537	NL	0.000	0.000	2.333
45.0		5.52	3.15	3.33															
47.5	0.125	5.83	3.30	3.49	0.76	0.78	0.740	C	88.8	15.0	13.6	21.4	1.00	0.94	0.219	NL	0.000	0.000	2.333
50.0		6.14	3.46	3.65															
50.8	0.125	6.24	3.51	3.69	0.74	0.74	0.732	C	88.8	17.0	15.0	23.0	1.00	0.93	0.236	NL	0.000	0.000	2.333
51.5		6.33	3.55	3.74															

Total, Inches = 2.33

Input Data in Shaded Areas

Client Number	4429	**Client Name**	Dansk
Drill Date	3/19/14	**Boring**	B-8

a_{max}/g	1.02		N Adjustments - Liners	1.20	Field Groundwater Depth, Ft	7	(current)
Magnitude	6.90		N Adjustments - Hole Diameter	1.00	Method (S = SPT)	S	
Groundwater Depth, Ft	7.0	(historic high)	N Adjustments - Energy	1.00	Unit Weight of Water	0.0624	
Reference Pressure, p_a	2.00		Nc	10.08			

Soil Types ((terminology specific to this computer program): SM = Sandy Silt, MG = Silty Gravel, MS = Silty Sand, G = Clean Gravel, S = Clean Sand, C = Clay to Silt ('C' indicates not susceptible to liquefaction based on other testing)
One input depth corresponds to groundwater depth. NL = Not Susceptible to Liquefaction N values adjusted to SPT values

References

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Youd, T. L. et al (2001), *Summary Report on Evaluation of Liquefaction Resistance of Soils, Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, Vol. 127, No. 10, pp. 817-833.

Liquefaction Evaluation

Depth, Feet	Total Unit Weight, γ_t	Overburden Pressure, σ_v	LIQ Effective Overburden Pressure, σ_v'	Field Effective Overburden Pressure, σ_v'	C_N	r_d	$CSR_{M=7.5}$	Soil Type	% Fines	N	$(N_1)_{60}$	Adjusted for Fines Content $(N_1)_{60}$	Rod Length Adjust	K_s	$CRR_{M=7.5}$	Safety Factor, SPT Method	Volumetric Strain, %	Settlement, inch	Cumulative Settlement, inch
0.0		0.00	0.00	0.00															
3.5	0.110	0.38	0.38	0.38	1.70	0.99	0.532	MS	0.0	8.0	12.2	12.2	0.75	1.00	0.134	Above GWT	0.000	0.000	0.000
7.0		0.77	0.77	0.77															
8.5	0.125	0.95	0.86	0.86	1.52	0.98	0.584	MS	0.0	8.0	12.4	12.4	0.85	1.00	0.136	0.23	0.022	0.806	0.806
10.0		1.14	0.95	0.95															
12.5	0.125	1.45	1.11	1.11	1.34	0.97	0.683	MS	0.0	14.0	19.2	19.2	0.85	1.00	0.208	0.31	0.017	1.010	1.816
15.0		1.77	1.27	1.27															
17.5	0.125	2.08	1.42	1.42	1.19	0.96	0.753	MS	43.7	6.0	8.1	14.7	0.95	1.00	0.161	0.21	0.020	1.177	2.993
20.0		2.39	1.58	1.58															
22.5	0.125	2.70	1.74	1.74	1.07	0.95	0.748	C	68.3	11.0	13.5	21.1	0.95	1.00	0.231	NL	0.000	0.000	2.993
25.0		3.02	1.89	1.89															
27.5	0.125	3.33	2.05	2.05	0.99	0.93	0.761	C	68.3	4.0	4.7	10.7	1.00	1.00	0.117	NL	0.000	0.000	2.993
30.0		3.64	2.21	2.21															
32.5	0.125	3.95	2.36	2.36	0.92	0.91	0.763	C	68.3	10.0	11.0	18.2	1.00	0.98	0.195	NL	0.000	0.000	2.993
35.0		4.27	2.52	2.52															
37.5	0.125	4.58	2.68	2.68	0.86	0.87	0.760	C	77.8	11.0	11.4	18.7	1.00	0.97	0.197	NL	0.000	0.000	2.993
40.0		4.89	2.83	2.83															
42.5	0.125	5.20	2.99	2.99	0.82	0.83	0.751	C	77.8	14.0	13.7	21.5	1.00	0.95	0.224	NL	0.000	0.000	2.993
45.0		5.52	3.15	3.15															
47.5	0.125	5.83	3.30	3.30	0.78	0.78	0.740	C	95.5	11.0	10.3	17.3	1.00	0.94	0.176	NL	0.000	0.000	2.993
50.0		6.14	3.46	3.46															
50.8	0.125	6.24	3.51	3.51	0.76	0.74	0.732	C	95.5	6.0	5.4	11.5	1.00	0.93	0.117	NL	0.000	0.000	2.993
51.5		6.33	3.55	3.55															

Total, Inches = 2.99

Appendix E
References

The following list includes the citations of references referred to in this report.

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Appendix F

Report Figures and Plates

Reference: Google Earth 2014

N

No Scale

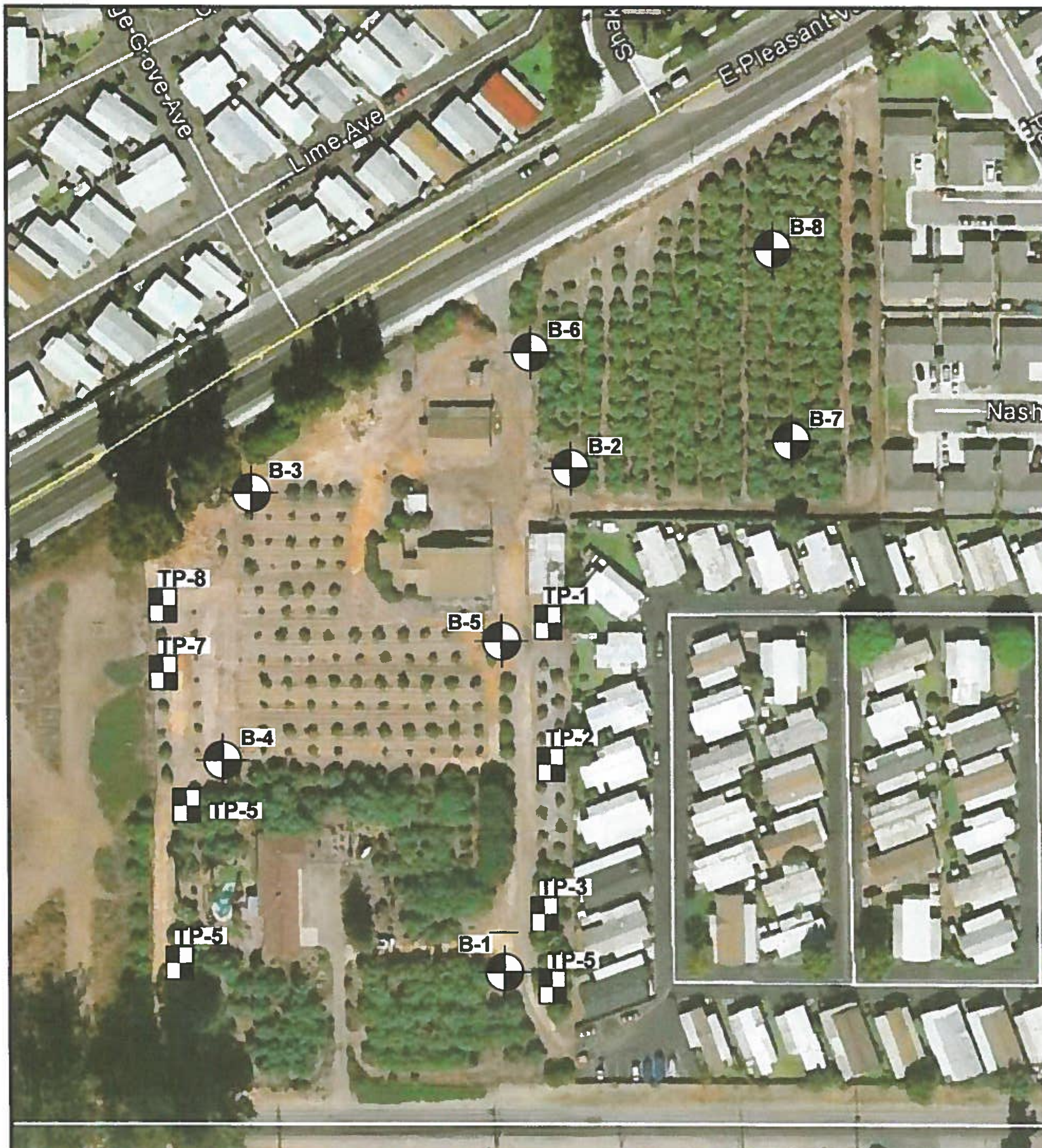
Advanced Geotechnical Services

SITE LOCATION MAP

Dansk Investments
2250 East Pleasant Valley Road
Oxnard, California

Client # 4429
Report # 9404

FIGURE 1



EXPLANATION

B-6 APPROXIMATE LOCATION OF EXPLORATORY BORING

TP-5 APPROXIMATE LOCATION OF EXPLORATORY TEST PIT

N

NO SCALE

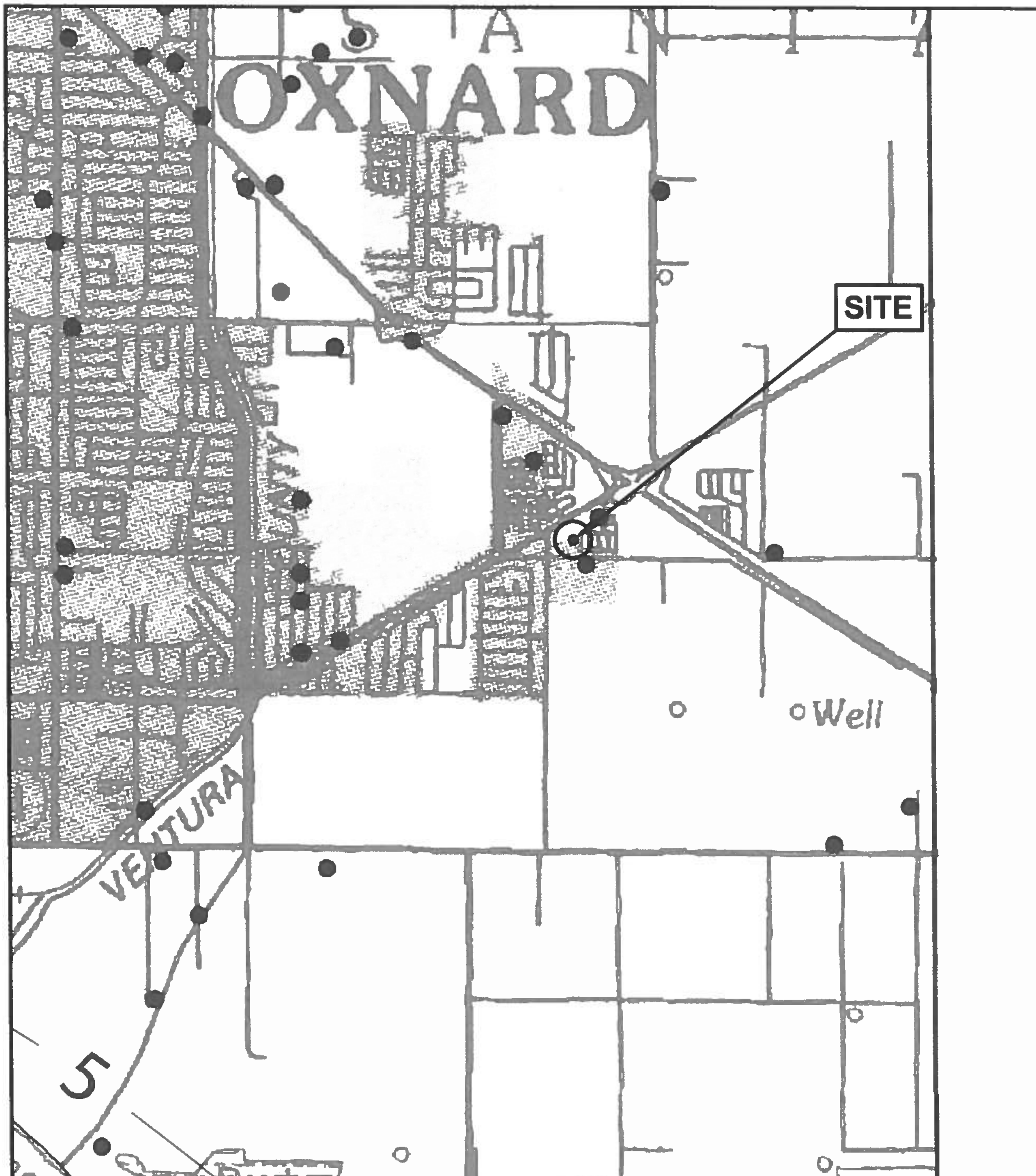
Advanced Geotechnical Services

EXISTING SITE PLAN

Dansk Investments
2250 East Pleasant Valley Road
Oxnard, California

Client # 4429
Report # 9404

FIGURE 2



Reference: CDMG, 2002, Seismic Hazard Zone Report 052

Scale: 1" = ½ mile

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DEPTH TO HISTORICALLY HIGH GROUNDWATER

Dansk Investments 2250 East Pleasant Valley Road Oxnard, California	
Client # 4429 Report # 9404	FIGURE 3

Static headtest: 6" water, 24 hr. presoak, 12" square hole, 4 hr. test period

Job Address: **2250 East Pleasant Valley Road** Nearest Cross Street: **Etting Road**

Owner/Builder: **Dansk Investments**

Diameter of Hole: **12"** Testing Laboratory: **AGS, Inc**

Test Performed By: **OC** Parcel #: - -

H = Distance from Reference Point to Water Level at Each Observation

H = Drop in Water Level Between Observations T = Time Interval Between Observations

R = Percolation Rate, Minutes/Inch

Date and Time of Soaking: **3-5-2014 9:00 am** Weather Conditions: **Sunny**

Date and Time of Testing: **3-6-2014 10:00 am** Temperature (Aprroximate): **72° F**

TEST HOLE TP-1 Depth[2] **6'** Stabilized Rate **0.17** min/inch

TIME	H (inch)*	H	T	R (Minutes/Inch)	REMARKS
0	6	-	-	-	
1	0	6	1	0.17	
3	6*	-	-	-	
4	0	6	1	0.17	
6	6*	-	-	-	
7	0	6	1	0.17	
9	6*	-	-	-	
10	0	6	1	0.17	
12	6*	-	-	-	
13	0	6	1	0.17	

TEST HOLE TP-2 Depth[2] **6'** Stabilized Rate **5** min/inch

0	6	-	-	-	
10	1.75	4.25	10	2.3	
20	3	3	10	3.33	
30	0	3	10	3.33	
60	0 / 6*	6	30	5	
90	0 / 6*	6	30	5	
120	0 / 6*	6	30	5	
150	0 / 6*	6	30	5	
180	0 / 6*	6	30	5	
210	0 / 6*	6	30	5	
240	0 / 6*	6	30	5	

TEST HOLE TP-3 Depth[2] **6'** Stabilized Rate **0.17** min/inch

0	6	-	-	-	
1	0	6	1	0.17	
3	6*	-	-	-	
4	0	6	1	0.17	
6	6*	-	-	-	
7	0	6	1	0.17	
9	6*	-	-	-	
10	0	6	1	0.17	
12	6*	-	-	-	
13	0	6	1	0.17	

* Note time of refill to 6" head. 2 - Distance from ground surface to bottom of hole

Advanced Geotechnical Services

PERCOLATION TEST DATA SHEET 1 of 2

Dansk Investments
2250 East Pleasant Valley Road
Oxnard, California

Client # 4429
Report # 9404

FIGURE 4

Static headtest: 6" water, 24 hr. presoak, 12" square hole, 4 hr. test period

Job Address: **2250 East Pleasant Valley Road** Nearest Cross Street: **Etting Road**

Owner/Builder: **Dansk Investments**

Diameter of Hole: **12"** Testing Laboratory: **AGS, Inc**

Test Performed By: **OC** Parcel #: - -

H = Distance from Reference Point to Water Level at Each Observation

H = Drop in Water Level Between Observations T = Time Interval Between Observations

R = Percolation Rate, Minutes/Inch

Date and Time of Soaking: **3-6-2014 10:00 am** Weather Conditions: **Sunny**

Date and Time of Testing: **3-7-2014 11:00 am** Temperature (Aprroximate): **72° F**

TEST HOLE TP-5 Depth[2] **6'** Stabilized Rate **5** min/inch

TIME	H (inch)*	H	T	R (Minutes/Inch)	REMARKS
0	6	-	-	-	
10	1.75 / 6*	4.25	10	2.3	
20	2.75	3.25	10	3.1	
30	0.75 / 6*	2	10	5	
60	0 / 6*	6	30	5	
90	0 / 6*	6	30	5	
120	0 / 6*	6	30	5	
150	0 / 6*	6	30	5	
180	0 / 6*	6	30	5	
210	0 / 6*	6	30	5	
240	0 / 6*	6	30	5	

TEST HOLE TP-6 Depth[2] **6'** Stabilized Rate **13.3** min/inch

0	6	-	-	-	
10	3.75	2.25	10	4.4	
20	2.5	1.25	10	8	
30	1.75 / 6*	0.75	10	13.3	
60	2.25	3.75	30	8	
90	0 / 6*	2.25	30	13.3	
120	1.75 / 6*	4.25	30	7.1	
150	2 / 6*	4	30	7.5	
180	2 / 6*	4	30	7.5	
210	2 / 6*	4	30	7.5	
240	2 / 6*	4	30	7.5	

TEST HOLE TP-7 Depth[2] **6'** Stabilized Rate **30** min/inch

0	6	-	-	-	
10	5	1	10	10	
20	4.5	0.5	10	20	
30	4	0.5	10	20	
60	2.75	1.25	30	24	
90	1.5 / 6*	1.25	30	24	
120	4.75	1.25	30	24	
150	3.5	1.25	30	24	
180	2.5	1	30	30	
210	1.5 / 6*	1	30	30	
240	4.75	1.25	30	24	

* Note time of refill to 6" head. 2 - Distance from ground surface to bottom of hole

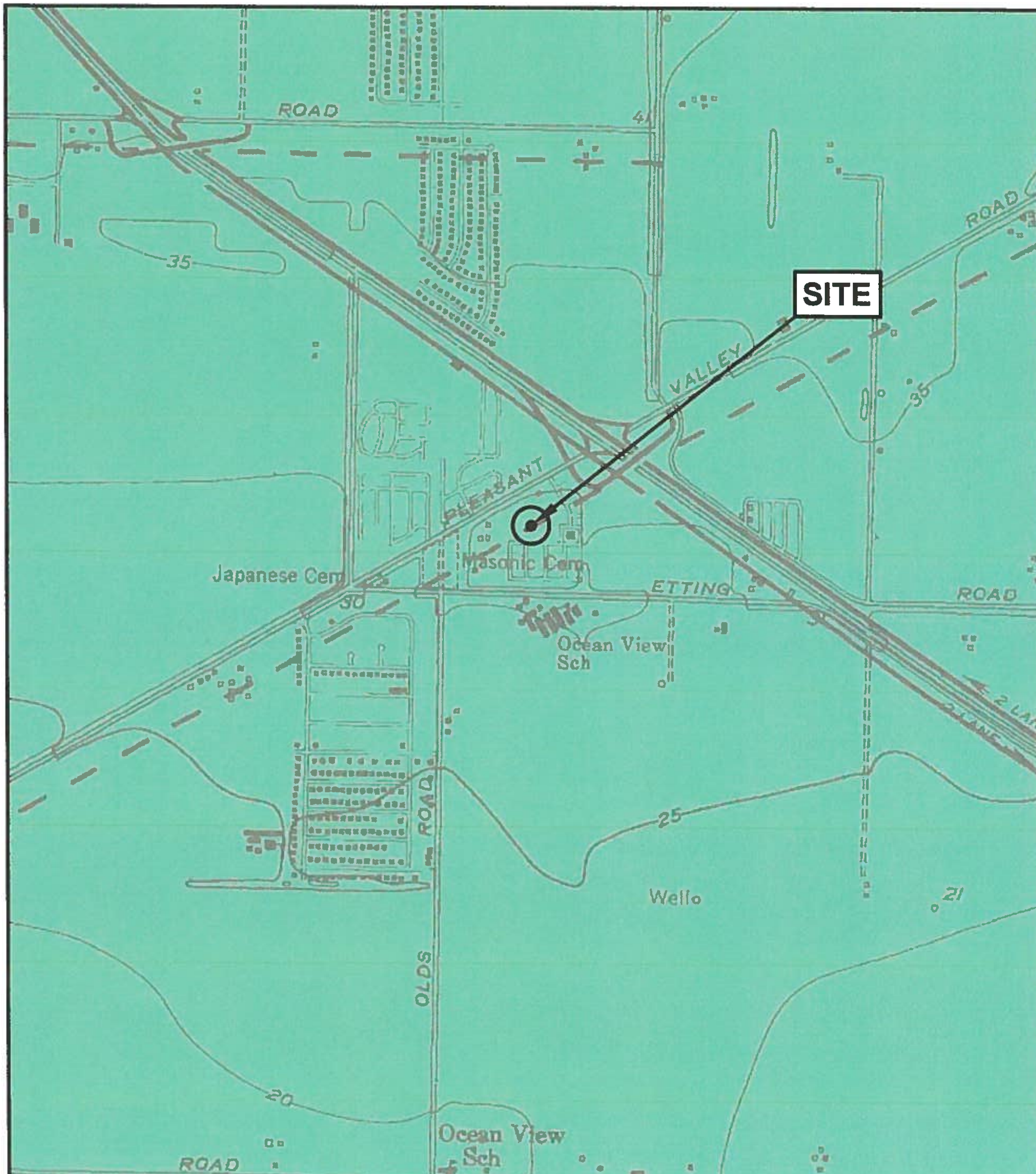
Advanced Geotechnical Services

PERCOLATION TEST DATA SHEET 2 of 2

Dansk Investments
2250 East Pleasant Valley Road
Oxnard, California

Client # 4429
Report # 9404

FIGURE 5

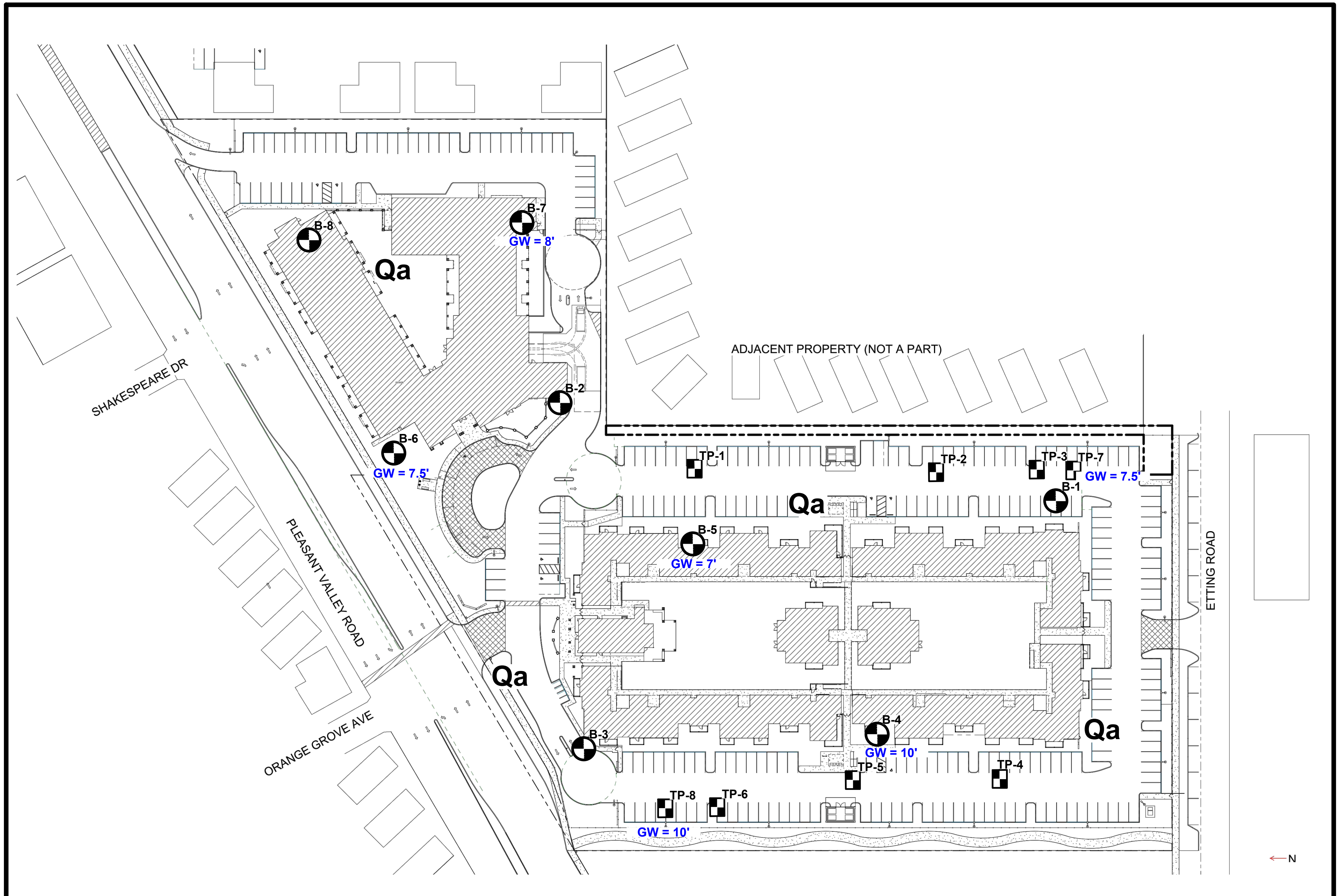


Reference: CDMG, 2002, Seismic Hazard Zones - Oxnard Quadrangle

N

Scale: 1" = $\frac{1}{4}$ mile

Advanced Geotechnical Services	**SEISMIC HAZARD ZONES MAP**	**Dansk Investments** **2250 East Pleasant Valley Road** **Oxnard, California**	
		Client # 4429 **Report # 9404**	**FIGURE 6**



EXPLANATION

TP-8	APPROXIMATE LOCATION OF EXPLORATORY TEST PIT
B-8	APPROXIMATE LOCATION OF EXPLORATORY BORING
af	ARTIFICIAL FILL
Qa	ALLUVIUM
GW = 7'	APPROXIMATE DEPTH OF GROUNDWATER AT TIME OF EXPLORATION

Advanced Geotechnical Services
5251 Verdugo Way, Suite L
Camarillo, California 93012
Office (805) 388-6162/Fax (805) 388-6167

PROPOSED SITE PLAN
Dansk Investments, LLC

Geotechnical Engineering Study
Apartment Buildings
2250 E. Pleasant Valley Road
Oxnard, California

100' 0' 100' 200'
SCALE: 1" = 100'

Client No.	4429	PLATE
Report No.	9404	1
Date	4/25/2014	
Drawing No.	9404cn4429	

Appendix G

Environmental Site Assessments, Excavation Summaries, and Human Health Screen Evaluation

Phase I Environmental Site Assessment

2295 Etting Road
Oxnard, California

Prepared for:

Dansk Investments, LLC

Prepared by:

Rincon Consultants, Inc.
March 18, 2014

rincon

Environmental Scientists Planners Engineers

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March 18, 2014
Project 13-01637

Vince Daly
Dansk Investments, LLC
6951 Campus Park Drive
Moorpark, CA 93021

Phase I Environmental Site Assessment – ASTM 13
2295 Etting Road
Oxnard, California

Dear Mr. Daly:

This report presents the findings of the Phase I Environmental Site Assessment (ESA) completed by Rincon Consultants, Inc. for 2295 Etting Road, Oxnard, California. The Phase I ESA was performed in general conformance with ASTM E 1527-13 and our proposal dated December 23, 2013.

The accompanying report presents our findings and provides an opinion regarding the potential presence of environmental site conditions. The Phase I ESA portion of this project, as referenced in our contract, is intended to meet the guidelines outlined in the American Society for Testing and Materials (ASTM), Standard Practice for Environmental Site Assessments: *Phase I Environmental Site Assessment Process* (ASTM Standard E-1527-13). Our scope of services, pursuant to ASTM practice, did not include any inquiries with respect to lead in drinking water, wetlands, regulatory compliance, cultural and historic resources, industrial hygiene, health and safety, ecological resources, endangered species, vapor intrusion or other indoor air quality, mold, or high voltage power lines.

Thank you for selecting Rincon for this project. If you have any questions, or if we can be of any future assistance, please contact us.

Sincerely,
RINCON CONSULTANTS, INC.

Lauren G Kodama

Lauren Kodama
Environmental Scientist

Walter Hamann, PG, CEG, CHG
Vice President, Environmental Services

Table of Contents

Phase I Environmental Site Assessment

2295 Etting Road

Oxnard, California

EXECUTIVE SUMMARY

This report presents the findings of a Phase I Environmental Site Assessment (ESA) for the property located at 2295 Etting Road in Oxnard, California (Figure 1, Vicinity Map).
The subject property is currently developed with a residential structure, a pool, a barn structure with attached residential structure, two large storage/workshop and garage structures, a storage shed, two storage containers, two pump houses (one active and one inactive) and one irrigation pump/irrigation well and avocado orchards.

Rincon Consultants performed a reconnaissance of the subject property on February 26, 2014. The purpose of the reconnaissance was to observe existing subject property conditions and to obtain information indicating the presence of recognized environmental conditions in connection with the subject property. During the site reconnaissance, Rincon observed multiple drums of motor oil, and small quantities of paint, sealers, household cleaning products, brake fluid, steering fluid and motor oil in various locations throughout the subject property. In addition, the property owner indicated that a former 450-gallon gasoline aboveground storage tank and a former 250-gallon gasoline underground storage tank were removed from the subject property approximately 20 years ago.

The subject property is surrounded by residential, educational and cemetery land uses. Properties in the vicinity of the subject property include mobile home parks, two schools, the Ocean View School District bus yard, and two cemeteries.

EDR was contracted to provide a database search of public lists of sites that generate, store, treat or dispose of hazardous materials or sites for which a release or incident has occurred. The EDR search was conducted for the subject property and included data from surrounding sites within a specified radius of the property. The subject property was not listed on any of the databases search by EDR.

The adjacent property to the southeast of the subject property was listed on the EDR report as Ocean View School District, located at 2382 Etting Road. A release of gasoline was reported to impact soil and groundwater. However, due to the closed case status and the direction of groundwater flow to the southeast and southwest (away from the subject property), the gasoline release associated with the adjacent property to the southeast is not expected to impact the subject property.

Historical sources reviewed as part of the Phase I ESA include aerial photographs, topographic maps and city directories. The photos and maps reviewed indicate that the subject property was vacant land from 1904 to 1910, and developed with orchards from 1938 to 2012, with structures appearing on the subject property in approximately 1947. The subject property was developed in its current configuration in approximately 1959. Historic topographic maps reviewed show the presence of the Masonic Cemetery on the subject property from 1951 to 1967. City directories indicate that the subject property was occupied by Frank and Robert Naumann from 1964 to 2013. In addition, Pete Romualdo and Ron Brady's Ambulance Service were reported to have occupied the subject property in 1970.

Based on the findings of this Phase I ESA, it is our opinion that there are 3 Potential Recognized Environmental Conditions (RECs) in connection with the property as follows:

Potential Recognized Environmental Conditions

1. Former and current agricultural use of the subject property - According to the historical resources reviewed, the subject property has been developed with orchards since approximately 1938. Because of the pesticides routinely involved in agricultural production, this former and current use of the subject property for agricultural purposes is considered a potential REC.
2. Former 250-gallon gasoline underground storage tank on the subject property **–** According to the interview with the property owner, a 250-gallon gasoline underground storage tank was formerly located on the northern portion of the subject property, near the storage structure. This tank was also reported to have been removed approximately 20 years ago, with no evidence of staining or leaks. From the information available, no sampling is interpreted to have been conducted following removal of the underground storage tank. Therefore, the presence of a former 250-gallon gasoline underground storage tank on the subject property is considered a potential REC.
3. Motor oil soil staining in the vicinity of the drums in the storage shed on northern portion of the subject property - Stained soil was observed in the vicinity of the drums in the storage shed on the northern portion of the subject property. These stains are interpreted to be from a release of motor oil. Based on the unknown extent of contamination, the stained soil is considered a potential REC.

Due to the former and current use of the subject property for agricultural purposes, there is a potential that the subject property could be affected with pesticides, or other chemicals used routinely in agricultural production. Soil samples should be collected from the orchards and barn/storage /workshop areas and should be analyzed for pesticides and arsenic. In addition, former vehicle and farm equipment service areas should be sampled and analyzed for petroleum hydrocarbons and metals.

To evaluate the subject property impact resulting from the former presence of a 250-gallon gasoline underground storage tank on the subject property, Rincon recommends conducting a subsurface assessment to determine if the tank was removed (as reported) and if contamination is present .

To evaluate the subject property impact associated with the motor oil stained soil in the storage shed on the northern portion of the subject property, Rincon recommends collecting shallow soil samples and analyzing these samples for petroleum hydrocarbons to determine the extent of contamination.

In addition, based on the age of onsite structures (constructed in as early as 1947), lead based paint (LBP) and asbestos containing materials (ACMs) have the potential to be present. Prior to remodeling or demolition, we recommend completion of an asbestos and lead based paint survey.

According to our review of the Preliminary Title Report, an oil and gas lease to Oxy Petroleum, Inc. and an oil and gas lease to Renaissance Petroleum, LLC are reported to be associated with the subject property.

A copy of the previous Phase I for the subject property could not be attained. Therefore, this previous report was never provided to Rincon.

INTRODUCTION

This report presents the findings of a Phase I ESA conducted for the property located at 2295 Etting Road, Oxnard, California. The Phase I ESA was performed by Rincon Consultants, Inc. for Dansk Investments, LLC (Dansk) in general conformance with ASTM E 1527-13 and our proposal dated December 23, 2013. The following sections present our findings and provide our opinion as to the potential presence and impact of environmental site conditions.

PURPOSE

The purpose of this Phase I ESA was to assess the environmental conditions of a property, taking into account commonly and reasonably ascertainable information and to qualify for Landowner Liability Protections under the Brownfields Amendments to CERCLA Liability.

A recognized environmental condition (REC) is defined pursuant to ASTM E 1527-13 as,

> *"the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: 1) due to any release to the environment; 2) under conditions indicative of a release to the environment; 3) under conditions that pose a material threat of a future release to the environment".*

A Controlled REC is defined pursuant to ASTM E 1527-13 as,

> *"a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls). A condition considered by the environmental professional to be a controlled recognized environmental condition shall be listed in the findings section of the Phase I Environmental Site Assessment report, and as a recognized environmental condition in the conclusions section of the Phase I Environmental Site Assessment report".*

A Historical REC is defined pursuant to ASTM E 1527-13 as,

> *"a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by regulatory authority, without subjecting the property to any required controls (for example, use restrictions, activity and use limitations, institutional controls, or engineering controls). Before calling the past release a historical recognized environmental condition, the environmental professional must determine whether the past release is a recognized environmental condition at the time the Phase I Environmental Site Assessment is conducted (for example, if there has been a change in the*

regulatory criteria). If the EP considers the past release to be a recognized environmental condition at the time the Phase I ESA is conducted, the condition shall be included in the conclusions section of the report as a recognized environmental condition".

DETAILED SCOPE OF SERVICES

The scope of services conducted for this study is outlined below:

- Perform an on-site reconnaissance to identify obvious indicators of the existence of hazardous materials.
- Observe adjacent or nearby properties from public thoroughfares in an attempt to see if such properties are likely to use, store, generate, or dispose of hazardous materials.
- Obtain and review an environmental records database search from Environmental Data Resources (EDR), Inc. to obtain information about the potential for hazardous materials to exist at the subject property or at properties located in the vicinity of the subject property.
- Review files for the subject property and immediately adjacent properties as identified in the EDR report, as applicable.
- Review the current U.S. Geological Survey (USGS) topographic map to obtain information about the subject property's topography and uses of the subject property and properties in the vicinity of the subject property.
- Review additional pertinent record sources (e.g., California Division of Oil and Gas records, online databases of hazardous substance release sites), as necessary, to identify the presence of RECs at the subject property.
- Review reasonably ascertainable historical resources (e.g., aerial photographs, topographic maps, fire insurance maps, city directories) to assess the historical land use of the subject property and adjacent properties.
- Provide a property owner interview questionnaire to the property owner or a designated subject property representative identified to Rincon by CLIENT.
- Provide a user interview questionnaire to a representative of CLIENT, the user of the Phase I ESA.
- Conduct interviews with other property representatives (e.g., key site manager, occupants), as applicable.
- Review Client-provided information (e.g., previous environmental reports, title documentation), as applicable.

Our scope of services, pursuant to ASTM E 1527-13 practice, did not include any inquiries with respect to asbestos containing building materials, biological agents, cultural and historic resources, ecological resources, endangered species, health and safety, indoor air quality unrelated to release of hazardous substances or petroleum products into the environment, industrial hygiene, lead-based paint, lead in drinking water, mold, radon, regulatory compliance, wetlands, or high voltage power lines.

SIGNIFICANT ASSUMPTIONS, LIMITATIONS, DEVIATIONS, EXCEPTIONS, SPECIAL TERMS AND CONDITIONS

Dansk Investments, LLC has requested this assessment and will use the assessment to provide information for the purposes of developing said property. No other use or disclosure is intended or authorized by Rincon. Also, this report is issued with the understanding that it is to be used only in its entirety. It is intended for use only by the client, and no other person or entity may rely upon the report without the express written consent of Rincon.

This work has been performed in accordance with good commercial, customary, and generally accepted environmental investigation practices for similar investigations conducted at this time and in this geographic area. No guarantee or warranties, expressed or implied are provided. The findings and opinions conveyed in this report are based on findings derived from a site reconnaissance, review of an environmental database report, specified regulatory records and historical sources, and comments made by interviewees. This report is not intended as a comprehensive site characterization and should not be construed as such. Standard data sources relied upon during the completion of Phase I ESAs may vary with regard to accuracy and completeness. Although Rincon believes the data sources are reasonably reliable, Rincon cannot and does not guarantee the authenticity or reliability of the data sources it has used. Additionally, pursuant to our contract, the data sources reviewed included only those that are practically reviewable without the need for extraordinary analysis.

Rincon has not found evidence that hazardous materials or petroleum products exist at the subject property at levels likely to warrant mitigation. Rincon does not under any circumstances warrant or guarantee that not finding evidence of hazardous materials or petroleum products means that hazardous materials or petroleum products do not exist on the subject property. Additional research, including surface or subsurface sampling and analysis, can reduce Dansk Investments, LLC's risks, but no techniques commonly employed can eliminate these risks altogether. In addition, in accordance with our authorized work scope and contract, no attempt was made to check for the presence of asbestos containing building materials, biological agents, cultural and historic resources, ecological resources, endangered species, health and safety, indoor air quality unrelated to release of hazardous substances or petroleum products into the environment, industrial hygiene, lead-based paint, lead in drinking water, mold, radon, regulatory compliance, wetlands, or high voltage power lines.

USER RELIANCE

This Phase I ESA was prepared for use solely and exclusively by Dansk Investments, LLC (Dansk). This report shall not be relied upon by or transferred to any other party without the express written authorization of Rincon Consultants.

SITE DESCRIPTION

Location

The subject property is a 7.4-acre property located at 2295 Etting Road, Oxnard, California (Figure 2, Site Map). The subject property is located 0.18 mile east of the intersection of Pleasant Valley Road and Etting Road.

Subject Property and Vicinity General Characteristics

The subject property is currently developed with a residential structure, a swimming pool, a barn structure with attached residential structure, two large storage/workshop and garage structures, a storage shed, two storage containers, two pump houses (one active and one inactive), one irrigation pump/irrigation well, and avocado orchards.

The subject property is surrounded by residential, educational and cemetery land uses. Properties in the vicinity of the subject property include mobile home parks, the Ocean View School District, and two cemeteries. The current adjacent land uses are described in Table 1 and depicted on Figure 3, Adjacent Land Use Map.

Table 1 - Current Uses of Adjacent Properties

Area	Use
Northern Properties	Pleasant Valley Road, then mobile home park
Eastern Properties	Mobile home park
Southern Properties	Etting Road, then Ocean View School District schools and bus yard
Western Properties	Vacant land

Descriptions of Structures, Roads, Other Improvements on the Site

The subject property is currently developed with a residential structure, a pool, a barn structure with attached residential structure, two large storage/workshop and garage structures, a storage shed, two storage containers, two pump houses (one active and one inactive), one irrigation pump/irrigation well, and avocado orchards. A chain-link fence was noted around the perimeter of the subject property. Access to the subject property is available from a driveway on Etting Road and Pleasant Valley Road.

Water and sewer service is provided by the City of Oxnard. Southern California Edison (SCE) provides electrical service and the Gas Company provides natural gas service. Solid waste collection and disposal services are provided by the City of Oxnard.

USER PROVIDED INFORMATION

As described in ASTM E 1527-13 Section 6, Dansk Investments was interviewed for actual knowledge pertaining to the subject property to help identify recognized environmental conditions in connection with the property. Frank Naumann, the owner, and Mark Pettit, the architect, completed the User Questionnaire as provided by ASTM Appendix X3 on behalf of Dansk Investments, prior to completion of the site reconnaissance. A copy of the completed questionnaire is included as Appendix 2. The following information is based on our review of the completed questionnaire.

Based on our review of the completed questionnaire, the user did not review the following sources of information and/or is unaware of information regarding the following:

- recorded land title records (or judicial records, where appropriate) that identify any environmental liens filed or recorded against the property
- recorded land title records (or judicial records, where appropriate) that identify any activity and land use limitations (AULs), such as engineering controls, land use restrictions or institutional controls that are in place at the property and/or have been filed or recorded against the property under federal, tribal, state or local law
- Title Report that identifies information pertaining to environmental cleanup liens or activity and use limitations (AULs) for the subject property
- reduction in value for the subject property relative to any known environmental issues
- commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases
- obvious indicators that point to the presence or likely presence of releases at the property
- pending, threatened, or past litigation relevant to hazardous substances or petroleum products, in, on, or from the site
- pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the site
- notice from any government entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products

Mr. Pettit and Mr. Naumann also provided the following information:

- They indicated that the Phase I ESA is being conducted at the city's request, for the purpose of sale/purchase of the subject property.
- An underground radar search to verify that nothing is buried underneath the subject property as a result of the adjacent cemeteries is considered.
- A previous Phase I was conducted on the subject property. However, a copy of the previous Phase I could not be attained, and was not provided to Rincon.
- They indicated that the purchase price being paid for this property reasonably reflects the fair market value of the property.

The following documents regarding the subject property were provided by Dansk:

- *Preliminary Report, 2295 Etting Road, in the City of Oxnard, California* prepared by Lawyers Title and dated November 18, 2013 - A review of this document indicated the following easements located on the subject property:
    - Easement(s) in favor of the public over any existing roads lying within said Land
    - Easements for visitation, use, driveways and access
    - Easement for public utilities

  In addition, an oil and gas lease to Oxy Petroleum, Inc. and an oil and gas lease to Renaissance Petroleum, LLC are indicated in the Title Report.

RECORDS REVIEW

PHYSICAL SETTING SOURCES

Topography

The current USGS topographic map (Oxnard Quadrangle, 1967) indicates that the subject property is situated at an elevation of about 32 feet above mean sea level with topography sloping slightly to the south.

Geology and Hydrogeology

Site Geology

According to the USGS geologic map (California: Los Angeles Sheet, 1969) the subject property is underlain by alluvium, which is described by the USGS as "clay, silt, sand, gravel, or similar unconsolidated detrital material, deposited during comparatively recent geologic time by a stream or other body of running water, as a sorted or semi-sorted sediment."

Regional Groundwater Occurrence and Quality

According to the *Case Closure Summary, Ocean View School District, 2382 Etting Road, Oxnard, California* prepared by the Ventura County Environmental Health and dated March 6, 2003, groundwater is encountered between 6 and 9 feet below grade and flows towards the southeast/southwest. This property is located adjacent to the southeast of the subject property.

STANDARD ENVIRONMENTAL RECORD SOURCES

Environmental Data Resources, Inc. (EDR) was contracted to provide a database search of public lists of sites that generate, store, treat or dispose of hazardous materials or sites for which a release or incident has occurred. The EDR search was conducted for the subject property and included data from surrounding sites within specified radii of the property. A copy of the EDR report, which specifies the ASTM search distance for each public list, is included as Appendix 2. As shown on the attached EDR report, federal, state and county lists were reviewed as part of the research effort. Please refer to Appendix 2 for a complete listing of sites reported by EDR and a description of the databases reviewed.

The Map Findings Summary, included in the EDR report, provides a summary of the databases searched, the number of reported facilities within the search radii, and whether the facility is located onsite or adjacent to the subject property. The following information is based on our review of the Map Findings Summary and the information contained in the EDR report.

Subject Property

The subject property was not listed on any of the regulatory databases reviewed.

Offsite Properties

Offsite properties listed by EDR fall under two general categories of databases: those reporting unauthorized releases of hazardous substances (e.g., LUST, National Priority List [a.k.a. Superfund sites], and corrective action facilities), and databases of businesses permitted to use hazardous materials or generate hazardous wastes, for which an unauthorized release has not been reported to a regulatory agency.

Rincon reviewed the EDR Radius Map and select detailed listings to evaluate their potential to impact the subject property, based on the following factors:

- Reported distance of the facility from the subject property
- The nature of the database on which the facility is listed, and/or whether the facility was listed on a database reporting unauthorized releases of hazardous materials, petroleum products, or hazardous wastes
- Reported case type (e.g., soil only, failed UST test only)
- Reported substance released (e.g., chlorinated solvents, gasoline, metals)
- Reported regulatory agency status (e.g., case closed, "no further action")
- Location of the facility with respect to the reported groundwater flow direction (discussed in the Geology and Hydrogeology section of this report)

Facilities/properties that were interpreted by Rincon to be of potential environmental concern to the subject property, based on one or more of the factors listed above, are summarized in Table 2. In accordance with ASTM, contamination migration pathways in soil, groundwater, and soil vapor were considered in our analysis of offsite properties of potential environmental concern.

Table 2 - EDR Listing Summary of Select Release Sites Within One-Eighth Mile of the Subject Site

Site Name	EDR Site ID	Site Address	Distance from Subject Property	Database Reference
Adjacent Properties				
Ocean View School District	2	2382 Etting Road	Adjacent Property – Southeast	FID, HIST UST, **LUST**, UST, WDS, SWEEPS UST, HIST CORTESE, NPDES

Regulatory agency information reviewed for the listings in the table above are summarized in the Additional Environmental Record Sources section of this report.

Orphan Listings

EDR reported 20 orphan or unmapped site listings, which EDR is unable to plot due to insufficient address information. Based on Rincon's review of the limited address information or site descriptions for the orphan listings, none of the listings are expected to impact the subject property.

ADDITIONAL ENVIRONMENTAL RECORD SOURCES

Review of Agency Files

As a follow-up to the database search, Rincon reviewed regulatory information for facilities within the specified search radii that were interpreted to have the potential to impact the subject property, based on one or more factors previously discussed (e.g., distance, open case status, up-gradient location, soil vapor migration).

The following is a summary of our review of regulatory information obtained from review of online sources (e.g., SWRCB GeoTracker database, DTSC Envirostor database) and/or files requested from the applicable regulatory agency, as described below. Copies of selected documents reviewed are included in Appendix 2.

Subject Property

The subject property was not listed in any of the databases searched by EDR.

Adjacent Properties

Ocean View School District, located adjacent to the southeast of the subject property at 2382 Etting Road is listed on a release database. According to Geotracker, this release of gasoline occurred in 1986 and affected soil and groundwater. According to *Case Closure Summary, Ocean View School District, 2382 Etting Road, Oxnard, California* prepared by Ventura County Environmental Health and dated March 6, 2003, “the residual contamination plume appears limited in extent and decreasing in concentration. Natural attenuation will likely continue to degrade the residual in-situ contamination.” In addition, no public drinking water wells were reported within 1,000 feet of the property. Groundwater at this property is reported to be encountered between 6 and 9 feet below grade and flow towards the southeast/southwest.

Up-gradient Release Sites

None of the nearby or up-gradient listed sites are release sites.

Known or Suspect Contaminated Release Sites with Potential Vapor Migration

The EDR report was reviewed to identify nearby known or suspect contaminated sites that have the potential for contaminated vapor originating from the nearby site to be migrating beneath the subject property. Based on the ASTM E 2600-10, *Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions*, the following minimum search distances were initially used to determine if contaminated soil vapors from a nearby known or suspect contaminated site have the potential to be migrating beneath the subject property:

- 1/10 mile (528 feet) for petroleum hydrocarbons
- 1/3 mile (1,760 feet) for other contaminants of concern (COCs)

If up-gradient known or suspect contaminated sites are located within the above referenced distances from the subject property, online resources are reviewed to determine the extent of the contaminated plume at those sites. The following describes search distances for contaminated plumes of petroleum hydrocarbons and other COCs.

Petroleum Hydrocarbons

Based on our review of the EDR report information as indicated above, there are no adjacent or up-gradient known or suspect petroleum hydrocarbon impacted soil or groundwater plumes located within 30 feet of the subject property.

Other COCs

Based on our review of the EDR report, there are no adjacent or up-gradient known or suspect contaminated soil or groundwater plumes located within 100 feet of the subject property.

Review of State of California Division of Oil and Gas Records

A review of the Department of Conservation, Division of Oil, Gas & Geothermal Resources Online Mapping System indicates that one oil well is located approximately 0.16 mile to the northwest of the subject property. This well is reported to be operated by Chevron U.S.A. Inc. and is reported to be plugged.

HISTORICAL USE INFORMATION ON THE PROPERTY AND THE ADJOINING PROPERTIES

The historic records review completed for this Phase I ESA includes aerial photographs, topographic maps and city directories as detailed in the following sections.

Review of Historic Aerial Photographs

Aerial photographs from EDR's aerial photograph collection were obtained and reviewed. Copies of the aerial photographs are included in Appendix 3 (Historical Documents).

Review of City Directory Listings

EDR was contracted to provide copies of city directory listings for the subject property. A copy of the EDR city directory report is included in Appendix 3.

Review of Fire Insurance Maps

EDR was contracted to provide copies of fire insurance maps for the subject property. As indicated in the attached report, no records were available for the subject property or adjacent properties.

Review of Historic Topographic Maps

Historic topographic maps from EDR's map collection were reviewed. Copies of the historic topographic maps are included in Appendix 3.

Review of City of Oxnard Building Permit Records

Based on the sufficient amount of information obtained from other historical resources review, building permits for the subject property were not reviewed.

Summary of Historic Uses

Subject Property
Based on our review of the documents listed above, it appears that the subject property was vacant land from 1904 to 1910, and developed with orchards from 1938 to 2012, with structures appearing on the subject property in approximately 1947. The subject property was developed in its current configuration in approximately 1959. Historic topographic maps reviewed show the presence of the Masonic Cemetery on the subject property from 1951 to 1967[1]. City directories indicate that the subject property was occupied by Frank and Robert Naumann from 1964 to 2013. In addition, Pete Romualdo and Ron Brady's Ambulance Service were reported to have occupied the subject property in 1970. Fire insurance maps were not available for the subject property.

Northern Adjacent Property
Based on our review of the documents listed above, it appears that the northern properties were developed with a road and vacant land from 1904 to 1910, developed with Pleasant Valley Road and orchards from 1938 to 1977, with multiple structures first appearing in 1959. From 1970 to 2012, the northern properties were developed with dense residential development. City directories and fire insurance maps were not available for the northern adjacent properties.

Eastern Adjacent Property
Based on our review of the documents listed above, it appears that the eastern properties were vacant land from 1904 to 1910, developed with orchards from 1938 to 1977, with structures appearing in approximately 1959. Historic topographic maps show the presence of the Masonic Cemetery on the eastern properties. In addition, city directories indicate that Sunny Acres occupied the eastern property in 1964. Fire insurance maps were not available for the eastern adjacent properties.

Southern Adjacent Property
Based on our review of the documents listed above, it appears that the southern properties were developed with a road and vacant land from 1904 to 1938, developed with a road and used for agricultural purposes in 1947, developed with Etting Road and vacant land from 1951 to 1970, and developed with Etting Road and multiple structures from 1977 to 2012. City directories indicate that from 1964 to 2002, the southern properties were occupied by the Ocean View

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[1] Additional information regarding both the Masonic and Japanese Cemetery is provided in *Cultural Resources Constraints Analysis for the 2295 Etting Road Project, Oxnard, Ventura County, California* prepared by Rincon Consultants and dated March 18, 2014.

School District and Mar Vista Elementary School, and from 1986 to 1993, the southern properties were occupied with Ocean View Junior High School. Fire insurance maps were not available for the southern adjacent properties.

Western Adjacent Property
Based on our review of the documents listed above, it appears that the western adjacent properties were developed with a road and vacant land from 1904 to 1910, developed with a single structure in 1947, vacant land and orchards from 1959 to 1994, and vacant land from 2005 to 2012. Historic topographic maps indicate that the western adjacent properties were developed with unimproved roads and vacant land from 1951 to 1967. City directories and fire insurance maps were not available for the western adjacent properties.

Gaps in Historical Sources

Several gaps of greater than 5 years were identified in the historical records reviewed, from 1904 to 1910, from 1910 to 1938, from 198 to 1947, from 1951 to 1959, from 1970 to 1977, and from 1996 to 2002. These gaps are considered insignificant because the subject property land use appears to be in similar in years before and after the specified data gaps.

INTERVIEWS

Rincon Consultants performed two interviews regarding the subject property and surrounding areas. The purpose of the interviews was to discuss current and historical subject property conditions and to obtain information indicating the presence of recognized environmental conditions in connection with the property.

Interview with Owner

An interview questionnaire was provided to the property owner, Frank Naumann, prior to the site reconnaissance. A copy of the completed questionnaire is included in Appendix 2. The following information is based on information obtained during our review of the completed questionnaire.

The property owner indicated the following:
- The subject property was part of an avocado ranch.
- The subject property is currently developed with a vacant residence and avocado ranch.
- The northern adjacent property is currently Pleasant Valley Road and mobile homes/condos.
- The eastern adjacent property is currently a mobile home park and single-family residences.
- The southern adjacent property is currently Etting Road and Ocean View School District offices and an elementary school.
- The western adjacent property has been a cemetery since the late 1800s, but is currently abandoned.
- The subject property was formerly a ranch home and orchard.
- The northern adjacent property was formerly an orchard in approximately 1965.

- The eastern adjacent property was formerly an orchard/row crops in approximately 1965.
- The southern adjacent property was formerly fields in approximately 1950.
- Frank Naumann has owned the subject property since before the 1950s.
- The residence was constructed in 1957; the barns were constructed in the 1940s.
- The subject property is developed with a well for agriculture, but the city supplies water to the residence.
- A soils report is underway. Soil borings will be complete the week of March 10, 2014.

Mr. Naumann indicated that there is no evidence of fill dirt, pits, ponds or lagoons, sumps, clarifiers or solvent degreasers, or vent pipes, fill pipes or access ways located on the subject property.

Mr. Naumann does not know if there has been any stained soil or surfaces, records indicating the presence of polychlorinated biphenyls (PCBs) on the subject property

The property owner indicated that he is not aware of any pending, threatened, or past litigation or administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the property. In addition, he is not aware of any notice from any government entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products.

Additional information is provided in the Interview with Site Representative/Property Owner section below.

Interview with Site Representative/Property Owner

The following information is based on information obtained during the February 26, 2014 site reconnaissance. Frank Naumann, property owner, and Mark Pettit, Managing Architect with Lauterbach and Associates Architects Inc., indicated that the subject property is currently developed with a residential structure, a pool, a barn structure with attached residential structure, two large storage/workshop and garage structures, a storage shed, two storage containers, two pump houses (one active and one former) and one irrigation pump/irrigation well and avocado orchards. Mr. Naumann indicated that the structures were built in the 1940s and various improvements to these structures have occurred from the 1940s through present day. Mr. Naumann indicated that no one currently lives on the subject property and the structures are primarily used for storage of household furniture, miscellaneous farm equipment and tools and other miscellaneous items that are typical found of a residential farm.

In addition, Mr. Naumann indicated that a former 450-gallon above ground storage tank containing gasoline fuel was located on the southern portion of the subject property (in the vicinity of the main residence) and a former 250-gallon underground storage tank containing gasoline fuel was located on the northern portion of the subject property (in the vicinity of the storage structure/pump house). Mr. Naumann indicated that he removed both storage tanks approximately 20 years ago. In addition, he indicated that after he removed both the above and below ground storage tanks, he did not observed any staining or indications of the tanks leaking.

Mr. Naumann indicated that he is not aware of any pending, threatened, or past litigation or administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the subject property. Mr. Naumann indicated that he is not aware of any notice from any government entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products in connection with the subject property.

Mr. Naumann also indicated that sewer service is provided by the City of Oxnard.

Interviews with Occupants

The property owner is also the current occupant. Information obtained from an interview with the occupant of the subject property is discussed above in the Interview with Site Representative/Property Owner section of this report.

Interviews with Local Government Officials

During the preparation of this Phase I ESA, we reviewed the California State Water Resources Control Board's (SWRCBs) online GeoTracker database to determine if the subject property is listed in the database as an unauthorized release site. In addition, we also reviewed the Department of Toxic Substances Control's (DTSCs) online Envirostor database to determine if the subject property is listed as a hazardous waste permitted facility or cleanup site in the Envirostor database. The subject property and adjacent properties were not listed on either database.

Based on the fact that the subject property and adjacent properties are not listed in the EDR report, GeoTracker database, or Envirostor database, no additional local agency files were requested.

Interviews with Others

Rincon did not attempt to interview neighboring property owners or others as part of this research effort.

SITE RECONNAISSANCE

Rincon Consultants performed a reconnaissance of the subject property on February 26, 2014 accompanied by property owner, Frank Naumann and Mark Pettit, Managing Architect with Lauterbach and Associates Architects Inc. The purpose of the reconnaissance was to observe existing subject property conditions and to obtain information indicating the presence of recognized environmental conditions in connection with the property.

METHODOLOGY AND LIMITING CONDITIONS

The site reconnaissance was conducted by 1) observing the subject property from public thoroughfares, 2) observing the adjacent properties from public thoroughfares, 3) observing the interior of the onsite structures, 4) observing the exterior of the structures, 5) backtracking to correlate exterior features with interior features, as necessary, 6) observing the subject property from dirt roads and walking paths.

CURRENT USE OF THE PROPERTY AND ADJACENT PROPERTIES

The subject property is currently developed with a residential structure, a pool, a barn structure with attached residential structure, two large storage/workshop and garage structures, a storage shed, two storage containers, two pump houses (one active and one former), one irrigation pump/irrigation well, and avocado orchards. Adjacent businesses include residential, educational facilities, bus yard, and a cemetery.

PAST USE OF THE PROPERTY AND ADJACENT PROPERTIES

Based on our site reconnaissance, with the exception of an avocado ranch, the former past uses at the subject property and adjacent properties are not readily apparent.

CURRENT OR PAST USES IN THE SURROUNDING AREAS

The subject property is surrounded by residential, educational and cemetery land uses as detailed in section Site Description section of this report. Past uses of the surrounding area are not readily apparent based on the site reconnaissance.

GEOLOGIC, HYDROGEOLOGIC, HYDROLOGIC AND TOPOGRAPHIC CONDITIONS

Geologic, Hydrogeologic, Hydrologic and topographic information are as previously stated in the Physical Settings Section of this report.

GENERAL DESCRIPTION OF STRUCTURES

Onsite structures are as described previously in the Site Description section of this report.

INTERIOR AND EXTERIOR OBSERVATIONS

Storage Tanks

During the site reconnaissance, no above or below ground storage tanks were observed. However, as reported by the subject property owner, a former 450-gallon above ground storage tank containing gasoline was located on the southern portion of the subject property and a former 250-gallon underground storage tank containing gasoline was located on the northern portion of the subject property. The property owner indicated that he removed both storage tanks approximately 20 years ago. In addition, he indicated that after he removed both the above and below storage tanks that he did not observed any staining or indications of the tanks leaking.

Drums

During the site reconnaissance, we observed the following drums:

- One 55-gallon drum and two smaller drums located on the eastern portion of the subject property. One of the smaller drums had fallen over and appeared empty. The 55-gallon drum and smaller drum appeared to have an unidentified substance inside the containers. The property owner indicated that these three drums may contain used motor oil, but was not certain.

- Two 55-gallon drums located in the storage shed contained used motor oil. Minor oil staining was observed on the two 55-gallon drums and on the soil in the vicinity of the drums. The property owner indicated these two 55-gallon drums contain used motor oil from the farm vehicles and equipment.

- Three empty 55-gallon drums located in the southern portion of the storage/workshop structure on the eastern portion of the subject property. The property owner indicated that these three 55-gallon drums are for collecting rain water and are not currently in use.

Hazardous Substances and Petroleum Products

Small quantities of various hazardous substances and petroleum products were observed during the site reconnaissance are as follows:

- The storage/workshop structure on the eastern portion of the site contains small quantities of paints, sealers, and miscellaneous containers of household cleaning products. In addition, what appeared as motor oil staining was observed in the southern portion of the storage/workshop structure.

- The storage shed contains small quantities of brake fluid, power steering fluid and motor oil. In addition, approximately 9 fuel containers and two 55-gallon drums with used motor oil were observed. Oil staining was observed on both of the 55-gallon drums.

Unidentified Substance Containers

Other than the previously discussed 55-gallon and smaller sized drums, no unidentified substance containers or unidentified containers that might contain hazardous substances were observed during the site reconnaissance.

Odors

During the site reconnaissance, Rincon did not identify any strong, pungent, or noxious odors.

Pools of Liquid

Other than the swimming pool, Rincon did not identify any pools of liquid including standing surface water during the site reconnaissance. In addition, sumps containing liquids likely to be hazardous substances or petroleum products were not observed.

Indications of Polychlorinated Biphenyls (PCBs)

During the site reconnaissance, Rincon observed two pole mounted transformers located along the dirt road on the eastern portion of the site. There was no indication of a release in the vicinity of the transformers.

Other Conditions of Concern

During the site reconnaissance Rincon did not note any of the following interior or exterior observations:

- corrosion
- clarifiers and sumps
- pits, ponds, and lagoons
- stressed vegetation
- solid waste/debris
- waste water
- septic systems/effluent disposal system

Stained Cement/ Stained Dirt – During the site reconnaissance, minor motor oil staining was observed on the cement flooring in the southern portion of the storage/workshop structure on the eastern portion of the subject property. In addition, minor oil staining was observed on the two 55-gallon drums and on the soil in the vicinity of the drums in the storage shed on the northern portion of the subject property.

Septic Systems/Effluent Disposal System – The property owner stated that sewer service is provided by the City of Oxnard.

Irrigation Pump House/ Irrigation Pumps and Wells – During the site reconnaissance, the property owner indicated that the site has one active pump house with an associated irrigation well and one irrigation pump with associated irrigation well on the northern portion of the subject property. The property owner indicated that the irrigation pump house, pumps and wells are currently in use for watering the avocado orchard. In addition, the property owner indicated that the pump house located in the vicinity of the main residence is no longer in use and there is no well associated with the pump house.

Storage Containers – During the site reconnaissance, Rincon could not gain access to the two locked storage containers located on the northern portion of the property. The property owner indicated that the two large storage containers are currently in use for bicycle and household storage.

EVALUATION

FINDINGS

Known or suspect environmental conditions associated with the property include the following:

A. Former and current agricultural use of the subject property, including avocado orchards, pesticide storage, and former vehicle and farm equipment repair
B. Former 450-gallon gasoline aboveground storage tank located on the subject property
C. Former 250-gallon gasoline underground storage tank located on the subject property
D. Cement staining from motor oil in the southern portion of the storage/workshop structure on the eastern portion of the subject property
E. Soil staining in the vicinity of the drums in the storage shed on the northern portion of the subject property
F. Adjacent release of gasoline to soil and groundwater
G. Former agricultural use of the adjacent properties

OPINIONS

A. ***Former and current agricultural use of the subject property, including avocado orchards, pesticide storage, and former vehicle and farm equipment repair –*** According to the historical resources reviewed, the subject property has been developed with orchards since approximately 1938. In addition, the sheds, workshops, and barn present onsite were formerly used for vehicle and farm equipment repair. Because of the pesticides routinely involved in agricultural production and the former vehicle and repair service that occurred onsite, this former use of the subject property for agricultural purposes is considered a potential REC.

B. ***Former 450-gallon gasoline aboveground storage tank located on the subject property –*** According to the interview with the property owner, a 450-gallon gasoline aboveground storage tank was formerly located on the southern portion of the subject property, near the main residence. However, the property owner reported that the storage tank was removed approximately 20 years ago, and that no staining or leaks were observed. Therefore, the former presence of the 450- gallon aboveground storage tank on the subject property is considered de minimis.

C. ***Former 250-gallon gasoline aboveground storage tank located on the subject property –*** According to the interview with the property owner, a 250-gallon gasoline underground storage tank was formerly located on the northern portion of the subject property, near the storage structure. This tank was also reported to have been removed approximately 20 years ago, with no evidence of staining or leaks. From the information available, no sampling is interpreted to have been conducted following removal of the underground storage tank. Therefore, the presence of a former 250-gallon gasoline underground storage tank on the subject property is considered a potential REC.

D. ***Cement staining from motor oil –*** Stained cement from motor oil was observed in the southern portion of the storage/workshop structure on the eastern portion of the subject property. Due to the type of surface, the cement staining from motor oil is considered de minimis.

E. ***Soil staining –*** Stained soil was observed in the vicinity of the drums in the storage shed on the northern portion of the subject property. These stains were interpreted to be from a release of motor oil. Based on the unknown extent of contamination, the stained soil is considered a potential REC.

F. ***Adjacent release of gasoline to soil and groundwater –*** The adjacent property to the southeast, Ocean View School District located at 2382 Etting Road, experienced a release of gasoline in 1986 that impacted soil and groundwater. Due to the closed case status and the direction of groundwater flow to the southeast to southwest (downgradient of the subject property), the release from this adjacent property is considered de minimis.

G. ***Former agricultural use of the adjacent properties –*** According to the historical resources reviewed, the adjacent properties were used for agricultural purposes from at least 1938 to 1994. However, based on the fact that the adjacent soil does not appear to have been brought onto the subject property, the former agricultural use of the adjacent properties is considered de minimis.

CONCLUSIONS

Rincon has performed a Phase I ESA in general conformance with the scope and limitations of ASTM E 1527-13 for the property located at 2295 Etting Road in Oxnard, California. This assessment has revealed evidence of 3 potential *RECs* in connection with the property as follows:

Potential Recognized Environmental Conditions

1. Former and current agricultural use of the subject property, including avocado orchards, pesticide storage, and former vehicle and farm equipment repair
2. Former 250-gallon gasoline underground storage tank on the subject property
3. Motor oil soil staining in the vicinity of the drums in the storage shed on northern portion of the subject property

RECOMMENDATIONS

Due to the former and current use of the subject property for agricultural purposes, there is a potential that the subject property could be affected with pesticides, or other chemicals used routinely in agricultural production. Shallow soil samples should be collected from the orchards and barn/storage /workshop areas and analyzed for pesticides and arsenic. In addition, former vehicle and farm equipment service areas should be sampled and analyzed for petroleum hydrocarbons and metals.

To evaluate the subject property impact resulting from the former presence of a 250-gallon gasoline underground storage tank on the subject property, Rincon recommends conducting a subsurface assessment to determine, if the tank was removed (as reported) and if contamination is present .

To evaluate the subject property impact associated with the motor oil stained soil in the storage shed on the northern portion of the subject property, Rincon recommends collecting shallow soil samples and analyzing these samples for petroleum hydrocarbons to determine the extent of contamination.

In addition, based on the age of onsite structures (constructed in as early as 1947), lead based paint (LBP) and asbestos containing materials (ACMs) have the potential to be located on the subject property.

According to our review of the Preliminary Title Report, an oil and gas lease to Oxy Petroleum, Inc. and an oil and gas lease to Renaissance Petroleum, LLC are reported to be associated with the subject property. A copy of the previous Phase I for the subject property could not be attained. Therefore, this previous report was never provided to Rincon.

DEVIATIONS

Deviations from ASTM E 1527-13 Practice were not encountered during the completion of this Phase I ESA.

REFERENCES

The following published reference materials were used in preparation of this Phase I ESA:

Environmental database: Environmental Data Resources (EDR) report dated February 25, 2014.

Chain of title: Preliminary Report, 2295 Etting Road, in the City of Oxnard, California prepared by Lawyers Title and dated November 18, 2013

Geology: USGS geologic map (California: Los Angeles Sheet, 1969)

Groundwater: Case Closure Summary, Ocean View School District, 2382 Etting Road, Oxnard, California prepared by the Ventura County Environmental Health and dated March 6, 2003

Topography: USGS topographic map (Oxnard Quadrangle, 1967)

Oil and gas records: State of California, Division of Oil, Gas and Geothermal Resources website: http://www.consrv.ca.gov/DOG/index.htm.

Aerial photographs: Photos maintained by EDR.

City directory listings: Listings provided by EDR.

Historic topographic maps: Maps maintained by EDR.

SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

The qualified environmental professionals that are responsible for preparing the report include Kristin Robert, Sarah Larese and Walt Hamann. Their qualifications are summarized in the following section.

"We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in 312.10 of 40 CFR 312. We have the specific qualifications based on education, training and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312."

Signature	March 18, 2014 Date
Walt Hamann, PG, CEG, CHG Name	Vice President Title
Signature	March 18, 2014 Date
Sarah Larese Name	Senior Environmental Scientist Title
Kristin Roberts Signature	March 18, 2014 Date
Kristin Roberts, QSP/QSD Name	Environmental Scientist Title

QUALIFICATIONS OF ENVIRONMENTAL CONSULTANTS

The environmental consultants responsible for conducting this Phase I ESA and preparing the report include Lauren Kodama, Kristin Roberts, Sarah Larese and Walt Hamann. Their qualifications are summarized below.

Environmental Professional Qualifications	X2.1.1 (2) (i) - Professional Engineer or Professional Geologist License or Registration, and 3 years of full-time relevant experience	X2.1.1 (2) (ii) - Licensed or certified by the Federal Government, State, Tribe, or U.S. Territory to perform environmental inquiries	X2.1.1 (2) (iii) – Baccalaureate or Higher Degree from and accredited institution of higher education in a discipline of engineering or science and the equivalent of 5 years of full-time relevant experience	X2.1.1 (2) (iii) – Equivalent of 10 years of full-time relevant experience
Walt Hamann	PG, CHG, CEG		MS Geology	25 years
Sarah Larese			BA Environmental Studies	15 years
Kristin Roberts	QSP,QSD		BS Soil Science	2 years
Lauren Kodama			BS Environmental Studies	1 year

Walt Hamann, PG, CEG, CHG, is a Principal and Senior Geologist with Rincon Consultants. He holds a Bachelor of Arts degree in geology from the University of California, Santa Barbara and a Master of Science degree in geology from the University of California, Los Angeles. He has over 25 years of experience conducting assessment and remediation projects and has prepared or overseen the preparation of hundreds of Phase I and Phase II Environmental Site Assessments throughout California. Mr. Hamann is a Professional Geologist (#4742), Certified Engineering Geologist (#1635), and Certified Hydrogeologist (#208) with the State of California.

Sarah A. Larese is an Associate Environmental Scientist with Rincon Consultants. She holds a Bachelors degree in environmental studies from the University of California, Santa Barbara, California. Ms. Larese has experience in development, implementation and project management of environmental assessment and remediation projects, especially relating to underground storage tanks. Ms. Larese's responsibilities at Rincon include implementation of Phase I and II Environmental Site Assessments as well as conducting site remediation field activities and preparation of environmental reports. She has 15 years of experience conducting research, assessment and remediation projects.

Kristin Roberts is an Environmental Scientist with Rincon Consultants. She holds a Bachelor of Science degree in Soil Science with a concentration in Land Resources from California Polytechnic State University of San Luis Obispo. Ms. Roberts supports and manages SWPPP compliance services and conducts environmental Phase I and Phase II assessments for various project assignments within the Environmental Site Assessment and Remediation Group. Ms. Roberts is a Certified Professional in Erosion and Sediment Control (CPESC #7494) and Qualified SWPPP Practitioner and Developer (QSP/D #24530).

Lauren G. Kodama is an Environmental Scientist with Rincon Consultants. She holds a Bachelor of Science degree in Environmental Studies with an outside concentration of Ecology, Evolution, and Marine Biology from the University of California, Santa Barbara. Ms. Kodama has experience working on Phase I Environmental Site Assessments for a variety of commercial, rural, and industrial properties. In addition, Ms. Kodama has been involved in working on large scale, multi-site projects. Ms. Kodama's responsibilities at Rincon include implementation of Phase I Environmental Site Assessment Reports.

Imagery provided by National Geographic Society, ESRI and its licensors © 2014. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

0 1,000 2,000
Feet

N

Subject Property

Vicinity Map

Figure 1

Imagery provided by ESRI and its licensors © 2014.

Site Map

Figure 2

Imagery provided by ESRI and its licensors © 2014.

Adjacent Land Use Map

Figure 3

Photograph 1. View of the subject property driveway and southern entrance, facing north.

Photograph 2. View of the two pole mounted transformers, barn and attached residence on the eastern portion of the subject property, facing northwest.

Photograph 3. View of the two 55-gallon drums containing used motor oil located in the storage shed.

Photograph 4. View of several fuel containers located in the storage shed

Photograph 5. View of the one 55-gallon drum and two smaller drums located on the eastern portion of the subject property, facing southeast.

Photograph 6. View of the minor motor oil staining on the concrete flooring in the southern portion of the storage/workshop structure on the eastern portion of the subject property.

Site Photographs

Figure 4

Photograph 7. View of the barn and storage /workshop structure located on the eastern portion of the subject property, facing southeast.

Photograph 8. View of storage/workshop area and pump house located on the northern portion of the subject property, facing southwest.

Photograph 9. View of the storage/workshop structure, facing south.

Photograph 10. View of the northern portion of the subject property with two storage containers, facing northeast.

Photograph 11. View of the irrigation pump and well located on the eastern portion of the subject property.

Photograph 12. View of the location where the former underground storage tank was located, facing northwest.

Site Photographs

Figure 5

Photograph 13. View of the western adjacent Masonic Cemetery property, facing north.

Photograph 14. View of the northern adjacent properties and E. Pleasant Valley Rd., facing northeast.

Photograph 15. View of the eastern adjacent residences, facing north.

Photograph 16. View of Mar Vista Elementary (2382 Etting Rd.), facing southeast.

Photograph 17. View of Etting Rd followed by Ocean View Jr. High School, facing south.

Photograph 18. View of the Ocean View School District bus parking/gasoline service area, facing south.

Site Photographs

Figure 6

Appendix 1

Interview Documentation

Property Owner Interview Questionnaire

Rincon Project 13-01637 – Proposed Pleasant Valley Apartments, 2295 Etting Road, Oxnard, CA

This questionnaire should be completed by the current property owner or a designated representative of the current property owner. We respectfully request that you fill out and return this form via fax 805-644-4240 or email lkodama@rinconconsultants.com to us within one week from the date of this transmittal.

1)	**Was the subject property or any adjoining property ever used as:**	
	☐ a gasoline or other fueling station	☐ a junkyard or landfill
	☐ a motor vehicle repair facility	☐ a waste treatment, storage, disposal, processing or recycling facility
	☐ a commercial printing facility	☐ a machine shop
	☐ a dry cleaners	☐ a manufacturing facility
	☐ a photo developing laboratory	☐ an oil production facility (including oil wells)
	☐ a metal plating facility	☐ any other industrial use
	☒ a farm	
	(please check all that apply and describe) PART OF AN AVOCADO RANCHO	

2)	**Please describe the current land uses of the subject property and those surrounding your property. Please indicate all businesses/companies located on property.** HOME/RANCHO	
2a	**Current use of Subject Property** (please check all that apply) ☐ Commercial (retail, offices, etc.) ☒ Residential (single family ~~or apartments~~) ☐ Industrial (manufacturing, warehousing, processing) ☐ Other-Please Describe	(please include a brief description of current operation) HOME (NO LONGER OCCUPIED) AND AVOCADO RANCHO
2b	**Current use of Northern Adjoining Properties** (please check all that apply) ☐ Commercial (retail, offices, etc.) ☒ Residential (single family or apartments) ☐ Industrial (manufacturing, warehousing, processing) ☐ Other-Please Describe	(please include a brief description of current operation) NORTH OF ADJACENT P.V. Rd. ARE MOBILE HOMES /CONDOS
2c	**Current use of Southern Adjoining Properties** (please check all that apply) ☐ Commercial (retail, offices, etc.) ☐ Residential (single family or apartments) ☐ Industrial (manufacturing, warehousing, processing) ☒ Other-Please Describe	(please include a brief description of current operation) SOUTH OF ADJACENT ETTING Rd. IS OCEAN VIEW SCHOOL DISTRICT OFFICES/EL. SCHOOL
2d	**Current use of Western Adjoining Properties** (please check all that apply) ☐ Commercial (retail, offices, etc.) ☐ Residential (single family or apartments) ☐ Industrial (manufacturing, warehousing, processing) ☒ Other-Please Describe	(please include a brief description of current operation) Abandoned cemetery
2e	**Current use of Eastern Adjoining Properties** (please check all that apply) ☐ Commercial (retail, offices, etc.) ☒ Residential (single family or apartments) ☐ Industrial (manufacturing, warehousing, processing) ☐ Other-Please Describe	(please include a brief description of current operation) mobile home park / SINGLE Family residential

3)	**Please describe the previous land uses of your property and those surrounding your property. Include property ownership and dates of operation if known.**	
3a	**Previous use of Subject Property** (please check all that apply) ☐ Commercial (retail, offices, etc.) ☒ Residential (single family ~~or apartments~~) ☐ Industrial (manufacturing, warehousing, processing) ☐ Other-Please Describe	(please include a brief description of previous operations, former property owners, and dates of operation) RANCH HOME AND ORCHARD
3b	**Previous use of Northern Adjoining Properties** (please check all that apply) ☐ Commercial (retail, offices, etc.) ☐ Residential (single family or apartments) ☐ Industrial (manufacturing, warehousing, processing) ☒ Other-Please Describe	(please include a brief description of previous operations) ORCHARD CIRCA 1965
3c	**Previous use of Southern Adjoining Properties** (please check all that apply) ☐ Commercial (retail, offices, etc.) ☐ Residential (single family or apartments) ☐ Industrial (manufacturing, warehousing, processing) ☒ Other-Please Describe	(please include a brief description of previous operations) FIELDS CIRCA 1950'S
3d	**Previous use of Western Adjoining Properties** (please check all that apply) ☐ Commercial (retail, offices, etc.) ☐ Residential (single family or apartments) ☐ Industrial (manufacturing, warehousing, processing) ☒ Other-Please Describe	(please include a brief description of previous operations) CEMETARY SINCE LATE 1800'S
3e	**Previous use of Eastern Adjoining Properties** (please check all that apply) ☐ Commercial (retail, offices, etc.) ☐ Residential (single family or apartments) ☐ Industrial (manufacturing, warehousing, processing) ☒ Other-Please Describe	(please include a brief description of previous operations) ORCHARD / ROW CROPS CIRCA 1965

4)	**Who is the current owner of the facility?**	FRANK NAUMAN – NAUMANN FAMILY LIMITED PARTNERSHIP by NAUMAN LAND & DEVELOPMENT CO, G.P.
5)	**When did current ownership begin?**	PRIOR TO 1950'S
6)	**What is the age of the on-site facility?**	HOUSE IS 1957, BARN/SHEDS FROM 1940'S
7)	**Who is the previous owner of the property?**	UNKNOWN
8)	**Please indicate the property's current**	
	electrical service provider -	S.C. EDISON

Property Owner Interview Questionnaire
Rincon Project 13-01637 – Proposed Pleasant Valley Apartments, 2295 Etting Road, Oxnard, CA

	water service provider -	City of Oxnard (water wells also on site)
	natural gas service provider -	S. C. GAS
	sewer service provider -	City of OXNARD
	solid waste hauler -	City of OXNARD

9)	**To the best of your knowledge, has your facility previously or does your facility currently store or use any of the following in individual containers larger than 5 gallons in volume or 50 gallons in the aggregate?** (if yes or unknown, include how many, type, and size)	
	❑ ***Damaged or discarded automotive or industrial batteries***	PER SITE MEETING w/ FRANK NAUMANN ON 2/26/14
	❑ ***Pesticides***	
	❑ ***Paints***	
	❑ ***Oils or solvents***	
	❑ ***Motor vehicle fuel***	
	❑ ***Pesticides or Herbicides***	
	❑ ***Other Chemicals or hazardous substances***	

10)	**Please indicate any wastes generated at the facility.**		
	Hazardous waste:	**Quantity:**	**Disposal Method:**

11)	**Are there currently or to the best of your knowledge have there been previously, any industrial drums (typically 55 gallon) or sacks of chemicals located on the property or at the facility?**	
	❑ Yes ❑ No ❑ Unknown	if Yes or Unknown, please describe

12)	**Are there currently or to the best of your knowledge have there been previously, any evidence of fill dirt having been brought onto the property that originated from a contaminated site or that is of an unknown origin?**	
	☐ Yes ☒ No ☐ Unknown	if Yes or Unknown, please describe

13)	**Are there currently or to the best of your knowledge have there been previously, any pits, ponds or lagoons located on the property in connection with waste treatment or waste disposal?**	
	☐ Yes ☒ No ☐ Unknown	if Yes or Unknown, please describe

14)	**Are there currently or to the best of your knowledge have there been previously, any sumps, clarifiers, or solvent degreasers on the property?**	
	☐ Yes ☒ No ☐ Unknown	if Yes or Unknown, please describe

15)	**Are there currently or to the best of your knowledge have there been previously, any stained soil on the property?**	
	☐ Yes ☐ No ☒ Unknown	if Yes or Unknown, please describe

16)	**Are there currently or to the best of your knowledge have there been previously, any storage tanks (above or below ground) located on the property?**	
	☐ Yes ☐ No ☐ Unknown	if Yes or Unknown, please describe YES - PER FRANK'S COMMENTS ON 2/26/14

17)	**Are there currently or to the best of your knowledge have there been previously, any vent pipes, fill pipes, or access ways (etc.) indicating a fill pipe protruding from the ground on the property or adjacent to any structure located on the property?**	
	☐ Yes ☒ No ☐ Unknown	if Yes or Unknown, please describe

18)	**If the property is served by a private well or non-public water system, have contaminants been identified in the well or system that exceed guidelines applicable to the water system or has the well been designated as contaminated by any government agency?**

WELL FOR AG - HOUSE HAS CITY WATER

	☐ Yes ☐ No ☐ Unknown	if Yes or Unknown, please describe

19)	**Are there currently or to the best of your knowledge have there been previously, any flooring, drains, or walls located within the facility that are stained by substances other than water, or are emitting foul odors?**	
	☐ Yes ☐ No ☒ Unknown	if Yes or Unknown, please describe

20)	**To the best of your knowledge has your facility previously or does your facility currently, discharge wastewater on or adjacent to the property other than storm water into a sanitary sewer system?**	
	☐ Yes ☐ No ☐ Unknown	if Yes or Unknown, please describe HOUSE IS connected to city sewer line. No storm water lines in area.

21)	**Have any of the following ever been dumped above grade, buried and/or burned on the property?** (please check all that apply and describe if possible)	
	☐ hazardous substances	REFER TO FRANK'S
	☐ petroleum products	Comments per 2/26/14
	☐ unidentified waste materials	
	☐ tires	
	☐ automotive or industrial batteries	
	☐ other waste materials (please describe)	

22)	**Are there currently or to the best of your knowledge have there been previously, a transformer, capacitor or any hydraulic equipment on the property?**	
	☒ Yes ☐ No ☐ Unknown	if Yes or Unknown, please describe PER FRANK'S COMMENTS on 2/26/14

23)	**Are there currently or to the best of your knowledge have there been previously any records indicating the presence of PCBs?**	
	☐ Yes ☐ No ☒ Unknown	if Yes or Unknown, please describe

24)	**Are there currently or to the best of your knowledge have there been previously any records indicating the presence of pesticides or herbicides?**	
	☐ Yes ☐ No ☐ Unknown	if Yes or Unknown, please describe REFER TO FRANK'S comments on 2/26/14

25)	**Do you have any environmental liens or governmental notification relating to past or recurrent violations of environmental laws with respect to the property or any facility located on the property?**	
	☐ Yes ☒ No ☐ Unknown	if Yes or Unknown, please describe

26)	**Have you been informed of the past or current existence of hazardous substances, petroleum products, or environmental violations with respect to the property or any facility located on the property?**	
	☐ Yes ☒ No ☐ Unknown	if Yes or Unknown, please describe

27)	**Do you have any knowledge of any environmental site assessments of the property or facility that indicated the presence of hazardous substances or petroleum products on, or contamination of, the property or recommended further assessment of the property?**	
	☐ Yes ☒ No ☐ Unknown	if Yes or Unknown, please describe

28)	**Do you know of any past, threatened, or pending lawsuits or administrative proceedings concerning a release of any hazardous substances or petroleum products involving the property by any owner or occupant of the property?**	
	☐ Yes ☒ No ☐ Unknown	if Yes or Unknown, please describe

29)	**Are there any site-specific geotechnical or geologic reports available for the subject property?**

	☐ Yes ☒ No ☐ Unknown	if Yes or Unknown, please describe A SOILS REPORT IS UNDERWAY. BORINGS COMPETE WEEK OF 3/10/14

30)	**Is there a Title Report available for the subject property?**	
	☒ Yes ☐ No ☐ Unknown	if Yes or Unknown, please describe PREVIOUSLY SENT

This questionnaire was completed by (please print)	
Name	FRANK NAUMANN
Title	OWNER
Firm	
Street Address	SUBJECT PARCEL
City, State, Zip Code	
Phone Number	208-651-2454
Fax Number	
What is the Preparer's relationship to the property (i.e., owner, occupant, property manager, employee, agent, consultant, etc.) ?	

Copies of the completed questionnaire should be faxed, emailed (preferably) or mailed to:

Rincon Consultants, Inc.
180 N. Ashwood Avenue, Ventura, CA 93003
Attention: Lauren Kodama
Fax: (805) 644-4240
Email: lkodama@rinconconsultants.com

Preparer represents that to the best of the preparer's knowledge the above statements and facts are true and correct and to the best of the preparer's knowledge no material facts have been suppressed or misstated.

Signature ______________________ **Date** __________

REFER ALSO TO COMMENTS
FROM FRANK ON 2/26/14

User Questionnaire
Rincon Project 13-01637 – Proposed Pleasant Valley Apartments, 2295 Etting Road, Oxnard, California

To qualify for one of the Landowner Liability Protections (LLPs) offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "Brownfields Amendments"), the user must provide the following information to the environmental professional. Failure to conduct these inquiries could result in a determination that "all appropriate inquiries" is not complete.

We respectfully request that you fill out this form and e-mail it to Lauren Kodama at lkodama@RinconConsultants.com within one week from the date of this transmittal.

1. Why is the Phase I is required or being performed?	CITY REQUEST
2. What type of property transaction is planned? (i.e. sale, purchase, exchange, etc.)	SALE / PURCHASE
3. What is the entire site address?	2 PARCELS - one address 2295 ETTING RD, OXNARD
4. What is the Assessor's Parcel Number (s)?	225-0-019-160 225-0-014-190
5. Are any considerations beyond the requirements of Practice E1527 to be considered? (i.e. lien search, asbestos & lead based paint, radon, etc.)	UNDER GROUND RADAR SEARCH TO VERIFY NOTHING BURIED. (ADJACENT PARCEL IS A CEMETERY)
6. Identify all parties who will rely on the Phase I report.	CITY of OXNARD PURCHASER COUNTY OF VTA - CULTURAL RESOURCES
7. Identify the Site Manager/Contact and how the contact can be reached.	MARK PETTIT ARCHITECT 805-218-1128 VINCE DALY - PURCHASER DALY/DANSK 805-407-3400
8. Identify the Site Owner and how the owner can be reached.	FRANK NAUMANN 208-651-2454

9. Do you have copies of any available prior environmental site assessment reports, documents, correspondence, etc., concerning the any other knowledge or experience with the property that may be pertinent to the environmental professional (i.e. title report, previous Ph I and II ESAs, Environmental Impact Studies, etc.).	PREVIOUSLY SENT PH I ON PARCEL 2 LOTS TO WEST.

1. **Did a search of *recorded land title records* (or judicial records, where appropriate) identify any environmental liens filed or recorded against the *property?***

Please checkmark the most appropriate response:

☒ I *have not* reviewed the records and ***do not know*** if there are any filed or recorded environmental liens.

☐ I *have* reviewed the records, and ***No, there aren't any*** filed or recorded environmental liens.

☐ I *have* reviewed the records, and ***Yes, there are*** environmental liens. Explain:

2. **Did a search of recorded land title records (or judicial records, where appropriate) identify any activity and land use limitations (AULs), such as engineering controls, land use restrictions or institutional controls that are in place at the property and/or have been filed or recorded against the property under federal, tribal, state or local law?**

Please checkmark the most appropriate response:

☒ I *have not* reviewed the records and ***do not know*** if there are any filed/recorded AULs or any AULs in place at the site.

☐ I *have* reviewed the records, and ***No, there aren't any*** filed/recorded AULs or any AULs in place at the site.

☐ I *have* reviewed the records, and ***Yes, there are*** AULs filed, recorded, and/or in place at the site. Explain:

3. Does the Title Report provide any information pertaining to environmental cleanup liens or activity and use limitations (AULs) for the subject property?

Please checkmark the most appropriate response:

☒ I *have not* reviewed the Title Report and ***do not know*** if it provides environmental cleanup liens or AULs information.

☐ I *have* reviewed the Title Report, and ***No, it does not*** provide environmental cleanup liens or AULs information.

☐ I *have* reviewed the Title Report, and ***Yes, it does provide*** environmental cleanup liens or AULs information. Explain:

4. Do you have any specialized knowledge or experience related to the *property* or nearby properties? For example, are you involved in the same line of business as the current or former *occupants* of the *property* or an *adjoining property* so that you would have specialized knowledge of the chemicals and processes used by this type of business?

Please checkmark the most appropriate response:

☐ *No*, I *do not* have any specialized knowledge and/or experience related to the property or nearby properties.

☒ *Yes*, I *do* have specialized knowledge and/or experience related to the property or nearby properties. Explain: INFO ON PARCEL 2 LOTS TO THE WEST.

5. As the user of this ESA, based on your knowledge and experience related to the property, are you aware of any information pertaining to a reduction in value for the subject property relative to any known environmental issues?

Please checkmark the most appropriate response:

☒ *No*, I *do not* have any information about a reduction in property value relative to environmental issues.

☐ *Yes*, I *do* have information about a reduction in property value relative to environmental issues. Explain:

6. **Does the purchase price being paid for this property reasonably reflect the fair market value of the property?**

Please checkmark the most appropriate response:

☒ *Yes*, I *do* believe the purchase price being paid for this property reasonably reflects the fair market value of the property. Skip to question #7.

☐ *No*, I *do not* believe the purchase price being paid for this property reasonably reflects the fair market value of the property. Proceed to question #6a.

a. **If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property? (40 CFR 312.29)**

Please checkmark the most appropriate response:

☐ *No*, I *have not* considered the idea that known or believed contamination at the site has caused the lower purchase price.

☐ *Yes*, I *have* considered the idea that known or believed contamination at the site has caused the lower purchase price. Explain.

7. **Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example,**

a. **Do you know the past uses of the property?**

☐ I *do not* know.

☒ I *do* know. Explain: RESIDENCE WITH AVOCADO RANCHO

b. Do you know of specific chemicals are present or once were present at the property?

☒ I *do not* know.

☐ I *do* know. Explain:

c. Do you know of any spills or other chemical releases that have taken place at the property?

☒ I *do not* know.

☐ I *do* know. Explain:

d. Do you know of any environmental cleanups have taken place at the property?

☒ I *do not* know.

☐ I *do* know. Explain:

8. Based on your knowledge and experience related to the property are there any obvious indicators that point to the presence or likely presence of releases at the property?

Please checkmark the most appropriate response:

☒ No, I do not know and/or do not have any experience with any obvious indicators that point to the presence or likely presence of contamination at the property.

☐ Yes, I do know of and/*or do have experience with* obvious indicators that point to the presence or likely presence of contamination at the property. Explain:

9. Are you aware of any pending, threatened, or past litigation relevant to hazardous substances or petroleum products, in, on, or from the site?

☒ ***No***, I *am not aware of any pending, threatened, or past litigation relevant to hazardous substances or petroleum products, in, on, or from the site.*

☐ ***Yes***, I *am aware of pending, threatened, or past litigation relevant to hazardous substances or petroleum products, in, on, or from the site*. Explain:

10. Are you aware of any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the site?

☒ ***No***, I *am not aware of any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the site.*

☐ ***Yes***, I *am aware of pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the site.* Explain:

11. **Are you aware of any notice from any government entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products?**

    ☒ *No*, I *am not aware of any notice from any government entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products.*

    ☐ *Yes*, I *am aware of a notice, or notices, from a government entity (or multiple government entities) regarding a possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products.* Explain:

This questionnaire was completed by (please print):

Name	MARK PETTIT / FRANK NAUMANN
Title	
Firm	SEE OTHER FORMS
Street Address	
City, State, Zip Code	
Phone Number	
Fax Number	
What is the preparer's relationship to the property (i.e., seller, buyer, occupant, property manager, employee, agent, consultant, etc.)?	

The preparer represents that to the best of the preparer's knowledge the above statements and facts are true and correct, and to the best of the preparer's knowledge, no material facts have been suppressed or misstated.

Signature **Date**

Please email this form to *Lauren Kodama* *at* **lkodama@RinconConsultants.com**. *This form may also be mailed to the following address:*

Rincon Consultants, Inc., ***Attention: Lauren Kodama***
180 N. Ashwood Avenue, Ventura, CA 93003
Fax: (805) 644-4240

Appendix 2

Regulatory Records Documentation

Pleasant Valley Apartments
2295 Etting Road
Oxnard, CA 93033

Inquiry Number: 03864571.2r
February 25, 2014

The EDR Radius Map™ Report with GeoCheck®

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

TABLE OF CONTENTS

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

2295 ETTING ROAD
OXNARD, CA 93033

COORDINATES

Latitude (North):	34.1623000 - 34˚ 9' 44.28''
Longitude (West):	119.1478000 - 119˚ 8' 52.08''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	302011.6
UTM Y (Meters):	3782041.2
Elevation:	32 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	34119-B2 OXNARD, CA
Most Recent Revision:	1967

AERIAL PHOTOGRAPHY IN THIS REPORT

Photo Year:	2012
Source:	USDA

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL National Priority List

EXECUTIVE SUMMARY

Proposed NPL - - - - - - Proposed National Priority List Sites
NPL LIENS - - - - - - Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL - - - - - - National Priority List Deletions

Federal CERCLIS list

CERCLIS - - - - - - Comprehensive Environmental Response, Compensation, and Liability Information System
FEDERAL FACILITY - - - - - - Federal Facility Site Information listing

Federal CERCLIS NFRAP site List

CERC-NFRAP - - - - - - CERCLIS No Further Remedial Action Planned

Federal RCRA CORRACTS facilities list

CORRACTS - - - - - - Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF - - - - - - RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG - - - - - - RCRA - Large Quantity Generators
RCRA-SQG - - - - - - RCRA - Small Quantity Generators
RCRA-CESQG - - - - - - RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

US ENG CONTROLS - - - - - - Engineering Controls Sites List
US INST CONTROL - - - - - - Sites with Institutional Controls
LUCIS - - - - - - Land Use Control Information System

Federal ERNS list

ERNS - - - - - - Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE - - - - - - State Response Sites

State and tribal landfill and/or solid waste disposal site lists

SWF/LF - - - - - - Solid Waste Information System

State and tribal leaking storage tank lists

INDIAN LUST - - - - - - Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

AST - - - - - - Aboveground Petroleum Storage Tank Facilities

INDIAN UST - Underground Storage Tanks on Indian Land
FEMA UST - Underground Storage Tank Listing

State and tribal voluntary cleanup sites

VCP - Voluntary Cleanup Program Properties
INDIAN VCP - Voluntary Cleanup Priority Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS - A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

DEBRIS REGION 9 - Torres Martinez Reservation Illegal Dump Site Locations
ODI - Open Dump Inventory
WMUDS/SWAT - Waste Management Unit Database
SWRCY - Recycler Database
HAULERS - Registered Waste Tire Haulers Listing
INDIAN ODI - Report on the Status of Open Dumps on Indian Lands

Local Lists of Hazardous waste / Contaminated Sites

US CDL - Clandestine Drug Labs
HIST Cal-Sites - Historical Calsites Database
SCH - School Property Evaluation Program
Toxic Pits - Toxic Pits Cleanup Act Sites
CDL - Clandestine Drug Labs
US HIST CDL - National Clandestine Laboratory Register

Local Land Records

LIENS 2 - CERCLA Lien Information
LIENS - Environmental Liens Listing
DEED - Deed Restriction Listing

Records of Emergency Release Reports

HMIRS - Hazardous Materials Information Reporting System
CHMIRS - California Hazardous Material Incident Report System
LDS - Land Disposal Sites Listing
MCS - Military Cleanup Sites Listing
SPILLS 90 - SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR - RCRA - Non Generators
DOT OPS - Incident and Accident Data
DOD - Department of Defense Sites
FUDS - Formerly Used Defense Sites
CONSENT - Superfund (CERCLA) Consent Decrees
ROD - Records Of Decision

EXECUTIVE SUMMARY

UMTRA	Uranium Mill Tailings Sites
US MINES	Mines Master Index File
TRIS	Toxic Chemical Release Inventory System
TSCA	Toxic Substances Control Act
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
SSTS	Section 7 Tracking Systems
ICIS	Integrated Compliance Information System
PADS	PCB Activity Database System
MLTS	Material Licensing Tracking System
RADINFO	Radiation Information Database
FINDS	Facility Index System/Facility Registry System
RAATS	RCRA Administrative Action Tracking System
RMP	Risk Management Plans
CA BOND EXP. PLAN	Bond Expenditure Plan
UIC	UIC Listing
NPDES	NPDES Permits Listing
Cortese	"Cortese" Hazardous Waste & Substances Sites List
CUPA Listings	CUPA Resources List
Notify 65	Proposition 65 Records
DRYCLEANERS	Cleaner Facilities
VENTURA CO. BWT	Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
WIP	Well Investigation Program Case List
ENF	Enforcement Action Listing
HAZNET	Facility and Manifest Data
EMI	Emissions Inventory Data
INDIAN RESERV	Indian Reservations
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
MED WASTE VENTURA	Medical Waste Program List
LEAD SMELTERS	Lead Smelter Sites
2020 COR ACTION	2020 Corrective Action Program List
WDS	Waste Discharge System
EPA WATCH LIST	EPA WATCH LIST
PCB TRANSFORMER	PCB Transformer Registration Database
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
Financial Assurance	Financial Assurance Information Listing
US AIRS	Aerometric Information Retrieval System Facility Subsystem
PROC	Certified Processors Database
PRP	Potentially Responsible Parties
MWMP	Medical Waste Management Program Listing
COAL ASH DOE	Steam-Electric Plant Operation Data
HWT	Registered Hazardous Waste Transporter Database
HWP	EnviroStor Permitted Facilities Listing
US FIN ASSUR	Financial Assurance Information

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	EDR Proprietary Manufactured Gas Plants

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF	Recovered Government Archive Solid Waste Facilities List

EXECUTIVE SUMMARY

RGA LUST - - - - - - - - - - - - - - - - - - Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control’s (DTSC’s) Site Mitigation and Brownfields Reuse Program’s (SMBRP’s) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 11/06/2013 has revealed that there is 1 ENVIROSTOR site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PACIFIC VIEW DAY SCHOOL Status: No Further Action	***ROSE AVENUE/GARY STREET***	***WNW 1/2 - 1 (0.719 mi.)***	***8***	***19***

State and tribal leaking storage tank lists

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the State Water Resources Control Board Leaking Underground Storage Tank Information System.

A review of the LUST list, as provided by EDR, and dated 12/16/2013 has revealed that there are 2 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
OCEAN VIEW SCHOOL DISTRICT Status: Completed - Case Closed	***2382 ETTING ROAD***	***ESE 0 - 1/8 (0.113 mi.)***	***2***	***8***
COASTAL FLORAL Status: Completed - Case Closed	***2810 ETTING RD***	***E 1/4 - 1/2 (0.312 mi.)***	***6***	***15***

EXECUTIVE SUMMARY

SLIC: SLIC Region comes from the California Regional Water Quality Control Board.

A review of the SLIC list, as provided by EDR, and dated 12/16/2013 has revealed that there is 1 SLIC site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
RENAISSANCE / PLEASANT VALLEY	***2797 EAST PLEASANT VALL***	***NE 1/4 - 1/2 (0.441 mi.)***	***7***	***17***
Facility Status: Completed - Case Closed				

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, and dated 12/16/2013 has revealed that there are 2 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
OCEAN VIEW SCHOOL DISTRICT	***2382 ETTING ROAD***	***ESE 0 - 1/8 (0.113 mi.)***	***2***	***8***

Lower Elevation	Address	Direction / Distance	Map ID	Page
MANABI FARMS, INC.	4550 OLDS ROAD	SSW 1/8 - 1/4 (0.166 mi.)	3	14

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Registered Storage Tanks

CA FID UST: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there is 1 CA FID UST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
OCEAN VIEW SCHOOL DISTRICT	***2382 ETTING ROAD***	***ESE 0 - 1/8 (0.113 mi.)***	***2***	***8***

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there is 1 HIST UST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
OCEAN VIEW SCHOOL DISTRICT	***2382 ETTING ROAD***	***ESE 0 - 1/8 (0.113 mi.)***	***2***	***8***

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there is 1 SWEEPS UST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
OCEAN VIEW SCHOOL DISTRICT	*2382 ETTING ROAD*	*ESE 0 - 1/8 (0.113 mi.)*	*2*	*8*

Other Ascertainable Records

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 2 HIST CORTESE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
OCEAN VIEW SCHOOL DISTRICT	*2382 ETTING ROAD*	*ESE 0 - 1/8 (0.113 mi.)*	*2*	*8*
COASTAL FLORAL	*2810 ETTING RD*	*E 1/4 - 1/2 (0.312 mi.)*	*6*	*15*

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR US Hist Auto Stat: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR US Hist Auto Stat list, as provided by EDR, has revealed that there is 1 EDR US Hist Auto Stat site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
STEVENSON S TEXACO	2050 E PLEASANT VALLE	WSW 1/8 - 1/4 (0.241 mi.)	5	14

EXECUTIVE SUMMARY

EDR US Hist Cleaners: EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR US Hist Cleaners list, as provided by EDR, has revealed that there are 2 EDR US Hist Cleaners sites within approximately 0.25 miles of the target property.

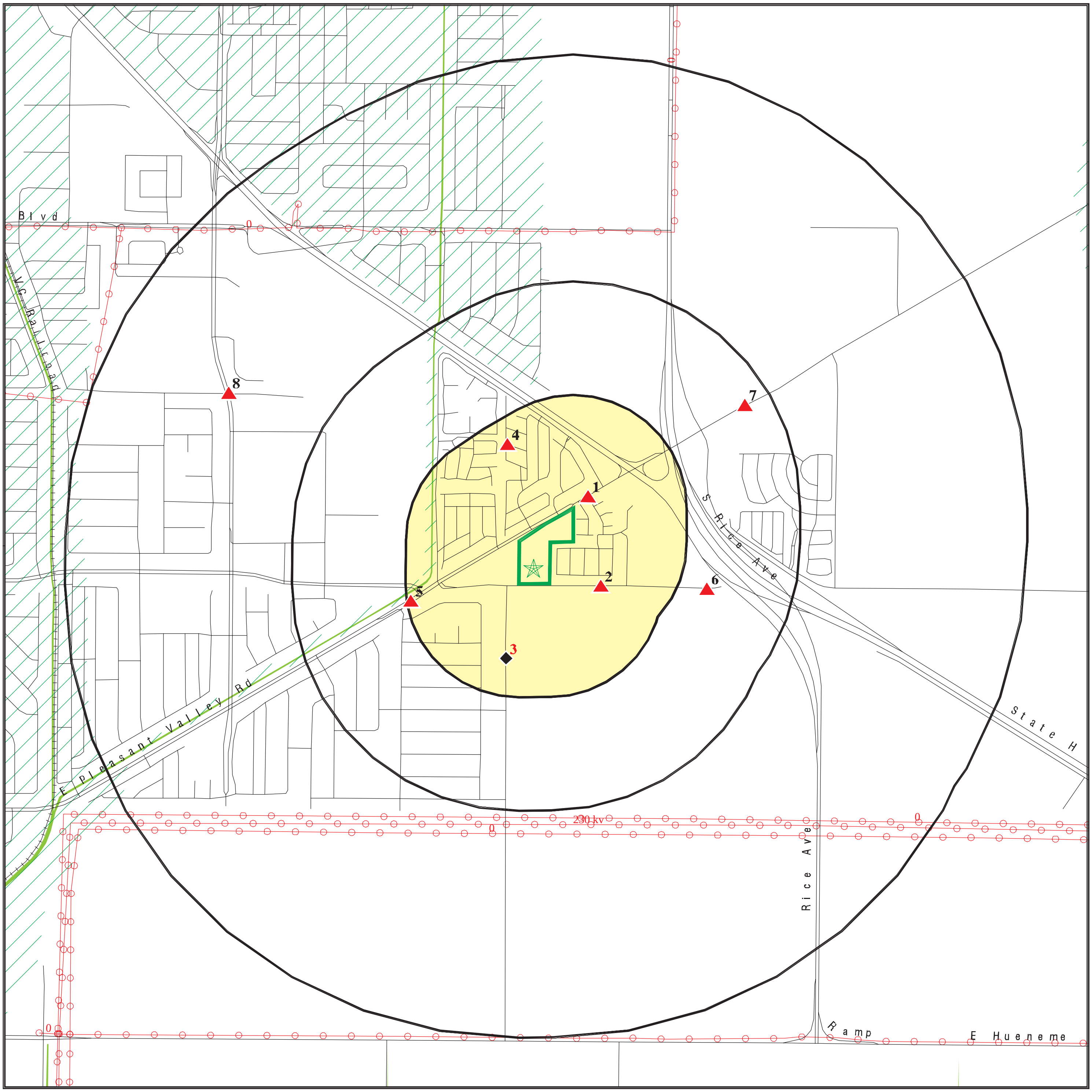
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported	2400 E PLEASANT VALLEY	NE 0 - 1/8 (0.042 mi.)	1	8
Not reported	1407 PEACH AVE	NNW 1/8 - 1/4 (0.195 mi.)	4	14

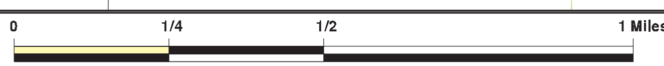
EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 20 records.

Site Name	Database(s)
PLEASANT VALLEY DENTAL	MED WASTE VENTURA
	CDL
OXNARD 1962	SWF/LF
THOMPSON LUMBER CO.	UST
LUNSFORD TOYTOTA	UST
SCHREINER,WALT(PAT'S USED CAR	UST
VACANT FACILITY	UST
BUDGET RENT-A-CAR	UST
OXNARD FLORAL, INC.	HIST UST
CALTRANS D-7/CONSTR/EA07-2Y8104	HAZNET
ALLIED DISTRIBUTING	HAZNET
CITY OF OXNARD - SOLID WASTE DIVIS	HAZNET
VILLA CAPRI MOBILE ESTATES	HAZNET
ITO FLOWER GROWERS	HAZNET
COMMANDER NAUMENN DRILL SITE	FINDS, EMI
BUSH WEST MONTALVO FIELD	FINDS, EMI
SO CAL EDISON - MISSILE SUBSTATION	VENTURA CO. BWT
SO CAL EDISON - COLONIA SUBSTATION	VENTURA CO. BWT
CALTRANS ROUTE 1	WDS
SHELL WESTERN E&P INC (SWEPI)	EMI

OVERVIEW MAP - 03864571.2r



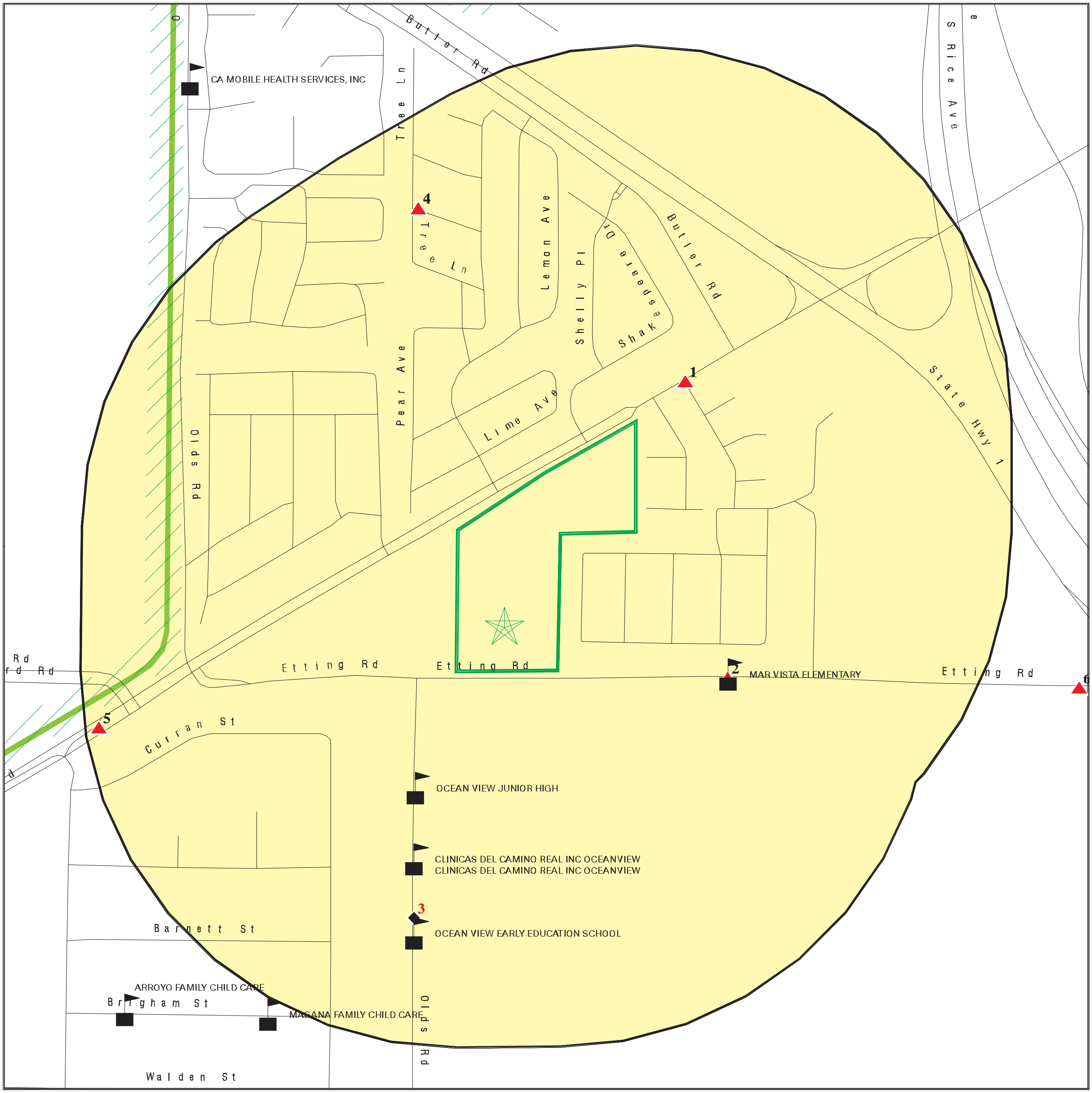


- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Pleasant Valley Apartments	CLIENT:	Rincon
ADDRESS:	2295 Etting Road	CONTACT:	Lauren Kodama
	Oxnard CA 93033	INQUIRY #:	03864571.2r
LAT/LONG:	34.1623 / 119.1478	DATE:	February 25, 2014 2:01 am

DETAIL MAP - 03864571.2r



0 1/16 1/8 1/4 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Oil & Gas pipelines from USGS
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Pleasant Valley Apartments	CLIENT:	Rincon
ADDRESS:	2295 Etting Road Oxnard CA 93033	CONTACT:	Lauren Kodama
		INQUIRY #:	03864571.2r
LAT/LONG:	34.1623 / 119.1478	DATE:	February 25, 2014 2:02 am

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	0.001		0	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS	0.500		0	0	0	NR	NR	0
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
LUCIS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	0	0	NR	0
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		0	0	0	1	NR	1
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		1	0	1	NR	NR	2

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
SLIC	0.500		0	0	1	NR	NR	1
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
UST	0.250		1	1	NR	NR	NR	2
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
FEMA UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL	0.001		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
US HIST CDL	0.001		0	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
CA FID UST	0.250		1	0	NR	NR	NR	1
HIST UST	0.250		1	0	NR	NR	NR	1
SWEEPS UST	0.250		1	0	NR	NR	NR	1
Local Land Records								
LIENS 2	0.001		0	NR	NR	NR	NR	0
LIENS	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
DOD	1.000		0	0	0	0	NR	0
FUDS	1.000		0	0	0	0	NR	0
CONSENT	1.000		0	0	0	0	NR	0
ROD	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
UIC	0.001		0	NR	NR	NR	NR	0
NPDES	0.001		0	NR	NR	NR	NR	0
Cortese	0.500		0	0	0	NR	NR	0
HIST CORTESE	0.500		1	0	1	NR	NR	2
CUPA Listings	0.250		0	0	NR	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
VENTURA CO. BWT	0.001		0	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
ENF	0.001		0	NR	NR	NR	NR	0
HAZNET	0.001		0	NR	NR	NR	NR	0
EMI	0.001		0	NR	NR	NR	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
MED WASTE VENTURA	0.001		0	NR	NR	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
WDS	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
HWT	0.250		0	0	NR	NR	NR	0
HWP	1.000		0	0	0	0	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR US Hist Auto Stat	0.250		0	1	NR	NR	NR	1
EDR US Hist Cleaners	0.250		1	1	NR	NR	NR	2
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS

Map ID Direction Distance Elevation	Site	Database(s)	EDR ID Number EPA ID Number

1
NE
< 1/8
0.042 mi.
224 ft.

2400 E PLEASANT VALLEY RD
OXNARD, CA 93033

EDR US Hist Cleaners **1015025620** **N/A**

Relative: **Higher**

Actual: **33 ft.**

EDR Historical Cleaners:
- Name: JAMAY CARPET CLEANING
- Year: 2005
- Address: 2400 E PLEASANT VALLEY RD

2
ESE
< 1/8
0.113 mi.
598 ft.

OCEAN VIEW SCHOOL DISTRICT
2382 ETTING ROAD
OXNARD, CA 93030

NPDES **HIST CORTESE** **LUST** **CA FID UST** **UST** **HIST UST** **SWEEPS UST** **WDS**

1000150854 **N/A**

Relative: **Higher**

Actual: **32 ft.**

NPDES:

Npdes Number:	CAS000001
Facility Status:	Active
Agency Id:	0
Region:	4
Regulatory Measure Id:	192840
Order No:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place Id:	Not reported
WDID:	4 56I018029
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	04/02/2003
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Ocean View Elementary School Dist
Discharge Address:	2382 Etting Rd
Discharge City:	Oxnard
Discharge State:	California
Discharge Zip:	93033

HIST CORTESE:

Region:	CORTESE
Facility County Code:	56
Reg By:	LTNKA
Reg Id:	C-86093

LUST:

Region:	STATE
Global Id:	T0611100166
Latitude:	34.1617557
Longitude:	-119.1432742
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	12/17/2003
Lead Agency:	VENTURA COUNTY LOP
Case Worker:	DBW
Local Agency:	VENTURA COUNTY LOP
RB Case Number:	C86093

OCEAN VIEW SCHOOL DISTRICT (Continued) **1000150854**

LOC Case Number:	86093
File Location:	Not reported
Potential Media Affect:	Other Groundwater (uses other than drinking water), Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0611100166
Contact Type:	Local Agency Caseworker
Contact Name:	DIANE B. WAHL
Organization Name:	VENTURA COUNTY LOP
Address:	800 S. VICTORIA AVE.
City:	VENTURA
Email:	diane.wahl@ventura.org
Phone Number:	8056545040
Global Id:	T0611100166
Contact Type:	Regional Board Caseworker
Contact Name:	DANIEL PIROTTON
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	Not reported
City:	R4 UNKNOWN
Email:	dpirotton@waterboards.ca.gov
Phone Number:	2135766714

Status History:

Global Id:	T0611100166
Status:	Open - Case Begin Date
Status Date:	12/22/1986
Global Id:	T0611100166
Status:	Open - Site Assessment
Status Date:	05/21/1987
Global Id:	T0611100166
Status:	Open - Site Assessment
Status Date:	07/01/1988
Global Id:	T0611100166
Status:	Completed - Case Closed
Status Date:	12/17/2003

Regulatory Activities:

Global Id:	T0611100166
Action Type:	ENFORCEMENT
Date:	04/16/2003
Action:	Technical Correspondence / Assistance / Other
Global Id:	T0611100166
Action Type:	ENFORCEMENT
Date:	12/08/2003
Action:	* Historical Enforcement
Global Id:	T0611100166
Action Type:	ENFORCEMENT

OCEAN VIEW SCHOOL DISTRICT (Continued) **1000150854**

Date:	09/17/2003
Action:	File review
Global Id:	T0611100166
Action Type:	ENFORCEMENT
Date:	12/17/2003
Action:	Closure/No Further Action Letter
Global Id:	T0611100166
Action Type:	ENFORCEMENT
Date:	02/04/1988
Action:	* Historical Enforcement
Global Id:	T0611100166
Action Type:	Other
Date:	01/01/1950
Action:	Leak Reported
Global Id:	T0611100166
Action Type:	Other
Date:	01/01/1950
Action:	Leak Discovery
Global Id:	T0611100166
Action Type:	RESPONSE
Date:	01/30/2004
Action:	Unknown

LUST REG 4:

Region:	4	
Regional Board:	04	
County:	Ventura	
Facility Id:	C-86093	
Status:	Case Closed	
Substance:	Gasoline	
Substance Quantity:	Not reported	
Local Case No:	86093	
Case Type:	O, S	
Abatement Method Used at the Site:		Not reported
Global ID:	T0611100166	
W Global ID:	Not reported	
Staff:	UNK	
Local Agency:	56000L	
Cross Street:	Not reported	
Enforcement Type:	CLOS	
Date Leak Discovered:	12/22/1986	
Date Leak First Reported:		12/22/1986
Date Leak Record Entered:	Not reported	
Date Confirmation Began:	7/1/1988	
Date Leak Stopped:	Not reported	
Date Case Last Changed on Database:		Not reported
Date the Case was Closed:		12/17/2003
How Leak Discovered:	Not reported	
How Leak Stopped:	Not reported	
Cause of Leak:	Not reported	
Leak Source:	Not reported	

OCEAN VIEW SCHOOL DISTRICT (Continued) **1000150854**

Operator: Not reported
Water System: Not reported
Well Name: Not reported
Approx. Dist To Production Well (ft): 1270.5139380700812352235695007
Source of Cleanup Funding: F
Preliminary Site Assessment Workplan Submitted: 5/21/1987
Preliminary Site Assessment Began: Not reported
Pollution Characterization Began: Not reported
Remediation Plan Submitted: Not reported
Remedial Action Underway: Not reported
Post Remedial Action Monitoring Began: Not reported
Enforcement Action Date: 2/4/1988
Historical Max MTBE Date: 11/19/2002
Hist Max MTBE Conc in Groundwater: 3.5
Hist Max MTBE Conc in Soil: 0
Significant Interim Remedial Action Taken: Not reported
GW Qualifier: =
Soil Qualifier: ND
Organization: Not reported
Owner Contact: Not reported
Responsible Party: OCEAN VIEW SCH DIST
RP Address: Not reported
Program: LUST
Lat/Long: 34.1614063 / -1
Local Agency Staff: DBW
Beneficial Use: Not reported
Priority: Not reported
Cleanup Fund Id: Not reported
Suspended: Not reported
Assigned Name: Not reported
Summary: Not reported

VENTURA CO. LUST:
Region: VENTURA
Facility ID: 86093
Status: Case Closed

CA FID UST:
Facility ID: 56000058
Regulated By: UTNKA
Regulated ID: 22706
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: Not reported
Mail To: Not reported
Mailing Address: 2382 ETTING RD
Mailing Address 2: Not reported
Mailing City,St,Zip: OXNARD 93033
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

OCEAN VIEW SCHOOL DISTRICT (Continued) **1000150854**

UST:
Facility ID: 056-013-051999
Latitude: 34.161559
Longitude: -119.145285
Permitting AgencyOXNARD, CITY OF

HIST UST:
Region: STATE
Facility ID: 00000022706
Facility Type: Other
Other Type: SCHOOL
Total Tanks: 0003
Contact Name: JACK TAYLOR
Telephone: 8054884441
Owner Name: OCEAN VIEW SCHOOL DISTRICT
Owner Address: 2382 ETTING ROAD
Owner City,St,Zip: OXNARD, CA 93033

Tank Num: 001
Container Num: #1
Year Installed: 1960
Tank Capacity: 00000550
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: Not reported
Leak Detection: Stock Inventor, Sensor Instrument

Tank Num: 002
Container Num: #2
Year Installed: 1974
Tank Capacity: 00001000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Tank Construction: Not reported
Leak Detection: Stock Inventor, Sensor Instrument

Tank Num: 003
Container Num: #3
Year Installed: 1979
Tank Capacity: 00001000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Tank Construction: Not reported
Leak Detection: Stock Inventor, Sensor Instrument

SWEEPS UST:
Status: Active
Comp Number: 672
Number: 9
Board Of Equalization: 44-030678
Referral Date: 09-30-92
Action Date: 09-30-92
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: Not reported
Swrcb Tank Id: 56-000-000672-000001

OCEAN VIEW SCHOOL DISTRICT (Continued) **1000150854**

Actv Date: Not reported
Capacity: 2000
Tank Use: UNKNOWN
Stg: P
Content: Not reported
Number Of Tanks: 2

Status: Active
Comp Number: 672
Number: 9
Board Of Equalization: 44-030678
Referral Date: 09-30-92
Action Date: 09-30-92
Created Date: 02-29-88
Tank Status: A
Owner Tank Id: Not reported
Swrcb Tank Id: 56-000-000672-000002
Actv Date: Not reported
Capacity: 4000
Tank Use: UNKNOWN
Stg: P
Content: Not reported
Number Of Tanks: Not reported

CA WDS:

Facility ID: 4 56I018029
Facility Type: Industrial - Facility that treats and/or disposes of liquid or semisolid wastes from any servicing, producing, manufacturing or processing operation of whatever nature, including mining, gravel washing, geothermal operations, air conditioning, ship building and repairing, oil production, storage and disposal operations, water pumping.
Facility Status: Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
NPDES Number: CAS000001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board
Subregion: 4
Facility Telephone: 8054884441
Facility Contact: BRIDGES GREGORY L
Agency Name: OCEAN VIEW SCH DIST
Agency Address: 2382 Etting Rd
Agency City,St,Zip: Oxnard 930336864
Agency Contact: BRIDGES GREGORY L
Agency Telephone: 8054884441
Agency Type: State
SIC Code: 0
SIC Code 2: Not reported
Primary Waste Type: Not reported
Primary Waste: Not reported
Waste Type2: Not reported
Waste2: Not reported
Primary Waste Type: Not reported
Secondary Waste: Not reported
Secondary Waste Type: Not reported
Design Flow: 0
Baseline Flow: 0
Reclamation: Not reported

OCEAN VIEW SCHOOL DISTRICT (Continued) **1000150854**

POTW: Not reported
Treat To Water: Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.
Complexity: Category C - Facilities having no waste treatment systems, such as cooling water dischargers or thosewho must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.

3
SSW
1/8-1/4
0.166 mi.
878 ft.

MANABI FARMS, INC.
4550 OLDS ROAD
OXNARD, CA

UST **U001966186**
N/A

Relative:
Lower

Actual:
31 ft.

VENTURA CO. UST:
Facility ID: D 425
Facility Status: Inactive

4
NNW
1/8-1/4
0.195 mi.
1027 ft.

1407 PEACH AVE
OXNARD, CA 93033

EDR US Hist Cleaners **1014992085**
N/A

Relative:
Higher

Actual:
35 ft.

EDR Historical Cleaners:
Name: CHANNEL ISLANDS CARPET CLEANING
Year: 2007
Address: 1407 PEACH AVE

Name: CHANNEL ISLANDS CARPET CLEANING
Year: 2008
Address: 1407 PEACH AVE

5
WSW
1/8-1/4
0.241 mi.
1271 ft.

STEVENSON S TEXACO
2050 E PLEASANT VALLEY RD
OJAI, CA

EDR US Hist Auto Stat **1009024340**
N/A

Relative:
Higher

Actual:
33 ft.

EDR Historical Auto Stations:
Name: STEVENSON S TEXACO
Year: 1976
Type: GASOLINE STATIONS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
6 **East** **1/4-1/2** **0.312 mi.** **1650 ft.**	**COASTAL FLORAL** **2810 ETTING RD** **OXNARD, CA 93030**	**HIST CORTESE** **LUST**	**S104164753** **N/A**

Relative: **Higher**

Actual: **32 ft.**

HIST CORTESE:

Region:	CORTESE
Facility County Code:	56
Reg By:	LTNKA
Reg Id:	C-89016

LUST:

Region:	STATE
Global Id:	T0611100439
Latitude:	34.1617047
Longitude:	-119.1360431
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	07/13/1994
Lead Agency:	VENTURA COUNTY LOP
Case Worker:	Not reported
Local Agency:	Not reported
RB Case Number:	C-89016
LOC Case Number:	89016
File Location:	Not reported
Potential Media Affect:	Other Groundwater (uses other than drinking water)
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0611100439
Contact Type:	Regional Board Caseworker
Contact Name:	DANIEL PIROTTON
Organization Name:	LOS ANGELES RWQCB (REGION 4)
Address:	Not reported
City:	R4 UNKNOWN
Email:	dpirotton@waterboards.ca.gov
Phone Number:	2135766714

Status History:

Global Id:	T0611100439
Status:	Open - Case Begin Date
Status Date:	02/02/1989
Global Id:	T0611100439
Status:	Open - Site Assessment
Status Date:	02/02/1989
Global Id:	T0611100439
Status:	Open - Site Assessment
Status Date:	08/30/1989
Global Id:	T0611100439
Status:	Open - Remediation
Status Date:	04/12/1990

COASTAL FLORAL (Continued) **S104164753**

Global Id: T0611100439
Status: Completed - Case Closed
Status Date: 07/13/1994

Regulatory Activities:

Global Id: T0611100439
Action Type: Other
Date: 01/01/1950
Action: Leak Discovery

Global Id: T0611100439
Action Type: Other
Date: 01/01/1950
Action: Leak Reported

Global Id: T0611100439
Action Type: ENFORCEMENT
Date: 02/02/1989
Action: * Historical Enforcement

LUST REG 4:

Region: 4
Regional Board: 04
County: Ventura
Facility Id: C-89016
Status: Case Closed
Substance: Gasoline
Substance Quantity: Not reported
Local Case No: 89016
Case Type: Groundwater
Abatement Method Used at the Site: Excavate and Treat
Global ID: T0611100439
W Global ID: Not reported
Staff: UNK
Local Agency: 56000L
Cross Street: Not reported
Enforcement Type: EF
Date Leak Discovered: 2/2/1989
Date Leak First Reported: 2/2/1989
Date Leak Record Entered: Not reported
Date Confirmation Began: 2/2/1989
Date Leak Stopped: Not reported
Date Case Last Changed on Database: Not reported
Date the Case was Closed: 7/13/1994
How Leak Discovered: Not reported
How Leak Stopped: Not reported
Cause of Leak: Not reported
Leak Source: Not reported
Operator: Not reported
Water System: Not reported
Well Name: Not reported
Approx. Dist To Production Well (ft): 1522.4147172465149952397405727
Source of Cleanup Funding: F
Preliminary Site Assessment Workplan Submitted: 2/2/1989
Preliminary Site Assessment Began: 8/30/1989

COASTAL FLORAL (Continued) **S104164753**

Pollution Characterization Began:	8/30/1989
Remediation Plan Submitted:	4/12/1990
Remedial Action Underway:	4/12/1990
Post Remedial Action Monitoring Began:	7/13/1994
Enforcement Action Date:	2/2/1989
Historical Max MTBE Date:	Not reported
Hist Max MTBE Conc in Groundwater:	Not reported
Hist Max MTBE Conc in Soil:	Not reported
Significant Interim Remedial Action Taken:	Not reported
GW Qualifier:	Not reported
Soil Qualifier:	Not reported
Organization:	Not reported
Owner Contact:	Not reported
Responsible Party:	COASTAL FLORAL
RP Address:	Not reported
Program:	LUST
Lat/Long:	34.1613853 / -1
Local Agency Staff:	EHD
Beneficial Use:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Suspended:	Not reported
Assigned Name:	Not reported
Summary:	Not reported

VENTURA CO. LUST:

Region:	VENTURA
Facility ID:	89016
Status:	Case Closed

7
NE
1/4-1/2
0.441 mi.
2331 ft.

RENAISSANCE / PLEASANT VALLEY ROAD
2797 EAST PLEASANT VALLEY ROAD
OXNARD, CA 93033

SLIC **S109038018**
CHMIRS **N/A**

Relative:
Higher

Actual:
37 ft.

SLIC:

Region:	STATE
Facility Status:	**Completed - Case Closed**
Status Date:	12/07/2010
Global Id:	T10000002592
Lead Agency:	VENTURA COUNTY LOP
Lead Agency Case Number:	SR0007398
Latitude:	34.171413
Longitude:	-119.135807
Case Type:	Cleanup Program Site
Case Worker:	EKO
Local Agency:	VENTURA COUNTY LOP
RB Case Number:	Not reported
File Location:	Not reported
Potential Media Affected:	Soil
Potential Contaminants of Concern:	Crude Oil
Site History:	On 9/13/2010, an agricultural backhoe operator was attempting to excavate a drainage ditch and hit the crude oil pipeline.

Click here to access the California GeoTracker records for this facility:

RENAISSANCE / PLEASANT VALLEY ROAD (Continued) **S109038018**

CHMIRS:

OES Incident Number:	07-6439
OES notification:	10/22/2007
OES Date:	Not reported
OES Time:	Not reported
Incident Date:	Not reported
Date Completed:	**Not reported**
Property Use:	Not reported
Agency Id Number:	Not reported
Agency Incident Number:	Not reported
Time Notified:	Not reported
Time Completed:	Not reported
Surrounding Area:	Not reported
Estimated Temperature:	Not reported
Property Management:	Not reported
Special Studies 1:	Not reported
Special Studies 2:	Not reported
Special Studies 3:	Not reported
Special Studies 4:	Not reported
Special Studies 5:	Not reported
Special Studies 6:	Not reported
More Than Two Substances Involved?:	Not reported
Resp Agncy Personel # Of Decontaminated:	Not reported
Responding Agency Personel # Of Injuries:	Not reported
Responding Agency Personel # Of Fatalities:	Not reported
Others Number Of Decontaminated:	Not reported
Others Number Of Injuries:	Not reported
Others Number Of Fatalities:	Not reported
Vehicle Make/year:	Not reported
Vehicle License Number:	Not reported
Vehicle State:	Not reported
Vehicle Id Number:	Not reported
CA/DOT/PUC/ICC Number:	Not reported
Company Name:	Not reported
Reporting Officer Name/ID:	Not reported
Report Date:	Not reported
Comments:	Not reported
Facility Telephone:	Not reported
Waterway Involved:	Not reported
Waterway:	Not reported
Spill Site:	Not reported
Cleanup By:	Contractor
Containment:	Not reported
What Happened:	Not reported
Type:	Not reported
Measure:	Not reported
Other:	Not reported
Date/Time:	Not reported
Year:	2007
Agency:	Renaissance Petroleum LLC
Incident Date:	10/22/2007 12:00:00 AM
Admin Agency:	Oxnard Fire Department
Amount:	Not reported
Contained:	Yes
Site Type:	Oil Field
E Date:	Not reported
Substance:	Crude Oil

RENAISSANCE / PLEASANT VALLEY ROAD (Continued) **S109038018**

Quantity Released:	Not reported
BBLS:	15
Cups:	0
CUFT:	0
Gallons:	0.000000
Grams:	0
Pounds:	0
Liters:	0
Ounces:	0
Pints:	0
Quarts:	0
Sheen:	0
Tons:	0
Unknown:	0
Evacuations:	0
Number of Injuries:	0
Number of Fatalities:	0
Description:	Caller states a strong easterly wind blew a part of the pumping unit over the flow line and broke the flow line.

---

8 **WNW** **1/2-1** **0.719 mi.** **3794 ft.**	**PACIFIC VIEW DAY SCHOOL** **ROSE AVENUE/GARY STREET** **OXNARD, CA 93033**	**SCH** **ENVIROSTOR**	**S105840796** **N/A**

Relative: **Higher**

Actual: **35 ft.**

SCH:

Facility ID:	56820006
Site Type:	School Investigation
Site Type Detail:	School
Site Mgmt. Req.:	NONE SPECIFIED
Acres:	3.7
National Priorities List:	NO
Cleanup Oversight Agencies:	DTSC
Lead Agency:	DTSC
Lead Agency Description:	* DTSC
Project Manager:	Not reported
Supervisor:	Javier Hinojosa
Division Branch:	Southern California Schools & Brownfields Outreach
Site Code:	304395
Assembly:	44
Senate:	19
Special Program Status:	Not reported
Status:	No Further Action
Status Date:	09/19/2003
Restricted Use:	NO
Funding:	School District
Latitude:	34.20528
Longitude:	-119.1914
APN:	NONE SPECIFIED
Past Use:	* EDUCATIONAL SERVICES
Potential COC:	NONE SPECIFIED, No Contaminants found
Confirmed COC:	No Contaminants found
Potential Description:	SOIL
Alias Name:	OXNARD UNION HIGH SCHOOL DISTRICT
Alias Type:	Alternate Name
Alias Name:	OXNARD USD-PACIFIC VIEW DAY SCHOOL

PACIFIC VIEW DAY SCHOOL (Continued) **S105840796**

Alias Type:	Alternate Name
Alias Name:	PACIFIC VIEW DAY SCHOOL
Alias Type:	Alternate Name
Alias Name:	304395
Alias Type:	Project Code (Site Code)
Alias Name:	56820006
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Report
Completed Date:	09/19/2003
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Phase 1
Completed Date:	12/13/2002
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Technical Report
Completed Date:	01/24/2003
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Environmental Oversight Agreement
Completed Date:	03/25/2003
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Cost Recovery Closeout Memo
Completed Date:	10/24/2003
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

ENVIROSTOR:

Site Type:	School Investigation
Site Type Detailed:	School
Acres:	3.7
NPL:	NO
Regulatory Agencies:	DTSC
Lead Agency:	DTSC
Program Manager:	Not reported

PACIFIC VIEW DAY SCHOOL (Continued) **S105840796**

Supervisor:	Javier Hinojosa
Division Branch:	Southern California Schools & Brownfields Outreach
Facility ID:	56820006
Site Code:	304395
Assembly:	44
Senate:	19
Special Program:	Not reported
Status:	No Further Action
Status Date:	09/19/2003
Restricted Use:	NO
Site Mgmt. Req.:	NONE SPECIFIED
Funding:	School District
Latitude:	34.20528
Longitude:	-119.1914
APN:	NONE SPECIFIED
Past Use:	* EDUCATIONAL SERVICES
Potential COC:	NONE SPECIFIED, No Contaminants found
Confirmed COC:	NONE SPECIFIED, No Contaminants found, No Contaminants found
Potential Description:	SOIL
Alias Name:	OXNARD UNION HIGH SCHOOL DISTRICT
Alias Type:	Alternate Name
Alias Name:	OXNARD USD-PACIFIC VIEW DAY SCHOOL
Alias Type:	Alternate Name
Alias Name:	PACIFIC VIEW DAY SCHOOL
Alias Type:	Alternate Name
Alias Name:	304395
Alias Type:	Project Code (Site Code)
Alias Name:	56820006
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Report
Completed Date:	09/19/2003
Comments:	Not reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Phase 1
Completed Date:	12/13/2002
Comments:	Not reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Technical Report
Completed Date:	01/24/2003
Comments:	Not reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Environmental Oversight Agreement
Completed Date:	03/25/2003
Comments:	Not reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Cost Recovery Closeout Memo

PACIFIC VIEW DAY SCHOOL (Continued) **S105840796**

Completed Date:	10/24/2003
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

Count: 20 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
OXNARD	S110712318	PLEASANT VALLEY DENTAL	4938 S "C" ST	93033	MED WASTE VENTURA
OXNARD	S112977463	CALTRANS D-7/CONSTR/EA07-2Y8104	RTE 1 NB/SB PM 12.8	93033	HAZNET
OXNARD	1006248420	COMMANDER NAUMENN DRILL SITE	HAILES & ETTING ROADS		FINDS, EMI
OXNARD	U001579979	OXNARD FLORAL, INC.	3360 S HIGHWAY 1	93033	HIST UST
OXNARD	S113473673	SO CAL EDISON - MISSILE SUBSTATION	LAS POSAS RD & HWY 1		VENTURA CO. BWT
OXNARD	U004065354	THOMPSON LUMBER CO.	1205 OXNARD BLVD.		UST
OXNARD	U003989398	LUNSFORD TOYTOTA	1000 OXNARD BLVD.		UST
OXNARD	U003989373	SCHREINER,WALT(PAT'S USED CAR	820830 OXNARD BLVD.		UST
OXNARD	U003913153	VACANT FACILITY	229 OXNARD BLVD.		UST
OXNARD	U003913152	BUDGET RENT-A-CAR	215 OXNARD BLVD.		UST
OXNARD	S112917267	ALLIED DISTRIBUTING	1657 OXNARD BLVD	93033	HAZNET
OXNARD	S106839288	SHELL WESTERN E&P INC (SWEPI)	OXNARD PLAINS LEASES-EAST	93033	EMI
OXNARD	S100779164	OXNARD 1962	PERKINS RD. AND ORMOND BEACH W		SWF/LF
OXNARD	S113473616	SO CAL EDISON - COLONIA SUBSTATION	PLEASANT VALLEY & WOOD RD		VENTURA CO. BWT
OXNARD	S113020225	CITY OF OXNARD - SOLID WASTE DIVIS	200 PLEASANT VALLEY RD	93033	HAZNET
OXNARD	S112932122	VILLA CAPRI MOBILE ESTATES	1300 PLEASANT VALLEY	93033	HAZNET
OXNARD	S112853792	ITO FLOWER GROWERS	1384 EAST PLEASANT VALLEY	93033	HAZNET
OXNARD	S105774861	CALTRANS ROUTE 1	PLEASANT VALLEY (ROUTE 1) RD	0	WDS
OXNARD	1006248433	BUSH WEST MONTALVO FIELD	STATE-MCGRATH-PATTERSON LSES	93030	FINDS, EMI
VENTURA COUNTY	S107538751		HIGHWAY 33 IN MIRA MONTE		CDL

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 11/11/2013
Date Made Active in Reports: 01/28/2014
Number of Days to Update: 78

Source: EPA
Telephone: N/A
Last EDR Contact: 01/21/2014
Next Scheduled EDR Contact: 04/21/2014
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 3
Telephone 215-814-5418

EPA Region 4
Telephone 404-562-8033

EPA Region 5
Telephone 312-886-6686

EPA Region 10
Telephone 206-553-8665

EPA Region 6
Telephone: 214-655-6659

EPA Region 7
Telephone: 913-551-7247

EPA Region 8
Telephone: 303-312-6774

EPA Region 9
Telephone: 415-947-4246

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 11/11/2013
Date Made Active in Reports: 01/28/2014
Number of Days to Update: 78

Source: EPA
Telephone: N/A
Last EDR Contact: 01/09/2014
Next Scheduled EDR Contact: 04/21/2014
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

DELISTED NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 11/11/2013
Date Made Active in Reports: 01/28/2014
Number of Days to Update: 78

Source: EPA
Telephone: N/A
Last EDR Contact: 01/09/2014
Next Scheduled EDR Contact: 04/21/2014
Data Release Frequency: Quarterly

Federal CERCLIS list

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 11/11/2013
Date Made Active in Reports: 02/13/2014
Number of Days to Update: 94

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 11/11/2013
Next Scheduled EDR Contact: 03/10/2014
Data Release Frequency: Quarterly

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 05/31/2013
Date Data Arrived at EDR: 07/08/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 151

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 01/10/2014
Next Scheduled EDR Contact: 04/21/2014
Data Release Frequency: Varies

Federal CERCLIS NFRAP site List

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 11/11/2013
Date Made Active in Reports: 02/13/2014
Number of Days to Update: 94

Source: EPA
Telephone: 703-412-9810
Last EDR Contact: 11/11/2013
Next Scheduled EDR Contact: 03/10/2014
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 10/02/2013
Date Made Active in Reports: 12/16/2013
Number of Days to Update: 75

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 01/02/2014
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 10/02/2013
Date Made Active in Reports: 12/16/2013
Number of Days to Update: 75

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 01/02/2014
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 10/02/2013
Date Made Active in Reports: 12/16/2013
Number of Days to Update: 75

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 01/02/2014
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 10/02/2013
Date Made Active in Reports: 12/16/2013
Number of Days to Update: 75

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 01/02/2014
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 10/02/2013
Date Made Active in Reports: 12/16/2013
Number of Days to Update: 75

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 01/02/2014
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 11/20/2013	Source: Department of the Navy
Date Data Arrived at EDR: 11/21/2013	Telephone: 843-820-7326
Date Made Active in Reports: 02/24/2014	Last EDR Contact: 02/14/2014
Number of Days to Update: 95	Next Scheduled EDR Contact: 06/02/2014
	Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 09/30/2013	Source: National Response Center, United States Coast Guard
Date Data Arrived at EDR: 10/01/2013	Telephone: 202-267-2180
Date Made Active in Reports: 12/06/2013	Last EDR Contact: 02/07/2014
Number of Days to Update: 66	Next Scheduled EDR Contact: 04/14/2014
	Data Release Frequency: Annually

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 11/06/2013	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 11/06/2013	Telephone: 916-323-3400
Date Made Active in Reports: 12/03/2013	Last EDR Contact: 02/06/2014
Number of Days to Update: 27	Next Scheduled EDR Contact: 05/19/2014
	Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 11/06/2013	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 11/06/2013	Telephone: 916-323-3400
Date Made Active in Reports: 12/03/2013	Last EDR Contact: 02/06/2014
Number of Days to Update: 27	Next Scheduled EDR Contact: 05/19/2014
	Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 11/18/2013
Date Data Arrived at EDR: 11/21/2013
Date Made Active in Reports: 01/02/2014
Number of Days to Update: 42

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 02/18/2014
Next Scheduled EDR Contact: 06/02/2014
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST REG 9: Leaking Underground Storage Tank Report
Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks
California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Varies

LUST REG 7: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing
For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List
Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List
Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

LUST REG 1: Active Toxic Site Investigation
Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST: Geotracker's Leaking Underground Fuel Tank Report
Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state. For more information on a particular leaking underground storage tank sites, please contact the appropriate regulatory agency.

Date of Government Version: 12/16/2013
Date Data Arrived at EDR: 12/17/2013
Date Made Active in Reports: 01/04/2014
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 12/17/2013
Next Scheduled EDR Contact: 03/31/2014
Data Release Frequency: Quarterly

SLIC: Statewide SLIC Cases
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 12/16/2013
Date Data Arrived at EDR: 12/17/2013
Date Made Active in Reports: 01/16/2014
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/17/2013
Next Scheduled EDR Contact: 03/31/2014
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Annually

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 08/27/2012
Date Data Arrived at EDR: 08/28/2012
Date Made Active in Reports: 10/16/2012
Number of Days to Update: 49

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Quarterly

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 08/27/2013
Date Data Arrived at EDR: 08/27/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 66

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 09/12/2011
Date Data Arrived at EDR: 09/13/2011
Date Made Active in Reports: 11/11/2011
Number of Days to Update: 59

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 11/21/2013
Date Data Arrived at EDR: 11/26/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 90

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Semi-Annually

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 02/01/2013
Date Data Arrived at EDR: 05/01/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 184

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 01/30/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 03/01/2013
Date Data Arrived at EDR: 03/01/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 42

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Quarterly

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 02/13/2014
Date Data Arrived at EDR: 02/14/2014
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 10

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 11/06/2013
Date Data Arrived at EDR: 11/07/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 29

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Quarterly

State and tribal registered storage tank lists

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 12/16/2013
Date Data Arrived at EDR: 12/17/2013
Date Made Active in Reports: 01/07/2014
Number of Days to Update: 21

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 12/17/2013
Next Scheduled EDR Contact: 03/31/2014
Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

AST: Aboveground Petroleum Storage Tank Facilities
A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 08/01/2009
Date Data Arrived at EDR: 09/10/2009
Date Made Active in Reports: 10/01/2009
Number of Days to Update: 21

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 01/03/2014
Next Scheduled EDR Contact: 04/21/2014
Data Release Frequency: Quarterly

INDIAN UST R1: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 02/01/2013
Date Data Arrived at EDR: 05/01/2013
Date Made Active in Reports: 01/27/2014
Number of Days to Update: 271

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 01/30/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 11/21/2013
Date Data Arrived at EDR: 11/26/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 90

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 02/13/2014
Date Data Arrived at EDR: 02/14/2014
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 10

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 05/10/2011
Date Data Arrived at EDR: 05/11/2011
Date Made Active in Reports: 06/14/2011
Number of Days to Update: 34

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Semi-Annually

INDIAN UST R7: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 02/28/2013
Date Made Active in Reports: 04/12/2013
Number of Days to Update: 43

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 07/29/2013	Source: EPA Region 8
Date Data Arrived at EDR: 08/01/2013	Telephone: 303-312-6137
Date Made Active in Reports: 11/01/2013	Last EDR Contact: 01/27/2014
Number of Days to Update: 92	Next Scheduled EDR Contact: 05/12/2014
	Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 07/29/2013	Source: EPA Region 9
Date Data Arrived at EDR: 07/30/2013	Telephone: 415-972-3368
Date Made Active in Reports: 12/06/2013	Last EDR Contact: 01/27/2014
Number of Days to Update: 129	Next Scheduled EDR Contact: 05/12/2014
	Data Release Frequency: Quarterly

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 02/05/2013	Source: EPA Region 10
Date Data Arrived at EDR: 02/06/2013	Telephone: 206-553-2857
Date Made Active in Reports: 04/12/2013	Last EDR Contact: 01/27/2014
Number of Days to Update: 65	Next Scheduled EDR Contact: 05/12/2014
	Data Release Frequency: Quarterly

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010	Source: FEMA
Date Data Arrived at EDR: 02/16/2010	Telephone: 202-646-5797
Date Made Active in Reports: 04/12/2010	Last EDR Contact: 01/13/2014
Number of Days to Update: 55	Next Scheduled EDR Contact: 04/28/2014
	Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 09/17/2013	Source: EPA, Region 1
Date Data Arrived at EDR: 10/01/2013	Telephone: 617-918-1102
Date Made Active in Reports: 12/06/2013	Last EDR Contact: 01/03/2014
Number of Days to Update: 66	Next Scheduled EDR Contact: 04/14/2014
	Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008	Source: EPA, Region 7
Date Data Arrived at EDR: 04/22/2008	Telephone: 913-551-7365
Date Made Active in Reports: 05/19/2008	Last EDR Contact: 04/20/2009
Number of Days to Update: 27	Next Scheduled EDR Contact: 07/20/2009
	Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 11/06/2013
Date Data Arrived at EDR: 11/06/2013
Date Made Active in Reports: 12/03/2013
Number of Days to Update: 27

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/06/2014
Next Scheduled EDR Contact: 05/19/2014
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 09/24/2013
Date Data Arrived at EDR: 09/24/2013
Date Made Active in Reports: 12/06/2013
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 12/24/2013
Next Scheduled EDR Contact: 04/07/2014
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 02/10/2014
Next Scheduled EDR Contact: 05/26/2014
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 12/16/2013
Date Data Arrived at EDR: 12/17/2013
Date Made Active in Reports: 01/07/2014
Number of Days to Update: 21

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 12/17/2013
Next Scheduled EDR Contact: 03/31/2014
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 11/20/2013
Date Data Arrived at EDR: 11/25/2013
Date Made Active in Reports: 12/31/2013
Number of Days to Update: 36

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 02/14/2014
Next Scheduled EDR Contact: 06/02/2014
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 11/04/2013
Next Scheduled EDR Contact: 02/17/2014
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US CDL: Clandestine Drug Labs
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 12/04/2013
Date Data Arrived at EDR: 12/10/2013
Date Made Active in Reports: 02/13/2014
Number of Days to Update: 65

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 12/05/2013
Next Scheduled EDR Contact: 03/17/2014
Data Release Frequency: Quarterly

HIST CAL-SITES: Calsites Database
The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 11/06/2013
Date Data Arrived at EDR: 11/06/2013
Date Made Active in Reports: 12/03/2013
Number of Days to Update: 27

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/06/2014
Next Scheduled EDR Contact: 05/19/2014
Data Release Frequency: Quarterly

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 06/30/2013
Date Data Arrived at EDR: 09/03/2013
Date Made Active in Reports: 10/10/2013
Number of Days to Update: 37

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: Varies

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/01/2007
Date Data Arrived at EDR: 11/19/2008
Date Made Active in Reports: 03/30/2009
Number of Days to Update: 131

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

Local Lists of Registered Storage Tanks

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/23/2009	Source: Department of Public Health
Date Data Arrived at EDR: 09/23/2009	Telephone: 707-463-4466
Date Made Active in Reports: 10/01/2009	Last EDR Contact: 12/02/2013
Number of Days to Update: 8	Next Scheduled EDR Contact: 03/17/2014
	Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990	Source: State Water Resources Control Board
Date Data Arrived at EDR: 01/25/1991	Telephone: 916-341-5851
Date Made Active in Reports: 02/12/1991	Last EDR Contact: 07/26/2001
Number of Days to Update: 18	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994	Source: State Water Resources Control Board
Date Data Arrived at EDR: 07/07/2005	Telephone: N/A
Date Made Active in Reports: 08/11/2005	Last EDR Contact: 06/03/2005
Number of Days to Update: 35	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/06/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/25/2013	Telephone: 202-564-6023
Date Made Active in Reports: 05/10/2013	Last EDR Contact: 01/27/2014
Number of Days to Update: 15	Next Scheduled EDR Contact: 05/12/2014
	Data Release Frequency: Varies

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 01/17/2014	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 01/21/2014	Telephone: 916-323-3400
Date Made Active in Reports: 02/11/2014	Last EDR Contact: 12/09/2013
Number of Days to Update: 21	Next Scheduled EDR Contact: 03/24/2014
	Data Release Frequency: Varies

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 12/09/2013
Date Data Arrived at EDR: 12/10/2013
Date Made Active in Reports: 01/03/2014
Number of Days to Update: 24

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 12/10/2013
Next Scheduled EDR Contact: 03/24/2014
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 01/03/2014
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 52

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 01/03/2014
Next Scheduled EDR Contact: 01/13/2014
Data Release Frequency: Annually

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 10/14/2013
Date Data Arrived at EDR: 10/30/2013
Date Made Active in Reports: 12/03/2013
Number of Days to Update: 34

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 01/30/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

LDS: Land Disposal Sites Listing

The Land Disposal program regulates of waste discharge to land for treatment, storage and disposal in waste management units.

Date of Government Version: 12/16/2013
Date Data Arrived at EDR: 12/17/2013
Date Made Active in Reports: 01/04/2014
Number of Days to Update: 18

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/17/2013
Next Scheduled EDR Contact: 03/31/2014
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing

The State Water Resources Control Board and nine Regional Water Quality Control Boards partner with the Department of Defense (DoD) through the Defense and State Memorandum of Agreement (DSMOA) to oversee the investigation and remediation of water quality issues at military facilities.

Date of Government Version: 12/16/2013
Date Data Arrived at EDR: 12/17/2013
Date Made Active in Reports: 01/04/2014
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/17/2013
Next Scheduled EDR Contact: 03/31/2014
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 10/02/2013
Date Made Active in Reports: 12/16/2013
Number of Days to Update: 75

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 01/02/2014
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Varies

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 02/06/2014
Next Scheduled EDR Contact: 05/19/2014
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 01/15/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: Semi-Annually

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 03/13/2013
Number of Days to Update: 15

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 12/13/2013
Next Scheduled EDR Contact: 03/24/2014
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 01/24/2014
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 31

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 12/26/2013
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Varies

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013
Date Data Arrived at EDR: 12/12/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 74

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 12/12/2013
Next Scheduled EDR Contact: 03/24/2014
Data Release Frequency: Annually

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 11/26/2013
Next Scheduled EDR Contact: 03/10/2014
Data Release Frequency: Varies

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 09/05/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 28

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 12/06/2013
Next Scheduled EDR Contact: 03/17/2014
Data Release Frequency: Semi-Annually

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 07/31/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 44

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 11/27/2013
Next Scheduled EDR Contact: 03/10/2014
Data Release Frequency: Annually

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2006
Date Data Arrived at EDR: 09/29/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 64

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 12/26/2013
Next Scheduled EDR Contact: 04/07/2014
Data Release Frequency: Every 4 Years

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

SSTS: Section 7 Tracking Systems
Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 01/28/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 07/20/2011
Date Data Arrived at EDR: 11/10/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 61

Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 10/09/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 06/01/2013
Date Data Arrived at EDR: 07/17/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 107

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 01/28/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: Annually

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 07/22/2013
Date Data Arrived at EDR: 08/02/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 91

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 12/09/2013
Next Scheduled EDR Contact: 03/24/2014
Data Release Frequency: Quarterly

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 09/30/2013
Date Data Arrived at EDR: 10/09/2013
Date Made Active in Reports: 11/01/2013
Number of Days to Update: 23

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 01/10/2014
Next Scheduled EDR Contact: 04/21/2014
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 03/08/2013
Date Data Arrived at EDR: 03/21/2013
Date Made Active in Reports: 07/10/2013
Number of Days to Update: 111

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 12/10/2013
Next Scheduled EDR Contact: 03/24/2014
Data Release Frequency: Quarterly

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 11/01/2013
Date Data Arrived at EDR: 12/12/2013
Date Made Active in Reports: 02/13/2014
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 02/26/2013
Date Made Active in Reports: 04/19/2013
Number of Days to Update: 52

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 11/25/2013
Next Scheduled EDR Contact: 03/10/2014
Data Release Frequency: Biennially

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 11/19/2013
Date Data Arrived at EDR: 11/21/2013
Date Made Active in Reports: 01/02/2014
Number of Days to Update: 42

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 02/18/2014
Next Scheduled EDR Contact: 06/02/2014
Data Release Frequency: Quarterly

UIC: UIC Listing

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 09/25/2013
Date Data Arrived at EDR: 12/17/2013
Date Made Active in Reports: 01/07/2014
Number of Days to Update: 21

Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 12/17/2013
Next Scheduled EDR Contact: 03/31/2014
Data Release Frequency: Varies

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 12/30/2013
Date Data Arrived at EDR: 12/31/2013
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 42

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 12/31/2013
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

NOTIFY 65: Proposition 65 Records

Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 10/21/1993
Date Data Arrived at EDR: 11/01/1993
Date Made Active in Reports: 11/19/1993
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 12/17/2013
Next Scheduled EDR Contact: 04/07/2014
Data Release Frequency: No Update Planned

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 09/11/2013
Date Made Active in Reports: 10/16/2013
Number of Days to Update: 35

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 12/09/2013
Next Scheduled EDR Contact: 03/24/2014
Data Release Frequency: Annually

WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 12/26/2013
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Varies

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 08/09/2013
Date Data Arrived at EDR: 08/13/2013
Date Made Active in Reports: 10/08/2013
Number of Days to Update: 56

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 02/10/2014
Next Scheduled EDR Contact: 05/05/2014
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 07/16/2013
Date Made Active in Reports: 08/26/2013
Number of Days to Update: 41

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 01/17/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: Annually

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2010
Date Data Arrived at EDR: 06/25/2013
Date Made Active in Reports: 08/22/2013
Number of Days to Update: 58

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 12/26/2013
Next Scheduled EDR Contact: 04/07/2014
Data Release Frequency: Varies

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 01/15/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: Semi-Annually

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011
Date Data Arrived at EDR: 03/09/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 54

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 01/20/2014
Next Scheduled EDR Contact: 05/05/2014
Data Release Frequency: Varies

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 06/30/2013
Date Data Arrived at EDR: 08/13/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 02/10/2014
Next Scheduled EDR Contact: 05/26/2014
Data Release Frequency: Quarterly

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 01/30/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 08/17/2010
Date Data Arrived at EDR: 01/03/2011
Date Made Active in Reports: 03/21/2011
Number of Days to Update: 77

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 12/13/2013
Next Scheduled EDR Contact: 03/24/2014
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing
Financial Assurance information

Date of Government Version: 01/28/2014
Date Data Arrived at EDR: 01/30/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 12

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/05/2014
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing
A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 11/18/2013
Date Data Arrived at EDR: 11/19/2013
Date Made Active in Reports: 12/31/2013
Number of Days to Update: 42

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 02/14/2014
Next Scheduled EDR Contact: 06/02/2014
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information
All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 11/20/2013
Date Data Arrived at EDR: 12/03/2013
Date Made Active in Reports: 02/13/2014
Number of Days to Update: 72

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 02/14/2014
Next Scheduled EDR Contact: 06/02/2014
Data Release Frequency: Quarterly

HWP: EnviroStor Permitted Facilities Listing
Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 11/25/2013
Date Data Arrived at EDR: 11/26/2013
Date Made Active in Reports: 12/31/2013
Number of Days to Update: 35

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 11/26/2013
Next Scheduled EDR Contact: 03/10/2014
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database
A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 01/13/2014	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 01/14/2014	Telephone: 916-440-7145
Date Made Active in Reports: 02/11/2014	Last EDR Contact: 01/14/2014
Number of Days to Update: 28	Next Scheduled EDR Contact: 04/28/2014
	Data Release Frequency: Quarterly

COAL ASH DOE: Sleam-Electric Plan Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005	Source: Department of Energy
Date Data Arrived at EDR: 08/07/2009	Telephone: 202-586-8719
Date Made Active in Reports: 10/22/2009	Last EDR Contact: 01/13/2014
Number of Days to Update: 76	Next Scheduled EDR Contact: 04/28/2014
	Data Release Frequency: Varies

MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 09/20/2013	Source: Department of Public Health
Date Data Arrived at EDR: 12/11/2013	Telephone: 916-558-1784
Date Made Active in Reports: 01/04/2014	Last EDR Contact: 12/09/2013
Number of Days to Update: 24	Next Scheduled EDR Contact: 03/24/2014
	Data Release Frequency: Varies

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/23/2013	Source: EPA
Date Data Arrived at EDR: 11/06/2013	Telephone: 202-564-5962
Date Made Active in Reports: 12/06/2013	Last EDR Contact: 12/26/2013
Number of Days to Update: 30	Next Scheduled EDR Contact: 04/14/2014
	Data Release Frequency: Annually

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/23/2013	Source: EPA
Date Data Arrived at EDR: 11/06/2013	Telephone: 202-564-5962
Date Made Active in Reports: 12/06/2013	Last EDR Contact: 12/26/2013
Number of Days to Update: 30	Next Scheduled EDR Contact: 04/14/2014
	Data Release Frequency: Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005	Source: U.S. Geological Survey
Date Data Arrived at EDR: 02/06/2006	Telephone: 888-275-8747
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 01/15/2014
Number of Days to Update: 339	Next Scheduled EDR Contact: 04/28/2014
	Data Release Frequency: N/A

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 04/15/2013
Date Data Arrived at EDR: 07/03/2013
Date Made Active in Reports: 09/13/2013
Number of Days to Update: 72

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 01/02/2014
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Quarterly

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Quarterly

LEAD SMELTER 2: Lead Smelter Sites
A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

LEAD SMELTER 1: Lead Smelter Sites
A listing of former lead smelter site locations.

Date of Government Version: 01/29/2013
Date Data Arrived at EDR: 02/14/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 13

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 01/03/2014
Next Scheduled EDR Contact: 04/21/2014
Data Release Frequency: Varies

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 12/16/2013
Date Data Arrived at EDR: 12/17/2013
Date Made Active in Reports: 01/07/2014
Number of Days to Update: 21

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 12/17/2013
Next Scheduled EDR Contact: 03/31/2014
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List
The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 11/11/2011
Date Data Arrived at EDR: 05/18/2012
Date Made Active in Reports: 05/25/2012
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 02/14/2014
Next Scheduled EDR Contact: 05/26/2014
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR US Hist Auto Stat: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Auto Stat: EDR Proprietary Historic Gas Stations - Cole

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: N/A
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR US Hist Cleaners: EDR Proprietary Historic Dry Cleaners - Cole

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: N/A
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: EDR
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: EDR
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/22/2014
Date Data Arrived at EDR: 01/23/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 19

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 12/30/2013
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Semi-Annually

Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 01/22/2014
Date Data Arrived at EDR: 01/23/2014
Date Made Active in Reports: 02/12/2014
Number of Days to Update: 20

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 12/30/2013
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA Facility List

Cupa Facility List

Date of Government Version: 12/05/2013
Date Data Arrived at EDR: 12/10/2013
Date Made Active in Reports: 01/03/2014
Number of Days to Update: 24

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 12/09/2013
Next Scheduled EDR Contact: 03/24/2014
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA Facility Listing
Cupa facility list.

Date of Government Version: 08/01/2013
Date Data Arrived at EDR: 08/02/2013
Date Made Active in Reports: 08/22/2013
Number of Days to Update: 20

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 01/13/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 09/30/2013
Date Data Arrived at EDR: 10/01/2013
Date Made Active in Reports: 11/26/2013
Number of Days to Update: 56

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 12/30/2013
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 12/05/2013
Date Data Arrived at EDR: 12/05/2013
Date Made Active in Reports: 01/27/2014
Number of Days to Update: 53

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 05/26/2014
Data Release Frequency: Varies

CONTRA COSTA COUNTY:

Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 11/18/2013
Date Data Arrived at EDR: 11/19/2013
Date Made Active in Reports: 12/31/2013
Number of Days to Update: 42

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 02/05/2014
Next Scheduled EDR Contact: 05/19/2014
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA Facility List
Cupa Facility list

Date of Government Version: 01/09/2013
Date Data Arrived at EDR: 01/10/2013
Date Made Active in Reports: 02/25/2013
Number of Days to Update: 46

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 11/04/2013
Next Scheduled EDR Contact: 02/17/2014
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 11/18/2013
Date Data Arrived at EDR: 11/19/2013
Date Made Active in Reports: 01/14/2014
Number of Days to Update: 56

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 02/04/2014
Next Scheduled EDR Contact: 05/19/2014
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 01/14/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 28

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 01/13/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: Semi-Annually

HUMBOLDT COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 12/16/2013
Date Data Arrived at EDR: 12/17/2013
Date Made Active in Reports: 01/07/2014
Number of Days to Update: 21

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

IMPERIAL COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 01/27/2014
Date Data Arrived at EDR: 01/28/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 14

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

INYO COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 09/11/2013
Date Made Active in Reports: 10/14/2013
Number of Days to Update: 33

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 08/31/2010
Date Data Arrived at EDR: 09/01/2010
Date Made Active in Reports: 09/30/2010
Number of Days to Update: 29

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 02/10/2014
Next Scheduled EDR Contact: 05/26/2014
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 12/12/2013
Date Data Arrived at EDR: 12/13/2013
Date Made Active in Reports: 01/07/2014
Number of Days to Update: 25

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

LAKE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 01/23/2013
Date Data Arrived at EDR: 01/25/2013
Date Made Active in Reports: 02/27/2013
Number of Days to Update: 33

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 01/20/2014
Next Scheduled EDR Contact: 05/05/2014
Data Release Frequency: Varies

LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: EPA Region 9
Telephone: 415-972-3178
Last EDR Contact: 12/17/2013
Next Scheduled EDR Contact: 04/07/2014
Data Release Frequency: No Update Planned

HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 03/28/2013
Date Data Arrived at EDR: 06/17/2013
Date Made Active in Reports: 08/21/2013
Number of Days to Update: 65

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 01/13/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: Semi-Annually

List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 01/20/2014
Date Data Arrived at EDR: 01/21/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 21

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 01/21/2014
Next Scheduled EDR Contact: 05/05/2014
Data Release Frequency: Varies

City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 03/05/2009
Date Data Arrived at EDR: 03/10/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 29

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 01/20/2014
Next Scheduled EDR Contact: 05/05/2014
Data Release Frequency: Varies

Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 01/30/2013
Date Data Arrived at EDR: 02/21/2013
Date Made Active in Reports: 03/25/2013
Number of Days to Update: 32

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 01/20/2014
Next Scheduled EDR Contact: 05/05/2014
Data Release Frequency: Annually

City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 10/21/2013
Date Data Arrived at EDR: 10/25/2013
Date Made Active in Reports: 11/27/2013
Number of Days to Update: 33

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 01/20/2014
Next Scheduled EDR Contact: 05/05/2014
Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/28/2003
Date Data Arrived at EDR: 10/23/2003
Date Made Active in Reports: 11/26/2003
Number of Days to Update: 34

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 01/30/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Annually

City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 07/15/2013
Date Data Arrived at EDR: 07/18/2013
Date Made Active in Reports: 08/20/2013
Number of Days to Update: 33

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 01/13/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 12/09/2013
Date Data Arrived at EDR: 12/10/2013
Date Made Active in Reports: 02/20/2014
Number of Days to Update: 72

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

MARIN COUNTY:

Underground Storage Tank Sites

Currently permitted USTs in Marin County.

Date of Government Version: 01/03/2014
Date Data Arrived at EDR: 01/09/2014
Date Made Active in Reports: 02/12/2014
Number of Days to Update: 34

Source: Public Works Department Waste Management
Telephone: 415-499-6647
Last EDR Contact: 01/03/2014
Next Scheduled EDR Contact: 04/21/2014
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA Facility List

CUPA facility list.

Date of Government Version: 11/21/2013
Date Data Arrived at EDR: 11/25/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 91

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

MONO COUNTY:

CUPA Facility List

CUPA Facility List

Date of Government Version: 12/02/2013
Date Data Arrived at EDR: 12/03/2013
Date Made Active in Reports: 01/02/2014
Number of Days to Update: 30

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 12/02/2013
Next Scheduled EDR Contact: 03/17/2014
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA Facility Listing

CUPA Program listing from the Environmental Health Division.

Date of Government Version: 01/09/2014
Date Data Arrived at EDR: 01/10/2014
Date Made Active in Reports: 02/14/2014
Number of Days to Update: 35

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

NAPA COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 12/05/2011	Source: Napa County Department of Environmental Management
Date Data Arrived at EDR: 12/06/2011	Telephone: 707-253-4269
Date Made Active in Reports: 02/07/2012	Last EDR Contact: 12/02/2013
Number of Days to Update: 63	Next Scheduled EDR Contact: 03/17/2014
	Data Release Frequency: No Update Planned

Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 01/15/2008	Source: Napa County Department of Environmental Management
Date Data Arrived at EDR: 01/16/2008	Telephone: 707-253-4269
Date Made Active in Reports: 02/08/2008	Last EDR Contact: 12/02/2013
Number of Days to Update: 23	Next Scheduled EDR Contact: 03/17/2014
	Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 11/06/2013	Source: Community Development Agency
Date Data Arrived at EDR: 11/07/2013	Telephone: 530-265-1467
Date Made Active in Reports: 12/04/2013	Last EDR Contact: 02/14/2014
Number of Days to Update: 27	Next Scheduled EDR Contact: 05/19/2014
	Data Release Frequency: Varies

ORANGE COUNTY:

List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 11/04/2013	Source: Health Care Agency
Date Data Arrived at EDR: 11/13/2013	Telephone: 714-834-3446
Date Made Active in Reports: 12/04/2013	Last EDR Contact: 02/10/2014
Number of Days to Update: 21	Next Scheduled EDR Contact: 05/26/2014
	Data Release Frequency: Annually

List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 11/04/2013	Source: Health Care Agency
Date Data Arrived at EDR: 11/13/2013	Telephone: 714-834-3446
Date Made Active in Reports: 12/04/2013	Last EDR Contact: 02/10/2014
Number of Days to Update: 21	Next Scheduled EDR Contact: 05/26/2014
	Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 11/04/2013	Source: Health Care Agency
Date Data Arrived at EDR: 11/13/2013	Telephone: 714-834-3446
Date Made Active in Reports: 12/04/2013	Last EDR Contact: 02/10/2014
Number of Days to Update: 21	Next Scheduled EDR Contact: 05/26/2014
	Data Release Frequency: Quarterly

PLACER COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Master List of Facilities

List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 12/09/2013
Date Data Arrived at EDR: 12/10/2013
Date Made Active in Reports: 01/07/2014
Number of Days to Update: 28

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 12/09/2013
Next Scheduled EDR Contact: 03/24/2014
Data Release Frequency: Semi-Annually

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites

Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 01/14/2014
Date Data Arrived at EDR: 01/15/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 27

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 12/19/2013
Next Scheduled EDR Contact: 04/07/2014
Data Release Frequency: Quarterly

Underground Storage Tank Tank List

Underground storage tank sites located in Riverside county.

Date of Government Version: 01/14/2014
Date Data Arrived at EDR: 01/15/2014
Date Made Active in Reports: 02/12/2014
Number of Days to Update: 28

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 12/19/2013
Next Scheduled EDR Contact: 04/07/2014
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

Toxic Site Clean-Up List

List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 11/21/2013
Date Data Arrived at EDR: 01/09/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 33

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 01/06/2014
Next Scheduled EDR Contact: 04/21/2014
Data Release Frequency: Quarterly

Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 11/21/2013
Date Data Arrived at EDR: 01/09/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 33

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 01/06/2014
Next Scheduled EDR Contact: 04/21/2014
Data Release Frequency: Quarterly

SAN BERNARDINO COUNTY:

Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 11/26/2013
Date Data Arrived at EDR: 11/27/2013
Date Made Active in Reports: 12/31/2013
Number of Days to Update: 34

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 02/10/2014
Next Scheduled EDR Contact: 05/26/2014
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 09/23/2013
Date Data Arrived at EDR: 09/24/2013
Date Made Active in Reports: 10/17/2013
Number of Days to Update: 23

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 12/09/2013
Next Scheduled EDR Contact: 03/24/2014
Data Release Frequency: Quarterly

Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2013
Date Data Arrived at EDR: 11/19/2013
Date Made Active in Reports: 12/31/2013
Number of Days to Update: 42

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 02/14/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 12/09/2013
Next Scheduled EDR Contact: 03/24/2014
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

Local Oversite Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 02/10/2014
Next Scheduled EDR Contact: 05/26/2014
Data Release Frequency: Quarterly

Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/29/2010
Date Data Arrived at EDR: 03/10/2011
Date Made Active in Reports: 03/15/2011
Number of Days to Update: 5

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 02/10/2014
Next Scheduled EDR Contact: 05/26/2014
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 12/18/2013
Date Data Arrived at EDR: 12/19/2013
Date Made Active in Reports: 01/08/2014
Number of Days to Update: 20

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 12/17/2013
Next Scheduled EDR Contact: 04/07/2014
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 08/26/2013
Date Data Arrived at EDR: 08/27/2013
Date Made Active in Reports: 10/10/2013
Number of Days to Update: 44

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

SAN MATEO COUNTY:

Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 01/13/2014
Date Data Arrived at EDR: 01/14/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 28

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 12/16/2013
Next Scheduled EDR Contact: 03/31/2014
Data Release Frequency: Annually

Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 12/12/2013
Date Data Arrived at EDR: 12/17/2013
Date Made Active in Reports: 01/07/2014
Number of Days to Update: 21

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 12/12/2013
Next Scheduled EDR Contact: 03/31/2014
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

SANTA CLARA COUNTY:

Cupa Facility List
Cupa facility list

Date of Government Version: 12/03/2013
Date Data Arrived at EDR: 12/04/2013
Date Made Active in Reports: 01/27/2014
Number of Days to Update: 54

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 12/02/2013
Next Scheduled EDR Contact: 03/17/2014
Data Release Frequency: Varies

HIST LUST - Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LOP Listing

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 12/02/2013
Date Data Arrived at EDR: 12/03/2013
Date Made Active in Reports: 01/02/2014
Number of Days to Update: 30

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 12/02/2013
Next Scheduled EDR Contact: 03/17/2014
Data Release Frequency: Annually

Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 11/12/2013
Date Data Arrived at EDR: 11/15/2013
Date Made Active in Reports: 01/03/2014
Number of Days to Update: 49

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 02/10/2014
Next Scheduled EDR Contact: 05/26/2014
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA Facility List

CUPA facility listing.

Date of Government Version: 12/09/2013
Date Data Arrived at EDR: 12/10/2013
Date Made Active in Reports: 01/03/2014
Number of Days to Update: 24

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA Facility List

Cupa Facility List.

Date of Government Version: 12/03/2013
Date Data Arrived at EDR: 12/04/2013
Date Made Active in Reports: 01/02/2014
Number of Days to Update: 29

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 02/24/2014
Next Scheduled EDR Contact: 06/09/2014
Data Release Frequency: Varies

SOLANO COUNTY:

Leaking Underground Storage Tanks

A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 12/16/2013
Date Data Arrived at EDR: 12/18/2013
Date Made Active in Reports: 01/08/2014
Number of Days to Update: 21

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 12/12/2013
Next Scheduled EDR Contact: 03/31/2014
Data Release Frequency: Quarterly

Underground Storage Tanks

Underground storage tank sites located in Solano county.

Date of Government Version: 12/16/2013
Date Data Arrived at EDR: 12/19/2013
Date Made Active in Reports: 01/08/2014
Number of Days to Update: 20

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 12/12/2013
Next Scheduled EDR Contact: 03/31/2014
Data Release Frequency: Quarterly

SONOMA COUNTY:

Cupa Facility List

Cupa Facility list

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 01/02/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 40

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 12/30/2013
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Varies

Leaking Underground Storage Tank Sites

A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 01/03/2014
Date Data Arrived at EDR: 01/03/2014
Date Made Active in Reports: 02/11/2014
Number of Days to Update: 39

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 12/30/2013
Next Scheduled EDR Contact: 04/14/2014
Data Release Frequency: Quarterly

SUTTER COUNTY:

Underground Storage Tanks

Underground storage tank sites located in Sutter county.

Date of Government Version: 12/10/2013
Date Data Arrived at EDR: 12/11/2013
Date Made Active in Reports: 01/04/2014
Number of Days to Update: 24

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 12/09/2013
Next Scheduled EDR Contact: 03/24/2014
Data Release Frequency: Semi-Annually

TUOLUMNE COUNTY:

CUPA Facility List

Cupa facility list

Date of Government Version: 11/04/2013
Date Data Arrived at EDR: 11/06/2013
Date Made Active in Reports: 12/04/2013
Number of Days to Update: 28

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 01/27/2014
Next Scheduled EDR Contact: 05/12/2014
Data Release Frequency: Varies

VENTURA COUNTY:

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 10/29/2013
Date Data Arrived at EDR: 11/21/2013
Date Made Active in Reports: 01/14/2014
Number of Days to Update: 54

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 02/18/2014
Next Scheduled EDR Contact: 06/02/2014
Data Release Frequency: Quarterly

Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 01/03/2014
Next Scheduled EDR Contact: 04/21/2014
Data Release Frequency: Annually

Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 02/17/2014
Next Scheduled EDR Contact: 06/02/2014
Data Release Frequency: Quarterly

Medical Waste Program List

To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 10/02/2013
Date Data Arrived at EDR: 10/30/2013
Date Made Active in Reports: 11/27/2013
Number of Days to Update: 28

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 10/28/2013
Next Scheduled EDR Contact: 02/11/2014
Data Release Frequency: Quarterly

Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 11/26/2013
Date Data Arrived at EDR: 12/18/2013
Date Made Active in Reports: 01/08/2014
Number of Days to Update: 21

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 12/16/2013
Next Scheduled EDR Contact: 03/31/2014
Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report

Underground storage tank sites located in Yolo county.

Date of Government Version: 12/18/2013
Date Data Arrived at EDR: 12/24/2013
Date Made Active in Reports: 01/08/2014
Number of Days to Update: 15

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 12/17/2013
Next Scheduled EDR Contact: 04/07/2014
Data Release Frequency: Annually

YUBA COUNTY:

CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 12/06/2013
Date Data Arrived at EDR: 12/10/2013
Date Made Active in Reports: 01/04/2014
Number of Days to Update: 25

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 12/06/2013
Next Scheduled EDR Contact: 02/17/2014
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013
Date Data Arrived at EDR: 08/19/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 45

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 02/21/2014
Next Scheduled EDR Contact: 06/02/2014
Data Release Frequency: Annually

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2011
Date Data Arrived at EDR: 07/19/2012
Date Made Active in Reports: 08/28/2012
Number of Days to Update: 40

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 01/17/2014
Next Scheduled EDR Contact: 04/28/2014
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 11/01/2013
Date Data Arrived at EDR: 11/07/2013
Date Made Active in Reports: 11/18/2013
Number of Days to Update: 11

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 02/07/2014
Next Scheduled EDR Contact: 05/19/2014
Data Release Frequency: Annually

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 07/24/2013
Date Made Active in Reports: 08/19/2013
Number of Days to Update: 26

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 01/20/2014
Next Scheduled EDR Contact: 05/05/2014
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 06/21/2013
Date Made Active in Reports: 08/05/2013
Number of Days to Update: 45

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 11/25/2013
Next Scheduled EDR Contact: 03/10/2014
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 08/09/2013
Date Made Active in Reports: 09/27/2013
Number of Days to Update: 49

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 12/11/2013
Next Scheduled EDR Contact: 03/31/2014
Data Release Frequency: Annually

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data
Source: Rextag Strategies Corp.
Telephone: (281) 769-2247
U.S. Electric Transmission and Power Plants Systems Digital GIS Data

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.
Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.
Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.
Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.
Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.
Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

STREET AND ADDRESS INFORMATION

GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

PLEASANT VALLEY APARTMENTS
2295 ETTING ROAD
OXNARD, CA 93033

TARGET PROPERTY COORDINATES

Latitude (North):	34.1623 - 34˚ 9’ 44.28’’
Longitude (West):	119.1478 - 119˚ 8’ 52.08’’
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	302011.6
UTM Y (Meters):	3782041.2
Elevation:	32 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	34119-B2 OXNARD, CA
Most Recent Revision:	1967

EDR’s GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

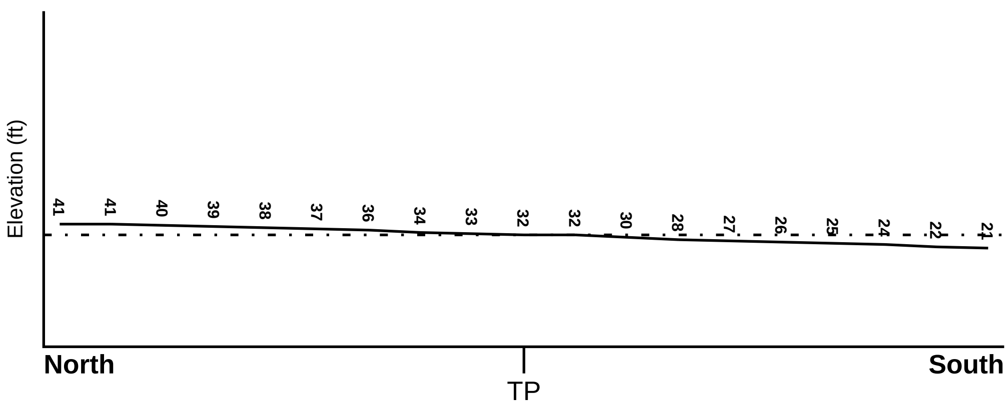
TOPOGRAPHIC INFORMATION

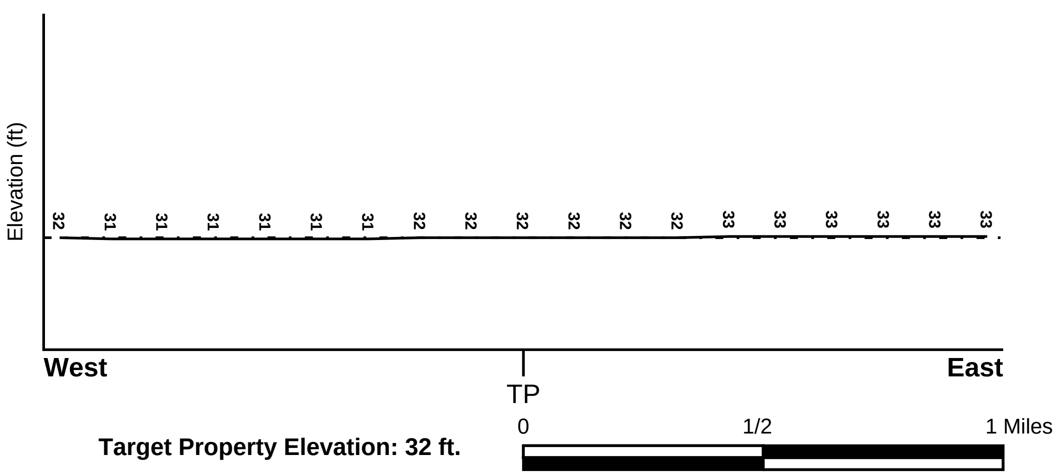
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General South

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Target Property Elevation: 32 ft.

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
VENTURA, CA	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 06111C - FEMA DFIRM Flood data

Additional Panels in search area: Not Reported

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
OXNARD	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius: 1.25 miles
Status: Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

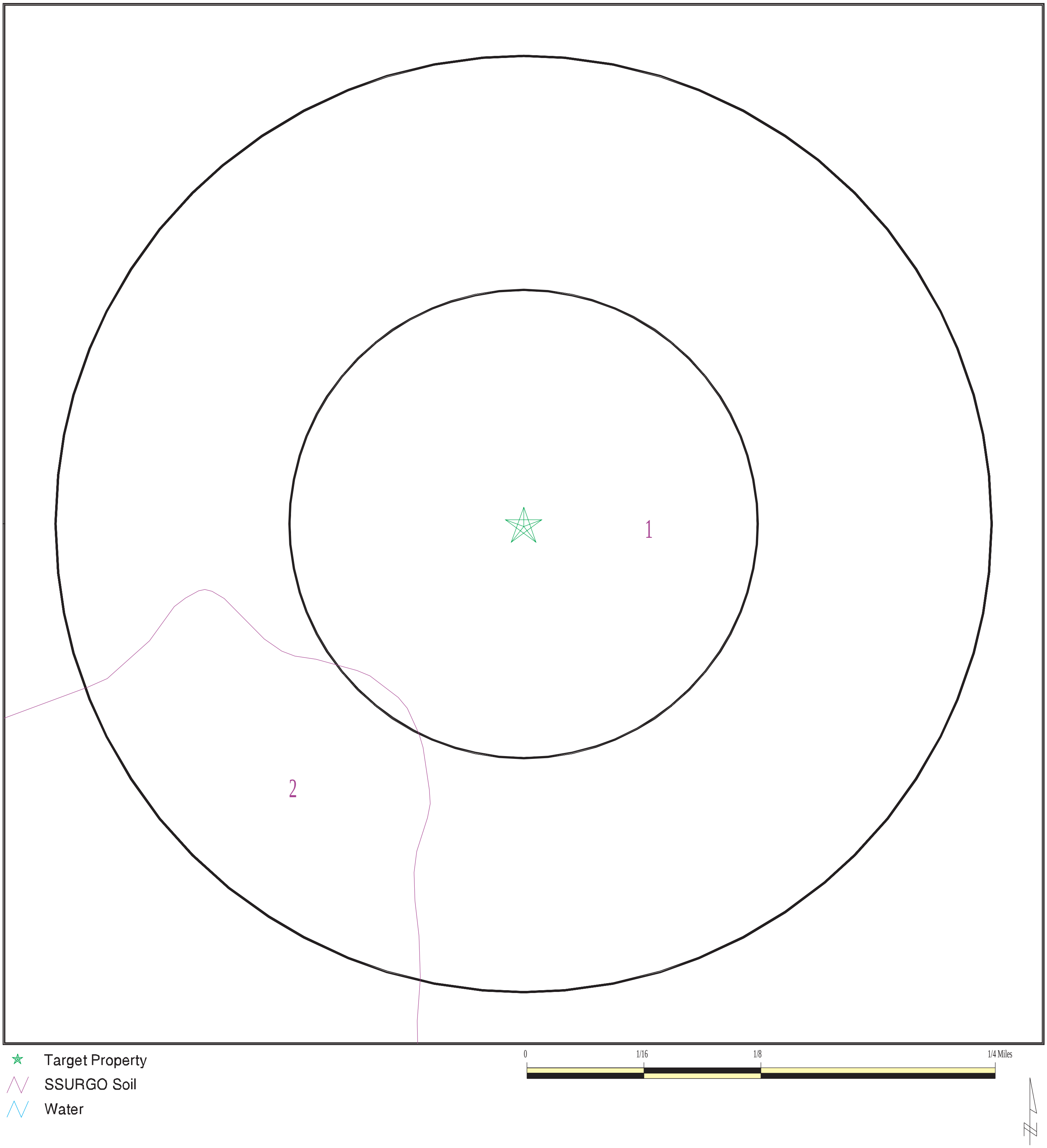
Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 03864571.2r



Target Property
SSURGO Soil
Water

SITE NAME: Pleasant Valley Apartments ADDRESS: 2295 Etting Road Oxnard CA 93033 LAT/LONG: 34.1623 / 119.1478	CLIENT: Rincon CONTACT: Lauren Kodama INQUIRY #: 03864571.2r DATE: February 25, 2014 2:02 am

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: HUENEME

Soil Surface Texture: sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Poorly drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 107 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	16 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 8.4 Min: 7.4
2	16 inches	64 inches	stratified sand to silt loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 8.4 Min: 7.4

Soil Map ID: 2

Soil Component Name: CAMARILLO

Soil Surface Texture: sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Poorly drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 107 inches

Soil Layer Information

	Boundary			Classification			
Layer	**Upper**	**Lower**	**Soil Texture Class**	**AASHTO Group**	**Unified Soil**	**Saturated hydraulic conductivity micro m/sec**	**Soil Reaction (pH)**
1	0 inches	24 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 8.4 Min: 7.9
2	24 inches	50 inches	stratified sandy loam to sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14 Min: 4	Max: 8.4 Min: 7.9
3	50 inches	79 inches	fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 8.4 Min: 7.9

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 0.001 miles
State Database	1.000

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
2	USGS40000142246	1/8 - 1/4 Mile SE
A4	USGS40000142216	1/4 - 1/2 Mile South
7	USGS40000142245	1/4 - 1/2 Mile ESE
B10	USGS40000142308	1/2 - 1 Mile NW
12	USGS40000142169	1/2 - 1 Mile South
14	USGS40000142329	1/2 - 1 Mile NNE
C15	USGS40000142168	1/2 - 1 Mile SE
D17	USGS40000142235	1/2 - 1 Mile East
20	USGS40000142173	1/2 - 1 Mile SW
21	USGS40000142167	1/2 - 1 Mile SE
E23	USGS40000142352	1/2 - 1 Mile NNE
24	USGS40000142163	1/2 - 1 Mile SE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	CADW50000004863	0 - 1/8 Mile West
3	CADW50000004874	1/8 - 1/4 Mile NE
A5	CADW50000004830	1/4 - 1/2 Mile South
6	714	1/4 - 1/2 Mile NNW
8	699	1/4 - 1/2 Mile ENE
9	CADW50000004860	1/4 - 1/2 Mile East
B11	CADW50000004903	1/2 - 1 Mile NW
C13	CADW50000004804	1/2 - 1 Mile SE
16	CADW50000004921	1/2 - 1 Mile NNE
18	CADW50000004898	1/2 - 1 Mile ENE
D19	CADW50000004840	1/2 - 1 Mile ESE
22	CADW50000004850	1/2 - 1 Mile East
E25	CADW50000004936	1/2 - 1 Mile NNE
E26	CADW50000004934	1/2 - 1 Mile NNE

OTHER STATE DATABASE INFORMATION

STATE OIL/GAS WELL INFORMATION

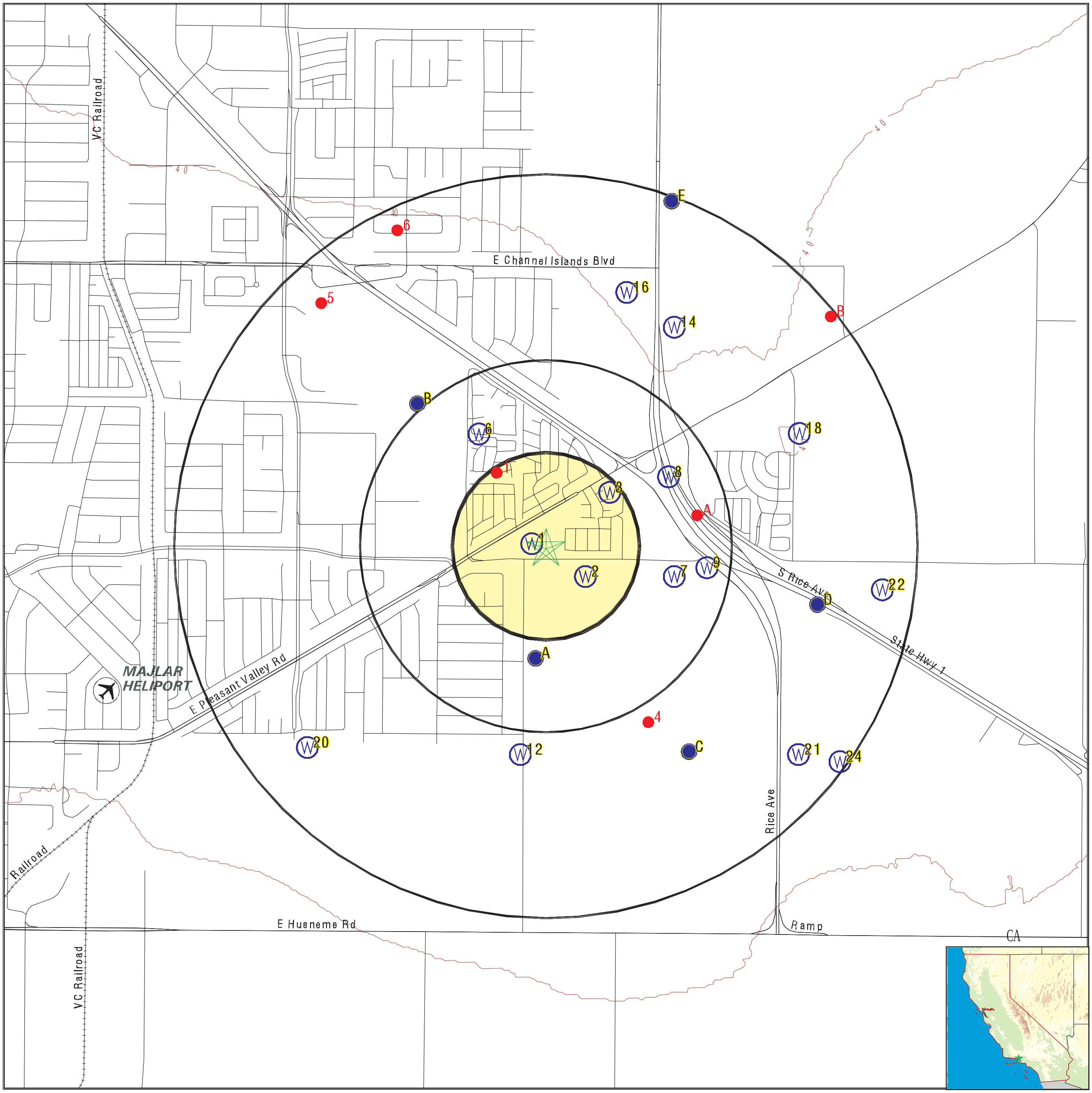
MAP ID	WELL ID	LOCATION FROM TP
1	CAOG9A000033855	1/8 - 1/4 Mile NW
A3	CAOG9A000033849	1/4 - 1/2 Mile ENE
A2	CAOG9A000033848	1/4 - 1/2 Mile ENE
4	CAOG9A000033839	1/2 - 1 Mile SSE
5	CAOG9A000033882	1/2 - 1 Mile NW
6	CAOG9A000033883	1/2 - 1 Mile NNW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE OIL/GAS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
B7	CAOG9A000033874	1/2 - 1 Mile NE
B8	CAOG9A000033876	1/2 - 1 Mile NE
B9	CAOG9A000033877	1/2 - 1 Mile NE
B10	CAOG9A000033875	1/2 - 1 Mile NE
B11	CAOG9A000033880	1/2 - 1 Mile NE
B12	CAOG9A000033879	1/2 - 1 Mile NE
B13	CAOG9A000033878	1/2 - 1 Mile NE

PHYSICAL SETTING SOURCE MAP - 03864571.2r



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME: Pleasant Valley Apartments ADDRESS: 2295 Etting Road Oxnard CA 93033 LAT/LONG: 34.1623 / 119.1478	CLIENT: Rincon CONTACT: Lauren Kodama INQUIRY #: 03864571.2r DATE: February 25, 2014 2:02 am

Map ID Direction Distance Elevation			Database	EDR ID Number
1 **West** **0 - 1/8 Mile** **Higher**			**CA WELLS**	**CADW50000004863**

Latitude :	34.162397		
Longitude :	119.14846		
Site code:	341619N1191478W001	Casgem sta:	01N22W14R002S
Local well:	01N22W14R02S	Casgem s 1:	Irrigation
County id:	56		
Basin cd:	4-4.02	Basin desc:	Oxnard
Org unit n:	Southern Region Office	Site id:	CADW50000004863

2 **SE** **1/8 - 1/4 Mile** **Higher**			**FED USGS**	**USGS40000142246**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-340940119084201		
Monloc name:	001N022W23A002S		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18070103	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	34.1611164
Longitude:	-119.145939	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	208
Welldepth units:	ft	Wellholedepth:	208
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

3 **NE** **1/8 - 1/4 Mile** **Higher**			**CA WELLS**	**CADW50000004874**

Latitude :	34.1644		
Longitude :	119.1448		
Site code:	341644N1191448W001	Casgem sta:	01N22W13N001S
Local well:	Not Reported	Casgem s 1:	Unknown
County id:	56		
Basin cd:	4-4.02	Basin desc:	Oxnard
Org unit n:	Southern Region Office	Site id:	CADW50000004874

Map ID Direction Distance Elevation	Database	EDR ID Number
A4 **South** **1/4 - 1/2 Mile** **Lower**	**FED USGS**	**USGS40000142216**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-340929119085001		
Monloc name:	001N022W23A004S		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18070103	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	34.1580608
Longitude:	-119.1481613	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

	Database	EDR ID Number
A5 **South** **1/4 - 1/2 Mile** **Lower**	**CA WELLS**	**CADW50000004830**

Latitude :	34.1578		
Longitude :	119.1484		
Site code:	341578N1191484W001	Casgem sta:	01N22W23A004S
Local well:	Not Reported	Casgem s 1:	Unknown
County id:	56		
Basin cd:	4-4.02	Basin desc:	Oxnard
Org unit n:	Southern Region Office	Site id:	CADW50000004830

	Database	EDR ID Number
6 **NNW** **1/4 - 1/2 Mile** **Higher**	**CA WELLS**	**714**

Water System Information:

Prime Station Code:	01N/22W-21B06 S	User ID:	TAP
FRDS Number:	5610009005	County:	Ventura
District Number:	06	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Standby Raw
Source Lat/Long:	341000.0 1190900.0	Precision:	1 Mile (One Minute)
Source Name:	WELL 04A - STANDBY		

System Number:	5610009		
System Name:	PORT HUENEME WATER DEPT		
Organization That Operates System:			
	250 N VENTURA ROAD		
	PORT HUENEME, CA 93041		
Pop Served:	19000	Connections:	6402
Area Served:	PORT HUENEME		

7
ESE
1/4 - 1/2 Mile
Higher

FED USGS **USGS40000142245**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-340940119082701		
Monloc name:	001N022W24C002S		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18070103	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	34.1611164
Longitude:	-119.1417722	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	320
Welldepth units:	ft	Wellholedepth:	402
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

8
ENE
1/4 - 1/2 Mile
Higher

CA WELLS **699**

Water System Information:

Prime Station Code:	01N/22W-13N02 S	User ID:	TAP
FRDS Number:	5602116001	County:	Ventura
District Number:	06	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	340954.0 1190828.0	Precision:	100 Feet (one Second)
Source Name:	WELL 01		
System Number:	5602116		
System Name:	SILVER WHEEL TRAILER PARK		
Organization That Operates System:			
	2434 SOLAR DR.		
	LOS ANGELES, CA 90046		
Pop Served:	120	Connections:	64
Area Served:	Not Reported		

Sample Collected:	24-MAY-12	Findings:	930. UG/L
Chemical:	IRON		
Sample Collected:	24-MAY-12	Findings:	420. UG/L
Chemical:	MANGANESE		
Sample Collected:	24-MAY-12	Findings:	5.61 PCI/L
Chemical:	GROSS ALPHA		
Sample Collected:	24-MAY-12	Findings:	3.33 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	24-MAY-12	Findings:	6.36 PCI/L
Chemical:	URANIUM (PCI/L)		
Sample Collected:	24-MAY-12	Findings:	1.63 PCI/L
Chemical:	URANIUM COUNTING ERROR		
Sample Collected:	24-MAY-12	Findings:	3.46 PCI/L
Chemical:	GROSS ALPHA MDA95		
Sample Collected:	24-MAY-12	Findings:	0.439 PCI/L
Chemical:	URANIUM MDA95		
Sample Collected:	24-MAY-12	Findings:	0.566 PCI/L
Chemical:	RA-226 FOR CWS OR TOTAL RA FOR NTNC BY 903.0		
Sample Collected:	24-MAY-12	Findings:	0.322 PCI/L
Chemical:	RA-226 OR TOTAL RA BY 903.0 C.E.		
Sample Collected:	24-MAY-12	Findings:	0.439 PCI/L
Chemical:	RADIUM, TOTAL, MDA95-NTNC ONLY, BY 903.0		
Sample Collected:	08-AUG-12	Findings:	1610. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	08-AUG-12	Findings:	7.1
Chemical:	PH, LABORATORY		
Sample Collected:	08-AUG-12	Findings:	220. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	08-AUG-12	Findings:	270. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	08-AUG-12	Findings:	684. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	08-AUG-12	Findings:	180. MG/L
Chemical:	CALCIUM		
Sample Collected:	08-AUG-12	Findings:	57. MG/L
Chemical:	MAGNESIUM		
Sample Collected:	08-AUG-12	Findings:	115. MG/L
Chemical:	SODIUM		
Sample Collected:	08-AUG-12	Findings:	1.9
Chemical:	SODIUM ABSORPTION RATIO		
Sample Collected:	08-AUG-12	Findings:	5. MG/L
Chemical:	POTASSIUM		
Sample Collected:	08-AUG-12	Findings:	56. MG/L
Chemical:	CHLORIDE		

Sample Collected:	08-AUG-12	Findings:	620. MG/L
Chemical:	SULFATE		
Sample Collected:	08-AUG-12	Findings:	0.4 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	08-AUG-12	Findings:	3. UG/L
Chemical:	ARSENIC		
Sample Collected:	08-AUG-12	Findings:	800. UG/L
Chemical:	BORON		
Sample Collected:	08-AUG-12	Findings:	490. UG/L
Chemical:	IRON		
Sample Collected:	08-AUG-12	Findings:	410. UG/L
Chemical:	MANGANESE		
Sample Collected:	08-AUG-12	Findings:	1230. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	08-AUG-12	Findings:	0.2
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	08-AUG-12	Findings:	2.8 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	08-AUG-12	Findings:	12.1
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	14-NOV-12	Findings:	680. UG/L
Chemical:	IRON		
Sample Collected:	14-NOV-12	Findings:	450. UG/L
Chemical:	MANGANESE		
Sample Collected:	20-FEB-13	Findings:	600. UG/L
Chemical:	IRON		
Sample Collected:	20-FEB-13	Findings:	430. UG/L
Chemical:	MANGANESE		
Sample Collected:	13-MAY-13	Findings:	610. UG/L
Chemical:	IRON		
Sample Collected:	13-MAY-13	Findings:	410. UG/L
Chemical:	MANGANESE		
Sample Collected:	10-OCT-11	Findings:	4. UG/L
Chemical:	ARSENIC		

9
East
1/4 - 1/2 Mile
Higher

CA WELLS **CADW50000004860**

Latitude :	34.161459		
Longitude :	119.140237		
Site code:	341617N1191392W001	Casgem sta:	01N22W24C002S
Local well:	01N22W24C02S	Casgem s 1:	Irrigation
County id:	56		
Basin cd:	4-4.02	Basin desc:	Oxnard
Org unit n:	Southern Region Office	Site id:	CADW50000004860

Map ID Direction Distance Elevation	Database	EDR ID Number
B10 **NW** **1/2 - 1 Mile** **Higher**	**FED USGS**	**USGS40000142308**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-341004119091001		
Monloc name:	001N022W14K001S		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18070103	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	34.1677829
Longitude:	-119.1537171	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	338
Welldepth units:	ft	Wellholedepth:	338
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

B11 **NW** **1/2 - 1 Mile** **Higher**	**CA WELLS**	**CADW50000004903**

Latitude :	34.167949		
Longitude :	119.153939		
Site code:	341678N1191537W001	Casgem sta:	01N22W14K001S
Local well:	01N22W14K01S	Casgem s 1:	Irrigation
County id:	56		
Basin cd:	4-4.02	Basin desc:	Oxnard
Org unit n:	Southern Region Office	Site id:	CADW50000004903

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12 **South** **1/2 - 1 Mile** **Lower**	**FED USGS**	**USGS40000142169**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-340915119085301		
Monloc name:	001N022W23J001S		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18070103	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	34.154172
Longitude:	-119.1489946	Sourcemap scale:	24000

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

C13
SE
1/2 - 1 Mile
Lower

CA WELLS **CADW50000004804**

Latitude :	34.154413		
Longitude :	119.14121		
Site code:	341539N1191406W001	Casgem sta:	01N22W24M002S
Local well:	01N22W24M02S	Casgem s 1:	Irrigation
County id:	56		
Basin cd:	4-4.02	Basin desc:	Oxnard
Org unit n:	Southern Region Office	Site id:	CADW50000004804

14
NNE
1/2 - 1 Mile
Higher

FED USGS **USGS40000142329**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-341015119082701		
Monloc name:	001N022W13E003S		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18070103	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	34.1708385
Longitude:	-119.1417723	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		

Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	404
Welldepth units:	ft	Wellholedepth:	404
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

C15
SE
1/2 - 1 Mile
Lower

FED USGS **USGS40000142168**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-340915119082401		
Monloc name:	001N022W24M002S		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18070103	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	34.154172
Longitude:	-119.1409387	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	250
Welldepth units:	ft	Wellholedepth:	250
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

16
NNE
1/2 - 1 Mile
Higher

CA WELLS **CADW50000004921**

Latitude :	34.1722		
Longitude :	119.144		
Site code:	341722N1191440W001	Casgem sta:	01N22W13E005S
Local well:	Not Reported	Casgem s 1:	Unknown
County id:	56		
Basin cd:	4-4.02	Basin desc:	Oxnard
Org unit n:	Southern Region Office	Site id:	CADW50000004921

D17
East
1/2 - 1 Mile
Higher

FED USGS **USGS40000142235**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-340937119080301		
Monloc name:	001N022W24B002S		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18070103	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	34.1602831
Longitude:	-119.1351053	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	29.0
Vert measure units:	feet	Vertacc measure val:	.1
Vert accmeasure units:	feet		
Vertcollection method:	Level or other surveying method		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	394
Welldepth units:	ft	Wellholedepth:	394
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

18
ENE
1/2 - 1 Mile
Higher

CA WELLS **CADW50000004898**

Latitude :	34.1667		
Longitude :	119.1359		
Site code:	341667N1191359W001	Casgem sta:	01N22W13K002S
Local well:	Not Reported	Casgem s 1:	Unknown
County id:	56		
Basin cd:	4-4.02	Basin desc:	Oxnard
Org unit n:	Southern Region Office	Site id:	CADW50000004898

D19
ESE
1/2 - 1 Mile
Lower

CA WELLS **CADW50000004840**

Latitude :	34.159768		
Longitude :	119.134989		
Site code:	341598N1191350W001	Casgem sta:	01N22W24B004S
Local well:	01N22W24B04S	Casgem s 1:	Irrigation
County id:	56		
Basin cd:	4-4.02	Basin desc:	Oxnard
Org unit n:	Southern Region Office	Site id:	CADW50000004840

20
SW
1/2 - 1 Mile
Lower

FED USGS **USGS40000142173**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-340916119092901		
Monloc name:	001N022W23E001S		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18070103	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	34.1544497
Longitude:	-119.158995	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

21
SE
1/2 - 1 Mile
Lower

FED USGS **USGS40000142167**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-340915119080601		
Monloc name:	001N022W24K001S		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18070103	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	34.1541721
Longitude:	-119.1359386	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	196
Welldepth units:	ft	Wellholedepth:	196
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

Map ID Direction Distance Elevation	Database	EDR ID Number
22 **East** **1/2 - 1 Mile** **Higher**	**CA WELLS**	**CADW50000004850**

Latitude :	34.1606		
Longitude :	119.132		
Site code:	341606N1191320W001	Casgem sta:	01N22W24B002S
Local well:	Not Reported	Casgem s 1:	Unknown
County id:	56		
Basin cd:	4-4.02	Basin desc:	Oxnard
Org unit n:	Southern Region Office	Site id:	CADW50000004850

E23 **NNE** **1/2 - 1 Mile** **Higher**	**FED USGS**	**USGS40000142352**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-341032119082701		
Monloc name:	001N022W13D003S		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18070103	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	34.1755607
Longitude:	-119.1417723	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	41
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	198308	Welldepth:	1220
Welldepth units:	ft	Wellholedepth:	1240
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

24 **SE** **1/2 - 1 Mile** **Lower**	**FED USGS**	**USGS40000142163**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-340914119075901		
Monloc name:	001N022W24K002S		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18070103	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	34.1538943
Longitude:	-119.133994	Sourcemap scale:	24000

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	234
Welldepth units:	ft	Wellholedepth:	234
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

E25
NNE
1/2 - 1 Mile
Higher

CA WELLS **CADW50000004936**

Latitude :	34.175931		
Longitude :	119.142205		
Site code:	341761N1191423W001	Casgem sta:	01N22W13D003S
Local well:	01N22W13D03S	Casgem s 1:	Irrigation
County id:	56		
Basin cd:	4-4.02	Basin desc:	Oxnard
Org unit n:	Southern Region Office	Site id:	CADW50000004936

E26
NNE
1/2 - 1 Mile
Higher

CA WELLS **CADW50000004934**

Latitude :	34.1758		
Longitude :	119.1417		
Site code:	341758N1191417W001	Casgem sta:	01N22W13D002S
Local well:	Not Reported	Casgem s 1:	Unknown
County id:	56		
Basin cd:	4-4.02	Basin desc:	Oxnard
Org unit n:	Southern Region Office	Site id:	CADW50000004934

Map ID Direction Distance		Database	EDR ID Number

1
NW
1/8 - 1/4 Mile **OIL_GAS** **CAOG9A000033855**

Districtnu:	2	Apinumber:	11105614
Blmwell:	N	Redrillcan:	No
Dryhole:	Y	Wellstatus:	P
Operatorna:	Chevron U.S.A. Inc.		
Countyname:	Ventura	Fieldname:	Any Field
Areaname:	Any Area		
Section:	14		
Township:	01N	Range:	22W
Basemeridi:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Glat:	34.165164		
Glong:	-119.150108		
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Bannon-Silver K	Wellnumber:	1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	30-DEC-99
Welldeptha:	Not Reported	Redrillfoo:	Not Reported
Abandonedd:	/ /	Completion:	/ /
Gissymbol:	Not Reported	Site id:	CAOG9A000033855

A3
ENE
1/4 - 1/2 Mile **OIL_GAS** **CAOG9A000033849**

Districtnu:	2	Apinumber:	11121337
Blmwell:	N	Redrillcan:	No
Dryhole:	Y	Wellstatus:	P
Operatorna:	Oryx Energy Company		
Countyname:	Ventura	Fieldname:	Cabrillo
Areaname:	Any Area		
Section:	13		
Township:	01N	Range:	22W
Basemeridi:	SB	Elevation:	51.7
Locationde:	Not Reported		
Glat:	34.163507		
Glong:	-119.1407		
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Nishimoto	Wellnumber:	1
Epawell:	N	Hydraulica:	Y
Confidenti:	N	Spuddate:	01-MAR-85
Welldeptha:	Not Reported	Redrillfoo:	Not Reported
Abandonedd:	/ /	Completion:	/ /
Gissymbol:	Not Reported	Site id:	CAOG9A000033849

A2
ENE
1/4 - 1/2 Mile **OIL_GAS** **CAOG9A000033848**

Districtnu:	2	Apinumber:	11106237
Blmwell:	N	Redrillcan:	No
Dryhole:	N	Wellstatus:	P
Operatorna:	ARCO Oil & Gas Company		
Countyname:	Ventura	Fieldname:	Ojai
Areaname:	Silverthread		
Section:	18		
Township:	04N	Range:	21W
Basemeridi:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Glat:	34.163507		
Glong:	-119.1407		
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Well No.	Wellnumber:	8
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	30-DEC-99
Welldeptha:	Not Reported	Redrillfoo:	Not Reported
Abandonedd:	/ /	Completion:	/ /
Gissymbol:	Not Reported	Site id:	CAOG9A000033848

4
SSE
1/2 - 1 Mile **OIL_GAS** **CAOG9A000033839**

Districtnu:	2	Apinumber:	11105615
Blmwell:	N	Redrillcan:	No
Dryhole:	Y	Wellstatus:	P
Operatorna:	Chevron U.S.A. Inc.		
Countyname:	Ventura	Fieldname:	Cabrillo
Areaname:	Any Area		
Section:	24		
Township:	01N	Range:	22W
Basemeridi:	SB	Elevation:	18GL
Locationde:	Not Reported		
Glat:	34.155435		
Glong:	-119.14299		
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Eastwood	Wellnumber:	1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	25-MAR-29
Welldeptha:	Not Reported	Redrillfoo:	Not Reported
Abandonedd:	/ /	Completion:	/ /
Gissymbol:	Not Reported	Site id:	CAOG9A000033839

5
NW
1/2 - 1 Mile **OIL_GAS** **CAOG9A000033882**

Districtnu:	2	Apinumber:	11105616
Blmwell:	N	Redrillcan:	No
Dryhole:	Y	Wellstatus:	P
Operatorna:	Chevron U.S.A. Inc.		
Countyname:	Ventura	Fieldname:	Any Field
Areaname:	Any Area		
Section:	14		
Township:	01N	Range:	22W
Basemeridi:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Glat:	34.171782		
Glong:	-119.158346		
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Petit	Wellnumber:	1
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	23-FEB-58
Welldeptha:	Not Reported	Redrillfoo:	Not Reported
Abandonedd:	/ /	Completion:	/ /
Gissymbol:	Not Reported	Site id:	CAOG9A000033882

6
NNW
1/2 - 1 Mile

OIL_GAS **CAOG9A000033883**

Districtnu:	2	Apinumber:	11101312
Blmwell:	N	Redrillcan:	No
Dryhole:	N	Wellstatus:	P
Operatorna:	Chevron U.S.A. Inc.		
Countyname:	Ventura	Fieldname:	Oxnard
Areaname:	Any Area		
Section:	14		
Township:	01N	Range:	22W
Basemeridi:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Glat:	34.174623		
Glong:	-119.154778		
Gissourcec:	hud		
Comments:	Not Reported		
Leasename:	Security First National Bank	Wellnumber:	2
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	13-MAR-59
Welldeptha:	Not Reported	Redrillfoo:	Not Reported
Abandonedd:	/ /	Completion:	/ /
Gissymbol:	Not Reported	Site id:	CAOG9A000033883

B7
NE
1/2 - 1 Mile

OIL_GAS **CAOG9A000033874**

Districtnu:	2	Apinumber:	11122136
Blmwell:	N	Redrillcan:	No
Dryhole:	N	Wellstatus:	A
Operatorna:	Renaissance Petroleum, LLC		
Countyname:	Ventura	Fieldname:	Cabrillo
Areaname:	Any Area		
Section:	13		
Township:	01N	Range:	22W
Basemeridi:	SB	Elevation:	49KB
Locationde:	Not Reported		
Glat:	34.171239		
Glong:	-119.134625		
Gissourcec:	noi		
Comments:	Not Reported		
Leasename:	Vivian Rosenmund	Wellnumber:	8
Epawell:	N	Hydraulica:	N
Confidenti:	Y	Spuddate:	30-DEC-99
Welldeptha:	0	Redrillfoo:	0
Abandonedd:	/ /	Completion:	/ /
Gissymbol:	Not Reported	Site id:	CAOG9A000033874

B8
NE **OIL_GAS** **CAOG9A000033876**
1/2 - 1 Mile

Districtnu:	2	Apinumber:	11122135
Blmwell:	N	Redrillcan:	No
Dryhole:	N	Wellstatus:	N
Operatorna:	Renaissance Petroleum, LLC		
Countyname:	Ventura	Fieldname:	Cabrillo
Areaname:	Any Area		
Section:	13		
Township:	01N	Range:	22W
Basemeridi:	SB	Elevation:	51.18KB
Locationde:	Not Reported		
Glat:	34.171241		
Glong:	-119.134559		
Gissourcec:	sum		
Comments:	Not Reported		
Leasename:	Vivian Rosenmund	Wellnumber:	7
Epawell:	N	Hydraulica:	N
Confidenti:	Y	Spuddate:	17-MAR-12
Welldeptha:	0	Redrillfoo:	0
Abandonedd:	/ /	Completion:	/ /
Gissymbol:	Not Reported	Site id:	CAOG9A000033876

B9
NE **OIL_GAS** **CAOG9A000033877**
1/2 - 1 Mile

Districtnu:	2	Apinumber:	11122135
Blmwell:	N	Redrillcan:	No
Dryhole:	N	Wellstatus:	N
Operatorna:	Renaissance Petroleum, LLC		
Countyname:	Ventura	Fieldname:	Cabrillo
Areaname:	Any Area		
Section:	13		
Township:	01N	Range:	22W
Basemeridi:	SB	Elevation:	51.18KB
Locationde:	Not Reported		
Glat:	34.171241		
Glong:	-119.134559		
Gissourcec:	sum		
Comments:	Not Reported		
Leasename:	Vivian Rosenmund	Wellnumber:	7
Epawell:	N	Hydraulica:	N
Confidenti:	Y	Spuddate:	30-DEC-99
Welldeptha:	0	Redrillfoo:	0
Abandonedd:	/ /	Completion:	/ /
Gissymbol:	Not Reported	Site id:	CAOG9A000033877

B10
NE
1/2 - 1 Mile

OIL_GAS **CAOG9A000033875**

Districtnu:	2	Apinumber:	11122085
Blmwell:	N	Redrillcan:	No
Dryhole:	N	Wellstatus:	A
Operatorna:	Renaissance Petroleum, LLC		
Countyname:	Ventura	Fieldname:	Cabrillo
Areaname:	Any Area		
Section:	13		
Township:	01N	Range:	22W
Basemeridi:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Glat:	34.171239		
Glong:	-119.134494		
Gissourcec:	noi		
Comments:	Not Reported		
Leasename:	Vivian Rosenmund	Wellnumber:	6
Epawell:	N	Hydraulica:	Y
Confidenti:	Y	Spuddate:	02-APR-11
Welldeptha:	0	Redrillfoo:	0
Abandonedd:	/ /	Completion:	/ /
Gissymbol:	Not Reported	Site id:	CAOG9A000033875

B11
NE
1/2 - 1 Mile

OIL_GAS **CAOG9A000033880**

Districtnu:	2	Apinumber:	11122022
Blmwell:	N	Redrillcan:	No
Dryhole:	N	Wellstatus:	A
Operatorna:	Renaissance Petroleum, LLC		
Countyname:	Ventura	Fieldname:	Cabrillo
Areaname:	Any Area		
Section:	13		
Township:	01N	Range:	22W
Basemeridi:	SB	Elevation:	Not Reported
Locationde:	Not Reported		
Glat:	34.171314		
Glong:	-119.134349		
Gissourcec:	sum		
Comments:	Not Reported		
Leasename:	Vivian Rosenmund	Wellnumber:	5
Epawell:	N	Hydraulica:	Y
Confidenti:	Y	Spuddate:	02-MAR-10
Welldeptha:	0	Redrillfoo:	0
Abandonedd:	/ /	Completion:	07/05/10
Gissymbol:	Not Reported	Site id:	CAOG9A000033880

B12
NE
1/2 - 1 Mile

OIL_GAS **CAOG9A000033879**

Districtnu:	2	Apinumber:	11121914
Blmwell:	N	Redrillcan:	No
Dryhole:	N	Wellstatus:	I
Operatorna:	Renaissance Petroleum, LLC		
Countyname:	Ventura	Fieldname:	Cabrillo
Areaname:	Any Area		
Section:	13		
Township:	01N	Range:	22W
Basemeridi:	SB	Elevation:	48.5KB
Locationde:	Not Reported		
Glat:	34.171267		
Glong:	-119.13426		
Gissourcec:	gps		
Comments:	Not Reported		
Leasename:	Vivian Rosenmund	Wellnumber:	3
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	01-MAY-06
Welldeptha:	Not Reported	Redrillfoo:	7595
Abandonedd:	/ /	Completion:	/ /
Gissymbol:	Not Reported	Site id:	CAOG9A000033879

B13
NE
1/2 - 1 Mile

OIL_GAS **CAOG9A000033878**

Districtnu:	2	Apinumber:	11121913
Blmwell:	N	Redrillcan:	No
Dryhole:	N	Wellstatus:	A
Operatorna:	Renaissance Petroleum, LLC		
Countyname:	Ventura	Fieldname:	Cabrillo
Areaname:	Any Area		
Section:	13		
Township:	01N	Range:	22W
Basemeridi:	SB	Elevation:	48.5KB
Locationde:	Not Reported		
Glat:	34.17126		
Glong:	-119.134127		
Gissourcec:	gps		
Comments:	Not Reported		
Leasename:	Vivian Rosenmund	Wellnumber:	2
Epawell:	N	Hydraulica:	N
Confidenti:	N	Spuddate:	22-MAR-06
Welldeptha:	Not Reported	Redrillfoo:	7150
Abandonedd:	/ /	Completion:	/ /
Gissymbol:	Not Reported	Site id:	CAOG9A000033878

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
93033	12	0

Federal EPA Radon Zone for VENTURA County: 1

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 93033

Number of sites tested: 5

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.780 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Scanned Digital USGS 7.5' Topographic Map (DRG)
Source: United States Geologic Survey
A digital raster graphic (DRG) is a scanned image of a U.S. Geological Survey topographic map. The map images are made by scanning published paper maps on high-resolution scanners. The raster image is georeferenced and fit to the Universal Transverse Mercator (UTM) projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW[R] Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations
Source: Department of Conservation
Telephone: 916-323-1779
Oil and Gas well locations in the state.

RADON

State Database: CA Radon
Source: Department of Health Services
Telephone: 916-324-2208
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR’s Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California’s Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

Appendix 3

Historical Research Documentation

Pleasant Valley Apartments

2295 Etting Road

Oxnard, CA 93033

Inquiry Number: 3864571.8

February 27, 2014

The EDR Aerial Photo Decade Package

EDR®

6 Armstrong Road, 4th Floor
Shelton, Connecticut 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

When delivered electronically by EDR, the aerial photo images included with this report are for ONE TIME USE ONLY. Further reproduction of these aerial photo images is prohibited without permission from EDR. For more information contact your EDR Account Executive.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Date EDR Searched Historical Sources:

Aerial Photography February 27, 2014

Target Property:

2295 Etting Road

Oxnard, CA 93033

Year	***Scale***	***Details***	***Source***
1938	Aerial Photograph. Scale: 1"=500'	Flight Year: 1938	Laval
1947	Aerial Photograph. Scale: 1"=500'	Flight Year: 1947	Tubis
1959	Aerial Photograph. Scale: 1"=500'	Flight Year: 1959	Robinson
1964	Aerial Photograph. Scale: 1"=500'	Flight Year: 1964	Mark Hurd
1970	Aerial Photograph. Scale: 1"=500'	Flight Year: 1970	Mark Hurd
1977	Aerial Photograph. Scale: 1"=500'	Flight Year: 1977	Teledyne
1989	Aerial Photograph. Scale: 1"=500'	Flight Year: 1989	USGS
1994	Aerial Photograph. Scale: 1"=500'	/DOQQ - acquisition dates: 1994	EDR
2005	Aerial Photograph. Scale: 1"=500'	Flight Year: 2005	EDR
2009	Aerial Photograph. Scale: 1"=500'	Flight Year: 2009	EDR
2010	Aerial Photograph. Scale: 1"=500'	Flight Year: 2010	EDR
2012	Aerial Photograph. Scale: 1"=500'	Flight Year: 2012	EDR

INQUIRY #: 3864571.8

YEAR: 1938

= 500'

N

EDR

INQUIRY #: 3864571.8

YEAR: 1947

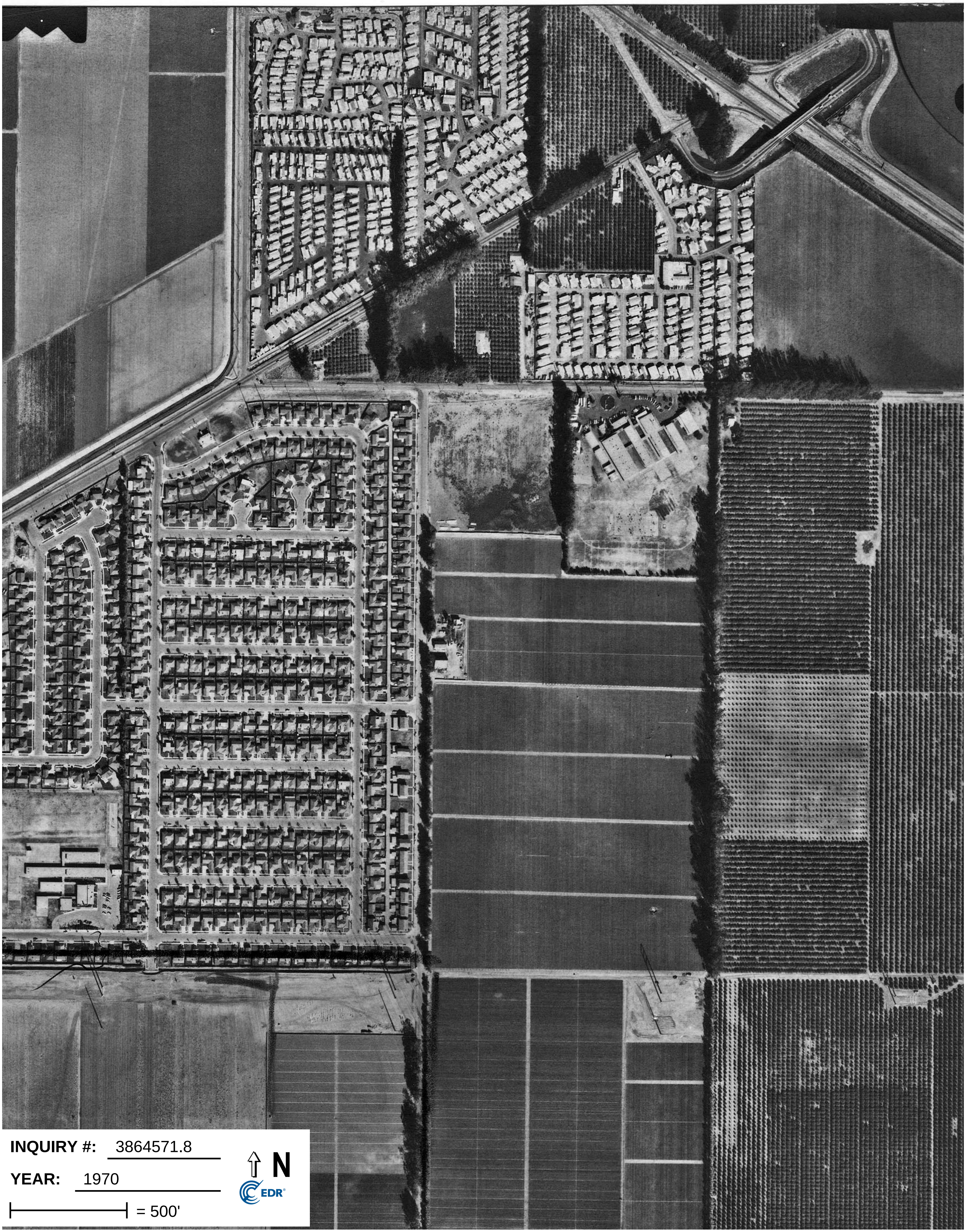
= 500'

N

EDR


INQUIRY #: 3864571.8
YEAR: 1959
= 500'
N
EDR


INQUIRY #: 3864571.8
YEAR: 1964
= 500'
N
EDR


INQUIRY #: 3864571.8
YEAR: 1970
= 500'
N
EDR

INQUIRY #: 3864571.8
YEAR: 1977
= 500'
N
EDR


INQUIRY #: 3864571.8
YEAR: 1989
= 500'
N
EDR


INQUIRY #: 3864571.8
YEAR: 1994
= 500'
N
EDR


INQUIRY #: 3864571.8
YEAR: 2005
= 500'
N
EDR

INQUIRY #: 3864571.8

YEAR: 2009

= 500'

N

EDR


INQUIRY #: 3864571.8
YEAR: 2010
= 500'
N
EDR

INQUIRY #: 3864571.8

YEAR: 2012

= 500'

N

EDR

Pleasant Valley Apartments

2295 Etting Road

Oxnard, CA 93033

Inquiry Number: 3864571.4

February 25, 2014

EDR Historical Topographic Map Report

EDR®

6 Armstrong Road, 4th Floor
Shelton, Connecticut 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topographic Map Report

Environmental Data Resources, Inc.s (EDR) Historical Topographic Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topographic Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the early 1900s.

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

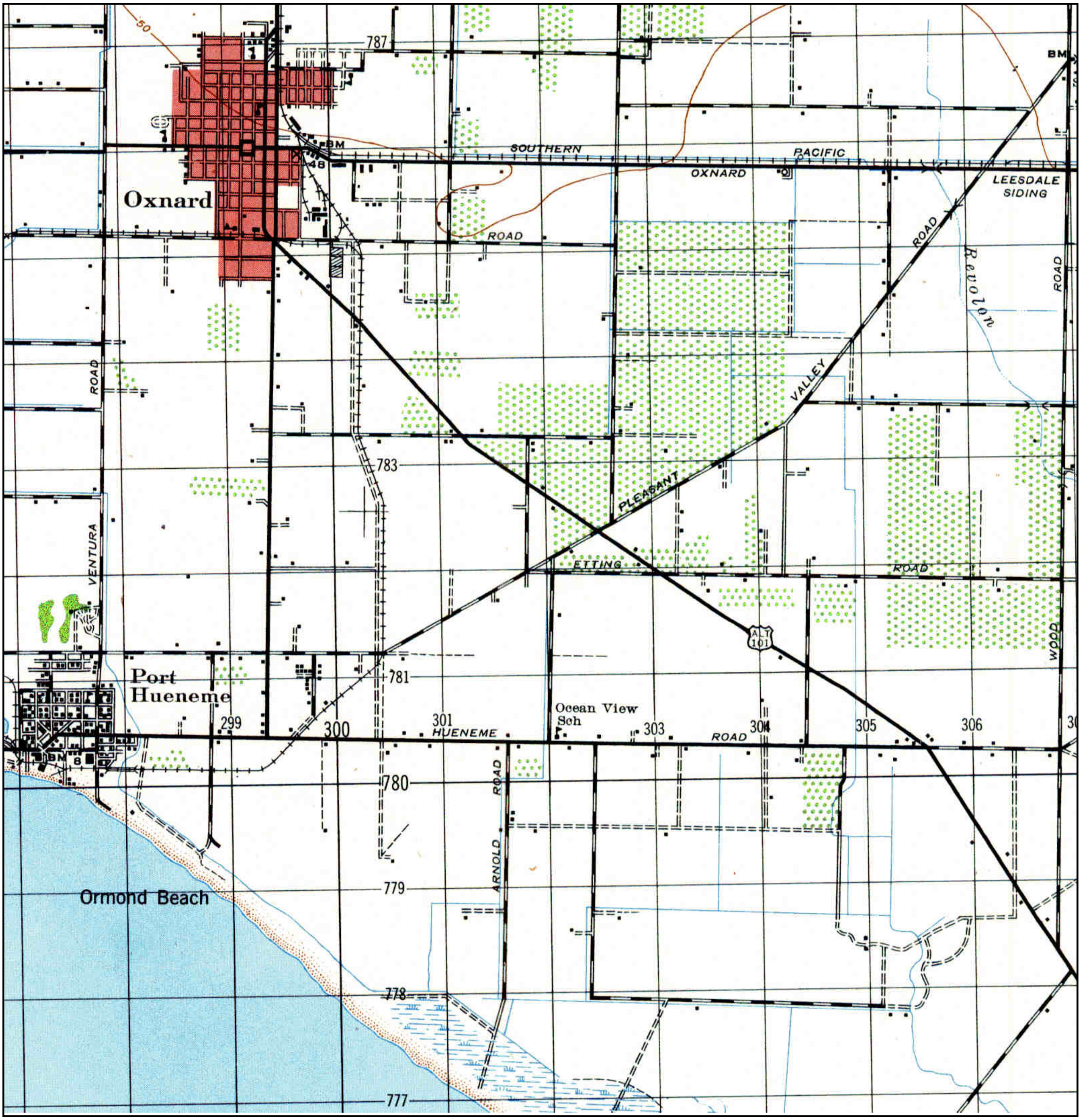
Historical Topographic Map

N	TARGET QUAD	SITE NAME:	Pleasant Valley Apartments	CLIENT:	Rincon
	NAME: HUENEME	ADDRESS:	2295 Etting Road Oxnard, CA 93033	CONTACT:	Lauren Kodama
	MAP YEAR: 1904	LAT/LONG:	34.1623 / -119.1478	INQUIRY#:	3864571.4
	SERIES: 15			RESEARCH DATE:	02/25/2014
	SCALE: 1:62500				

Historical Topographic Map

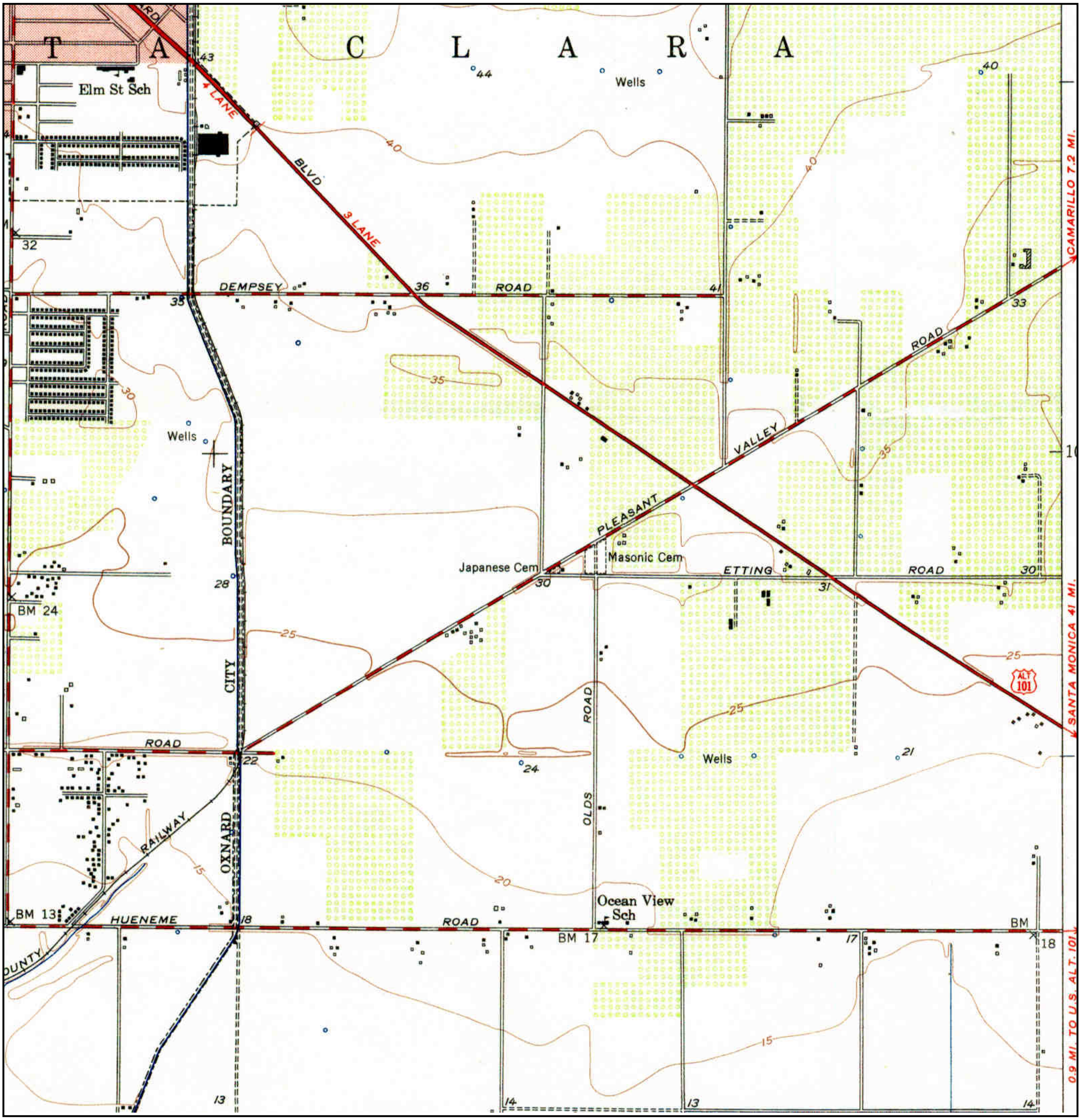
N	TARGET QUAD NAME: SOUTHERN CA SHEET 3 MAP YEAR: 1910 SERIES: 60 SCALE: 1:250000	SITE NAME: Pleasant Valley Apartments ADDRESS: 2295 Etting Road Oxnard, CA 93033 LAT/LONG: 34.1623 / -119.1478	CLIENT: Rincon CONTACT: Lauren Kodama INQUIRY#: 3864571.4 RESEARCH DATE: 02/25/2014

Historical Topographic Map



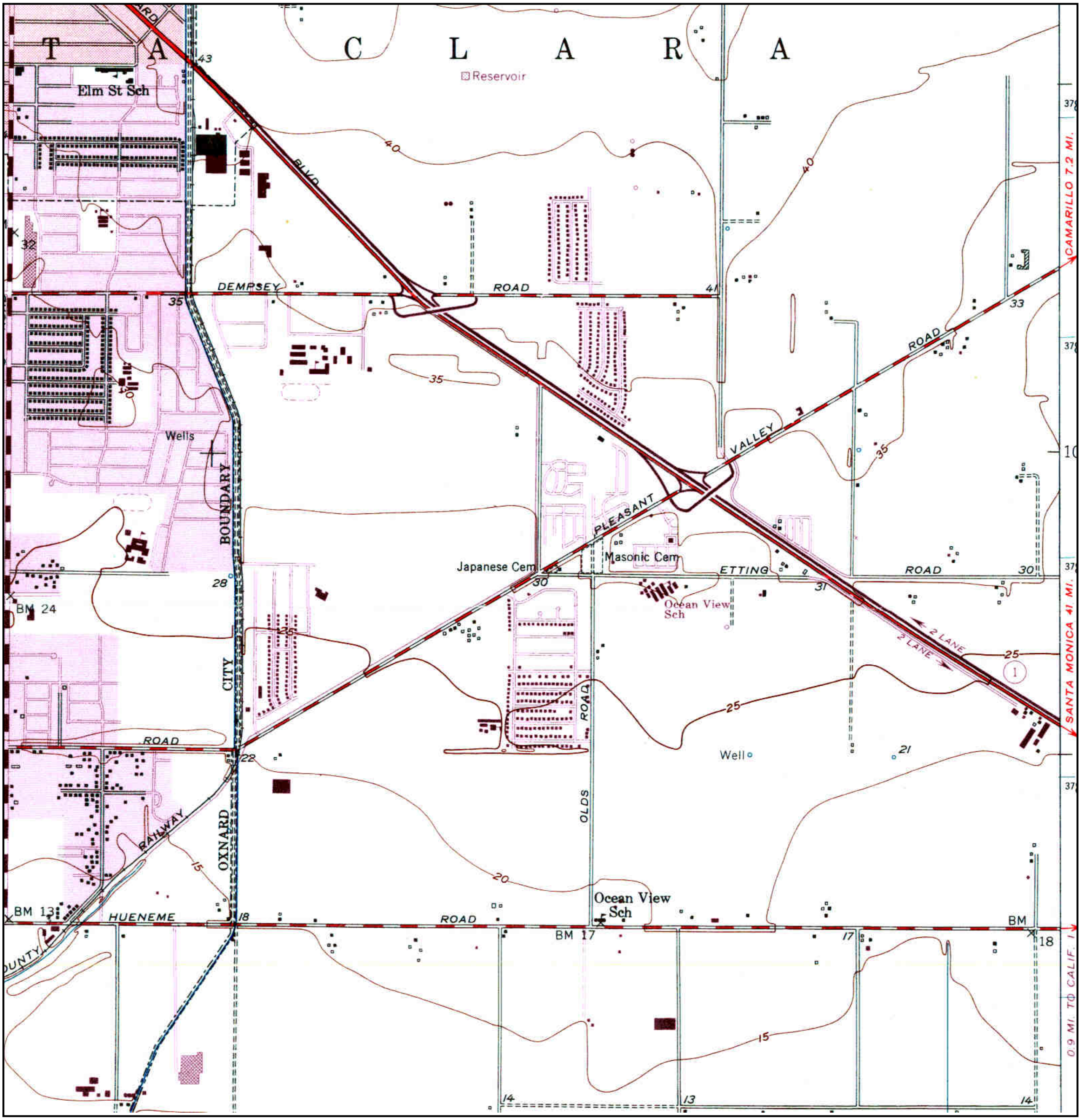
TARGET QUAD NAME: HUENEME MAP YEAR: 1947 SERIES: 15 SCALE: 1:50000	SITE NAME: Pleasant Valley Apartments ADDRESS: 2295 Etting Road Oxnard, CA 93033 LAT/LONG: 34.1623 / -119.1478	CLIENT: Rincon CONTACT: Lauren Kodama INQUIRY#: 3864571.4 RESEARCH DATE: 02/25/2014

Historical Topographic Map



N	TARGET QUAD NAME: OXNARD MAP YEAR: 1951 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Pleasant Valley Apartments ADDRESS: 2295 Etting Road Oxnard, CA 93033 LAT/LONG: 34.1623 / -119.1478	CLIENT: Rincon CONTACT: Lauren Kodama INQUIRY#: 3864571.4 RESEARCH DATE: 02/25/2014

Historical Topographic Map



N	TARGET QUAD NAME: OXNARD MAP YEAR: 1967 PHOTOREVISED FROM :1949 SERIES: 7.5 SCALE: 1:24000	SITE NAME: Pleasant Valley Apartments ADDRESS: 2295 Etting Road Oxnard, CA 93033 LAT/LONG: 34.1623 / -119.1478	CLIENT: Rincon CONTACT: Lauren Kodama INQUIRY#: 3864571.4 RESEARCH DATE: 02/25/2014

Pleasant Valley Apartments
2295 Etting Road
Oxnard, CA 93033

Inquiry Number: 3864571.3
February 24, 2014

Certified Sanborn® Map Report

EDR®

6 Armstrong Road, 4th Floor
Shelton, Connecticut 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

2/24/14

Site Name:	**Client Name:**
Pleasant Valley Apartments	Rincon
2295 Etting Road	180 North Ashwood Avenue
Oxnard, CA 93033	Ventura, CA 93003-0000
EDR Inquiry # 3864571.3	Contact: Lauren Kodama

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Rincon were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Site Name:	Pleasant Valley Apartments
Address:	2295 Etting Road
City, State, Zip:	Oxnard, CA 93033
Cross Street:	
P.O. #	13-01637
Project:	Pleasant Valley Apartments
Certification #	BC3A-45A4-8736

Sanborn® Library search results
Certification # BC3A-45A4-8736

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ✔ Library of Congress
- ✔ University Publications of America
- ✔ EDR Private Collection

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Pleasant Valley Apartments
2295 Etting Road
Oxnard, CA 93033

Inquiry Number: 3864571.5
February 26, 2014

The EDR-City Directory Abstract

EDR® Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at five year intervals.

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1926 through 2013. This report compiles information gathered in this review by geocoding the latitude and longitude of properties identified and gathering information about properties within 660 feet of the target property.

A summary of the information obtained is provided in the text of this report.

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

Year	***Source***	***TP***	***Adjoining***	***Text Abstract***	***Source Image***
2013	Cole Information Services	-	X	X	-
	Cole Information Services	X	X	X	-
2008	Cole Information Services	-	X	X	-
2003	Cole Information Services	-	X	X	-
2002	Haines & Company, Inc.	X	X	X	-
2000	Pacific Bell Telephone Co	-	-	-	-
1996	GTE Directories Corporation	X	X	X	-
	Pacific Bell	X	X	X	-
1993	GTE	X	X	X	-
1986	Pacific Bell	X	X	X	-
1985	Pacific Telephone Co	X	X	X	-
1980	Polk	X	X	X	-
1976	R. L. Polk & Co.	-	X	X	-
1975	General Telephone Company of California	X	X	X	-
	Pacific Telephone Co	X	X	X	-
1971	B&G Publications	-	-	-	-
1970	General Telephone Company of California	X	X	X	-
1968	B&G Publications	-	-	-	-
1965	R. L. Polk & Co.	-	X	X	-
1964	Pacific Telephone Co	X	X	X	-
1961	R. L. Polk & Co.	-	-	-	-
1957	R. L. Polk & Co.	-	-	-	-
1953	R. L. Polk & Co. of California	-	-	-	-
1949	Los Angeles Directory Co.	-	-	-	-

EXECUTIVE SUMMARY

Year	Source	TP	Adjoining	Text Abstract	Source Image
1940	Southern California	-	-	-	-
1930	Los Angeles Directory Co.	-	-	-	-
1926	Los Angeles Directory Co.	-	-	-	-

FINDINGS

TARGET PROPERTY INFORMATION

ADDRESS

2295 Etting Road
Oxnard, CA 93033

FINDINGS DETAIL

Target Property research detail.

ETTING RD

2295 ETTING RD

Year	***Uses***	***Source***
2013	NAUMANN FRANK	Cole Information Services
2002	NAUMANO	Haines & Company, Inc.
1996	Naumann Frank R	Pacific Bell
1993	Naumann Frank R Skipper	GTE
	Naumann Robt G rnch	GTE
1986	Naumann Frank R Skipper	Pacific Bell
	Naumann Robt G rnch	Pacific Bell
1985	Naumann Frank R Skipper	Pacific Telephone Co
	Naumann Robt G rnch	Pacific Telephone Co
1980	Naumann Frank R Skipper	Polk
	Naumann Robt G rnch	Polk
1975	Naumann Frank	General Telephone Company of California
	Naumann Robt G rnch	General Telephone Company of California
	Naumann Frank	Pacific Telephone Co
	Naumann Robt G rnch	Pacific Telephone Co
1970	Romualdo Pete Yadao	General Telephone Company of California
	RON BRADYS AMBULAN CE S E RVICE	General Telephone Company of California
1964	Naumann Robt G rnch	Pacific Telephone Co

FINDINGS

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

BLUEBIRD AVE

4080 BLUEBIRD AVE

Year	***Uses***	***Source***
1976	Weaver Jack C	R. L. Polk & Co.

4081 BLUEBIRD AVE

Year	***Uses***	***Source***
1976	Costa Raymond W	R. L. Polk & Co.

4090 BLUEBIRD AVE

Year	***Uses***	***Source***
1976	Anderson Nola E	R. L. Polk & Co.

4091 BLUEBIRD AVE

Year	***Uses***	***Source***
1976	Schwalbe Ray	R. L. Polk & Co.

4100 BLUEBIRD AVE

Year	***Uses***	***Source***
1976	Carson Ann B	R. L. Polk & Co.

4101 BLUEBIRD AVE

Year	***Uses***	***Source***
1976	Leib Sarah Mrs	R. L. Polk & Co.

BLUEBIRD CIR

4101 BLUEBIRD CIR

Year	***Uses***	***Source***
1986	Schwalbe Ray	Pacific Bell

BLUEBIRD LN

4080 BLUEBIRD LN

Year	***Uses***	***Source***
2002	XXXX	Haines & Company, Inc.

FINDINGS

Year	Uses	Source
1993	Weaver John C Jack	GTE
	Weaver John C Jack	GTE
1986	Weaver John C Jack	Pacific Bell
1985	Weaver John C Jack	Pacific Telephone Co
1980	Weaver John C Jack	Polk
1975	Weaver John C	Pacific Telephone Co
	Weaver John C	General Telephone Company of California
1965	HAMPEL ALFRED E	R. L. Polk & Co.
1964	Hampel Alfred E	Pacific Telephone Co

4081 BLUEBIRD LN

Year	Uses	Source
1986	Griffith Jack	Pacific Bell
1980	Costa Raymond	Polk
1975	Costa Raymond	General Telephone Company of California
	Costa Raymond	Pacific Telephone Co
1970	Leonard Ralph J	General Telephone Company of California
1965	LEONARD RALPH J	R. L. Polk & Co.
1964	Campbell Robt M Jr	Pacific Telephone Co

4090 BLUEBIRD LN

Year	Uses	Source
1980	Anderson Nola	Polk
1975	Anderson Nola	General Telephone Company of California
	Anderson Nola	Pacific Telephone Co
1965	BERSQUIST FRANK	R. L. Polk & Co.

4091 BLUEBIRD LN

Year	Uses	Source
1980	Jones Philip	Polk
1975	Bierstein Chas F	General Telephone Company of California
	Bierstein Chas F	Pacific Telephone Co
1970	Leleng Thelma	General Telephone Company of California
1964	Wade David R	Pacific Telephone Co
	Wade David R	Pacific Telephone Co

4100 BLUEBIRD LN

Year	Uses	Source
2002	FINNEYJerodd	Haines & Company, Inc.
1986	Mc Crum Lola	Pacific Bell

Year	Uses	Source
1986	Mc Crum Robt T	Pacific Bell
1985	Mc Crum Robt T	Pacific Telephone Co
	Mc Crum Lola	Pacific Telephone Co
1970	Nadeau Reading Clinic	General Telephone Company of California
	Nadeau John J	General Telephone Company of California
1965	NADEAU JOHN J	R. L. Polk & Co.
1964	Mc Giveron Arthur J	Pacific Telephone Co

4101 BLUEBIRD LN

Year	Uses	Source
2003	ALTEC	Cole Information Services
2002	ALLENMelin	Haines & Company, Inc.
1993	Allen Melvin	GTE
	Allen Michael	GTE
	Allen Melvin	GTE
	Allen Michael W	GTE
1985	Schwalbe Ray	Pacific Telephone Co
1980	Schwalbe Ray	Polk
1975	Lieb Jos M	General Telephone Company of California
	Lieb Jos M	Pacific Telephone Co
1965	LIEB JOSEPH M	R. L. Polk & Co.

CANARY LN

4071 CANARY LN

Year	Uses	Source
2002	XXXX	Haines & Company, Inc.
1980	Williams E C	Polk
1976	Williams Ellen C	R. L. Polk & Co.
1975	Williams E C	Pacific Telephone Co
	Williams E C	General Telephone Company of California
1970	Williams E C	General Telephone Company of California
1965	WILLIAMS ELLEN C	R. L. Polk & Co.

CURRAN ST

2110 CURRAN ST

Year	Uses	Source
2002	MCDONALDSntner	Haines & Company, Inc.
1993	Mc Donald Sirner J	GTE

FINDINGS

Year	Uses	Source
1993	Mc Donald Sirner J	GTE
1976	Carson Walter	R. L. Polk & Co.

2115 CURRAN ST

Year	Uses	Source
2002	RAYASCha 69s	Haines & Company, Inc.
1986	Simpson C	Pacific Bell
	Simpson B J	Pacific Bell
1985	Ollivier ivor E	Pacific Telephone Co
1976	Glenn Michael	R. L. Polk & Co.

2120 CURRAN ST

Year	Uses	Source
1996	Parsons im 4 T	Pacific Bell
1986	Parsons Tim	Pacific Bell
1985	Parsons Tim	Pacific Telephone Co
1980	Hernandez Richard A	Polk
	Rivas David	Polk
1976	Rivas Ralph	R. L. Polk & Co.
1970	Rivas Antonette R	General Telephone Company of California

2121 CURRAN ST

Year	Uses	Source
2002	MONTGOMERY Wayne	Haines & Company, Inc.
1976	Heupel Harry	R. L. Polk & Co.

2122 CURRAN ST

Year	Uses	Source
2002	PARSONST	Haines & Company, Inc.

2124 CURRAN ST

Year	Uses	Source
2002	MALCKAton	Haines & Company, Inc.
1986	Vasquez Felix	Pacific Bell
1980	Mack Betty S	Polk
1976	Mack Al	R. L. Polk & Co.
1975	Schwan Robt L	General Telephone Company of California

FINDINGS

2125 CURRAN ST

Year	Uses	Source
2002	OOAKSachie DO I	Haines & Company, Inc.
1976	Doak Clifton	R. L. Polk & Co.
1975	Doak Clifton W	General Telephone Company of California
1970	Doak Clifton W	General Telephone Company of California

2130 CURRAN ST

Year	Uses	Source
2002	CORi AOaa Qobarto	Haines & Company, Inc.
1996	Ghall Maged A	Pacific Bell
1993	Ghani Abdul @Thousand Oaks	GTE
	Ghanbari Valodi @Thousand Oaks	GTE
	Ghali Maged A	GTE
	Ghali Maged A	GTE
1976	Skercevic Chris	R. L. Polk & Co.
1970	Pearson Gene	General Telephone Company of California

2131 CURRAN ST

Year	Uses	Source
2002	EMENDZGIOMa	Haines & Company, Inc.
1986	Ross Jeffrey & Jill	Pacific Bell
	Ross Jim & Rhonda	Pacific Bell
1985	Brooks K	Pacific Telephone Co
1976	Drogemeier Stanley E	R. L. Polk & Co.
1970	Langford Leon D	General Telephone Company of California

2134 CURRAN ST

Year	Uses	Source
1976	Feaman Lee M	R. L. Polk & Co.
1970	Feaman L M	General Telephone Company of California

2135 CURRAN ST

Year	Uses	Source
2002	SWILEYDo Btard	Haines & Company, Inc.
1986	Rydalch Bill	Pacific Bell
1985	Rydalch Bill	Pacific Telephone Co
1980	Rydalch Bill	Polk
1976	Gayharts	R. L. Polk & Co.

FINDINGS

2140 CURRAN ST

Year	***Uses***	***Source***
1986	Kelley Bruce & Cherie	Pacific Bell
1985	Kelley Bruce & Cherie	Pacific Telephone Co
1980	Kelley Bruce & Cherie	Polk
1976	Vacant	R. L. Polk & Co.
1975	Knopp Jerry	General Telephone Company of California
1970	Knopp Jerry	General Telephone Company of California

2145 CURRAN ST

Year	***Uses***	***Source***
2002	ANDERSOt 4Douglas	Haines & Company, Inc.
1993	Anderson Douglas	GTE
	Jay D Landscape Inc	GTE
	Jayich Jeff	GTE
	Jayich Matt	GTE
	Anderson Douglas	GTE
	Jay D Landscape Inc	GTE
1986	Anderson Douglas	Pacific Bell
	Jay D Landscape Inc	Pacific Bell
1985	Anderson Douglas	Pacific Telephone Co
	Jay D Landscape Inc	Pacific Telephone Co
1980	Anderson Douglas	Polk
	Jay D Landscape Inc	Polk
1976	Anderson Douglas W	R. L. Polk & Co.
1975	Anderson Douglas	General Telephone Company of California
1970	Anderson Douglas	General Telephone Company of California

2150 CURRAN ST

Year	***Uses***	***Source***
2002	KREHBIETam	Haines & Company, Inc.
1993	Kreher Scott @Newbury Park	GTE
	Krehbiel Tom	GTE
	Krehbiel Tom	GTE
1986	Krehbiel Tom	Pacific Bell
1985	Krehbiel Tom	Pacific Telephone Co
1976	Soto Dani	R. L. Polk & Co.
1970	Cleaveland Lee G	General Telephone Company of California

FINDINGS

2151 CURRAN ST

Year	Uses	Source
2002	EVAn 6 SSJ	Haines & Company, Inc.
1996	Evans Shey	Pacific Bell
1993	Evans David W	GTE
	Evans David W	GTE
1986	Evans David W	Pacific Bell
1985	Evans David W	Pacific Telephone Co
1980	Evans David W	Polk
1976	Evans David W	R. L. Polk & Co.
1975	Evans David W	General Telephone Company of California

2154 CURRAN ST

Year	Uses	Source
1986	Skupien Thaddeus	Pacific Bell
1985	Skupien Thaddeus	Pacific Telephone Co
1980	Skupien Thaddeus	Polk
1976	Skupien Thaddeus J	R. L. Polk & Co.
1970	Skupien Thaddeus	General Telephone Company of California

2160 CURRAN ST

Year	Uses	Source
2002	MART 14 EZStacy	Haines & Company, Inc.
	MARTtl NEZEnc	Haines & Company, Inc.
	ALCANTARA 2aaan 4len	Haines & Company, Inc.

2161 CURRAN ST

Year	Uses	Source
2002	LEADBETTERP	Haines & Company, Inc.
1976	Arnold Robt M	R. L. Polk & Co.
1975	Arnold Robt W CPA	General Telephone Company of California
	Arnold Robt M	General Telephone Company of California
1970	Arnold Robt MI	General Telephone Company of California

2164 CURRAN ST

Year	Uses	Source
2002	SKUPEI NTbadeiaa	Haines & Company, Inc.

2165 CURRAN ST

Year	Uses	Source
1993	Alcantar C @Oxnard	GTE

Year	Uses	Source
1993	Alcantar Alex & Phillida	GTE
	Alcantar Alex & Phillida	GTE
1986	Eckert Allen	Pacific Bell
	Eckert D	Pacific Bell
1985	Eckert Allen	Pacific Telephone Co
1980	Spivey Chester	Polk
1976	Spivey Chester	R. L. Polk & Co.
1975	Spivey Chester	General Telephone Company of California
1970	Katona Michael G	General Telephone Company of California

E PLEASANT VA ILY RD

2177 E PLEASANT VA ILY RD

Year	Uses	Source
1964	Sunny Acres	Pacific Telephone Co

E PLEASANT VALLEY RD

2176 E PLEASANT VALLEY RD

Year	Uses	Source
2002	OKESSONPnscilla	Haines & Company, Inc.
	HENDRi CKSONToni	Haines & Company, Inc.
1986	Laroche M & D	Pacific Bell
1980	WARE J B GENL ENGINEERING CONTRACTOR	Polk
	Ware J B	Polk
1975	i Ware K	General Telephone Company of California
	Ware K	Pacific Telephone Co
	WARE I B GENL ENGINEERING CONTRACTOR	Pacific Telephone Co
1970	Ware J B	General Telephone Company of California
	Ware K	General Telephone Company of California

2177 E PLEASANT VALLEY RD

Year	Uses	Source
2013	SUNNY ACRES MOBILE HOME PARK	Cole Information Services
2002	HOME PARK	Haines & Company, Inc.
	SUNNYACRESMOBILE	Haines & Company, Inc.
1993	Sunny Acres Mobile Home Park	GTE
	Sunny Acres Mobile Home Park	GTE

FINDINGS

Year	Uses	Source
1986	S UN NZ ACRE S MOBILE HOME PARK	Pacific Bell
1985	SUNNY ACRES MOBILE HOME PARK	Pacific Telephone Co
1980	SUNNY ACRES MOBILE HOME PARK	Polk
1976	Sunny Acres Mobile Home Park	R. L. Polk & Co.
1975	Egle Bryan S	General Telephone Company of California
	S UN NZ ACRE S MOBILE HOME PARK	General Telephone Company of California
	SUNNY ACRES MOBILE HOME PARK	Pacific Telephone Co
	Egle Bryan S	Pacific Telephone Co
1970	S UN NZ ACRE S	General Telephone Company of California
1965	SUNNY ACRES MOBIL HOME PARK	R. L. Polk & Co.
1964	Egle Bryan S	Pacific Telephone Co

2255 E PLEASANT VALLEY RD

Year	Uses	Source
2002	TROPHIESETC	Haines & Company, Inc.
	EXHIBITS	Haines & Company, Inc.
	THE FIVE STAR	Haines & Company, Inc.
	XX 0 X	Haines & Company, Inc.
1993	Simba Cal Inc	GTE
	Scott E	GTE
	Scott Drake Mustang Parts	GTE
	AFM Machining	GTE
	Astrosports International	GTE
	Dashnaw Geo	GTE
	I Dasia Corp	GTE
	Drake Scott Mustang Parts	GTE
	Fila Golf & Tennis	GTE
	Genesis Promotions Inc	GTE
	Laser Printer Service & Leasing Inc	GTE
	Mustang Parts Scott Drake	GTE
	PACIFIC GLAS S AN D MIRROR	GTE
	Scott Drake Mustang Parts	GTE
	Simba Cal Inc	GTE
	AFM Machining	GTE
	Astrosports International	GTE
	I Dasia Corp	GTE
	Dasilva Daniel	GTE
	Da Silva Milly & Placide @Thousand Oaks	GTE
	Drake Scott Mustang Parts	GTE

FINDINGS

Year	Uses	Source
1993	Drake Sonya @Thousand Oaks	GTE
	Fila Golf & Tennis	GTE
	Genesis Promotions Inc	GTE
	Laser Printer Service & Leasing Inc	GTE
	Mustang Parts Scott Drake	GTE
	PACIFIC GLAS S AN D MIRROR	GTE
1986	Stone Allan W	Pacific Bell
	AME RICAN S PORTS E QUIP IN C	Pacific Bell
	Atrigon Sports Inc	Pacific Bell
	PACIFIC GLAS S AN D MIRROR	Pacific Bell
	Simba Cal Inc	Pacific Bell
	Stone Age Products	Pacific Bell
	Stone Andrea	Pacific Bell
	World Mail Corp	Pacific Bell
1985	American Sports Equip Inc	Pacific Telephone Co
	Atrigon Sports Inc	Pacific Telephone Co
	Nichols Chris Foods	Pacific Telephone Co
	PACIFIC GLASS AND MIRRORK	Pacific Telephone Co
	Simba Cal Inc	Pacific Telephone Co
	World Mail Corp	Pacific Telephone Co

ETTING RD

2161 ETTING RD

Year	Uses	Source
2002	XXXX	Haines & Company, Inc.
1986	Sanchez Antonio	Pacific Bell
1985	Sanchez Antonio	Pacific Telephone Co
1980	Sanchez Antonio	Polk
1975	Sanchez Antonio	Pacific Telephone Co

2265 ETTING RD

Year	Uses	Source
1996	HAUMANN R G	Pacific Bell

2362 ETTING RD

Year	Uses	Source
1996	BOYS & GIRLS CLUB OF	Pacific Bell
	OCEAN VIEW S D OXNARD	Pacific Bell
	OCEAN VIEW S D OXNARD	Pacific Bell

FINDINGS

Year	Uses	Source
1996	OCEAN VIEW S D OXNARD	Pacific Bell
	OCEAN VIEW S D O	Pacific Bell
	OCEAN VIEW S D OXNARD	Pacific Bell

2382 ETTING RD

Year	Uses	Source
2002	OCEAN VWSCDIST	Haines & Company, Inc.
	OCEAN VWS	Haines & Company, Inc.
	ADMSV OCEAN VWS	Haines & Company, Inc.
	AUDIO VIDEO OCEAN VWS	Haines & Company, Inc.
	UGUNAELM	Haines & Company, Inc.
	OCEAN VWSCDIST	Haines & Company, Inc.
	MAR VISTA ELA	Haines & Company, Inc.
	OCEAN VWSCDIST	Haines & Company, Inc.
	MNTC OPER	Haines & Company, Inc.
	OCEAN VWSCDIST	Haines & Company, Inc.
	TRNSPTN	Haines & Company, Inc.
1993	Mar Vista Elementary School	GTE
	District Cafeteria Service	GTE
	Mar Vista Elementary School	GTE
	Mar Vista Cafeteria	GTE
	Ocean View Junior High School	GTE
	Mar Vista Elementary School	GTE
	OC E AVIW S CHOOL DIS TRICT	GTE
	OC E AVIW S CHOOL DIS TRICT	GTE
	District Cafeteria Service	GTE
	OC E AVIW S CHOOL DIS TRICT	GTE
	Mar Vista Elementary School	GTE
1986	Ocean View Junior High School	Pacific Bell
	Mar Vista Cafeteria	Pacific Bell
	Mar Vista Elementary School	Pacific Bell
	District Cafeteria Service	Pacific Bell
	Mar Vista Elementary School	Pacific Bell
1985	Mar Vista Elementary School	Pacific Telephone Co
	District Cafeteria Service	Pacific Telephone Co
	OCEAN VIEW SCHOOL DISTRICT	Pacific Telephone Co
	Mar Vista Elementary School	Pacific Telephone Co
1980	Mar Vista Elementary School	Polk
	OCEAN VIEW SCHOOL DISTRICT	Polk

FINDINGS

Year	Uses	Source
1980	OCEAN VIEW SCHOOL DISTRICT	Polk
	District Cafeteria Service	Polk
	OCEAN VIEW SCHOOL DISTRICT	Polk
	Mar Vista Elmentary School	Polk
1976	Mar Vista Elementary School	R. L. Polk & Co.
1975	Mar Vista Elementary School	Pacific Telephone Co
	OCEAN VIEW SCHOOL DISTRICT	Pacific Telephone Co
	OCEAN VIEW SCHOOL DISTRICT	Pacific Telephone Co
	District Cafeteria Service	Pacific Telephone Co
	OCEAN VIEW SCHOOL DISTRICT	Pacific Telephone Co
	Mar Vista Elementary School	Pacific Telephone Co
	Mar Vista Elementary School	General Telephone Company of California
	District Cafeteria Service	General Telephone Company of California
	Mar Vista Elementary School	General Telephone Company of California
	Mar Vista Cafeteria	General Telephone Company of California
1970	Ocean View School Dist	General Telephone Company of California
1964	Ocean View School	Pacific Telephone Co
	OCEAN VIEW SCHOOL DIST Dist Ofc	Pacific Telephone Co

2438 ETTING RD

Year	Uses	Source
2002	XXXX	Haines & Company, Inc.
1996	6 Juarez Juan A	Pacific Bell
1993	Cal Sun Manufacturing @Somis	GTE
	Dufau Rd Oxnrd	GTE
	Cal Sun Farms	GTE
	Cal Sun Farms	GTE
1986	Dufau Rd Oxnrd	Pacific Bell
	Cal Sun Farms	Pacific Bell
1985	Cal Sun Farms	Pacific Telephone Co
1980	Cal Sun Farms	Polk
1975	Flores Rito	General Telephone Company of California
	Flores Rito	Pacific Telephone Co
1964	Jones Doyle	Pacific Telephone Co

FINDINGS

LANGLEY ST

2170 LANGLEY ST

Year	Uses	Source
1976	Gunderson Robt W	R. L. Polk & Co.

2180 LANGLEY ST

Year	Uses	Source
2002	0 GUZMANJe 88e MED 18 NAAbareo Rom 4ro	Haines & Company, Inc.

MOCKINGBIRD LN

4104 MOCKINGBIRD LN

Year	Uses	Source
1976	Smith Marion G	R. L. Polk & Co.
1975	Smith Gray	General Telephone Company of California
	Smith Gray	Pacific Telephone Co
1970	Smith Gray	General Telephone Company of California

OLDS RD

4200 OLDS RD

Year	Uses	Source
2013	OCEAN VIEW SCHOOL DISTRICT	Cole Information Services
2008	OCEAN VIEW ELEMENTARY SCHOOL DISTRIC	Cole Information Services

4201 OLDS RD

Year	Uses	Source
2002	RABOSKYGesrge	Haines & Company, Inc.
1993	Rabosky Geo Andrew	GTE
	Rabosky Geo Andrew	GTE
	Rabosky Geo Andrew	GTE
	Rabosky Geo Andrew	GTE
1976	Rabosky Geo	R. L. Polk & Co.

4211 OLDS RD

Year	Uses	Source
2002	0 PALOMARESArel	Haines & Company, Inc.
1996	Borchardt Jas	Pacific Bell
1993	Borchardt Jas	GTE

Year	Uses	Source
1993	Borchardt Jas	GTE
1986	Borchardt Jas	Pacific Bell
1985	Borchardt Jas	Pacific Telephone Co
1980	Borchardt Jas	Polk
1976	Borchard James	R. L. Polk & Co.
1975	Borchardt Jas	General Telephone Company of California
	Borchardt Jas	Pacific Telephone Co

4221 OLDS RD

Year	Uses	Source
2002	WELLS Everen W	Haines & Company, Inc.
1996	Wells Everett W	Pacific Bell
1993	Wels Everett W	GTE
	Wels Everett W	GTE
	Wels Fargo Alarm Services	GTE
	W E LLS FARGO BANK	GTE
1986	Wells Everett W	Pacific Bell
	Wells Fargo Alarm Services A Division Of Baker Protective Services Inc	Pacific Bell
	Wells Fargo Bank N A Credit Card Customer Services	Pacific Bell
	No Charge To Calling Party	Pacific Bell
1985	Wells Everett W	Pacific Telephone Co
1980	Osborne Thos B Jr	Polk
1976	Trask Geo E	R. L. Polk & Co.
1975	Trask Geo E	Pacific Telephone Co
	Trask Geo E	General Telephone Company of California
1970	Trask Geo E	General Telephone Company of California

4231 OLDS RD

Year	Uses	Source
2002	ROSE Horace	Haines & Company, Inc.
1996	Ross Horace	Pacific Bell
1993	Rose Horace	GTE
	Rose Horace	GTE
1986	Rose Horace	Pacific Bell
1985	Rose Horace	Pacific Telephone Co
1980	Rose Horace	Polk
1976	Crosby Richd	R. L. Polk & Co.
1975	i Crosby Richard	General Telephone Company of California

FINDINGS

Year	Uses	Source
1975	Crosby Richard	Pacific Telephone Co
1970	Ziegler H A	General Telephone Company of California

4300 OLDS RD

Year	Uses	Source
2013	OCEAN VIEW SCHOOL DISTRICT	Cole Information Services
2008	OCEAN VIEW ELEMNTR SCHOOL DST	Cole Information Services
2003	OCEAN VIEW PONY BSBL LEAGUE	Cole Information Services
	OCEAN VIEW JUNIOR HIGH SCHOOL	Cole Information Services

4301 OLDS RD

Year	Uses	Source
2002	SOUTHWARD Danael	Haines & Company, Inc.
1986	Milan Steve & June	Pacific Bell
	Milan! E A	Pacific Bell
	Milan R @Oxnard	Pacific Bell
	Milan Fred M	Pacific Bell
1985	Milan Fred M	Pacific Telephone Co
1976	Milan Fred M	R. L. Polk & Co.
1975	Harper TIliman J	Pacific Telephone Co
1970	Harper Tillman J	General Telephone Company of California

4311 OLDS RD

Year	Uses	Source
2002	0 DETWILER	Haines & Company, Inc.
	DEOTTWILER Gerald	Haines & Company, Inc.
1996	Dttwtler Gerald	Pacific Bell
1993	Dettwiler Gerald & D	GTE
	Dettwiler Gerald & D	GTE
1986	Hudson Donna @Thousand Oaks	Pacific Bell
	Hudson Sharon	Pacific Bell
	Hudson Donald R	Pacific Bell
1985	Hudson Sharon	Pacific Telephone Co
	Hudson Donald R	Pacific Telephone Co
1976	Banner Ray S	R. L. Polk & Co.
1975	Jackson Curtis H	General Telephone Company of California
1970	Jackson Curtis H	General Telephone Company of California

FINDINGS

4321 OLDS RD

Year	Uses	Source
2002	FOX Eric	Haines & Company, Inc.
1976	Fox Gary L	R. L. Polk & Co.

4331 OLDS RD

Year	Uses	Source
2002	0 TYNERJUJdy	Haines & Company, Inc.
1976	Tyner	R. L. Polk & Co.

4341 OLDS RD

Year	Uses	Source
2002	MEAOE George	Haines & Company, Inc.
1986	Herrera L M	Pacific Bell
1985	Herrera L M	Pacific Telephone Co
1980	Herrera L M	Polk
1976	Herrera William M	R. L. Polk & Co.
1975	Herrera L M	General Telephone Company of California
	Herrera L M	Pacific Telephone Co

4400 OLDS RD

Year	Uses	Source
2013	CLINICAS DEL CAMINO REAL	Cole Information Services

4401 OLDS RD

Year	Uses	Source
2002	MORALES Israe	Haines & Company, Inc.
1996	Holes Hilda	Pacific Bell
1986	Graves Ver I & Shelly	Pacific Bell
1976	Coupe Michael	R. L. Polk & Co.
1970	Griess Howard R	General Telephone Company of California

4411 OLDS RD

Year	Uses	Source
2002	XXXX	Haines & Company, Inc.
1996	w Infante Ofesa	Pacific Bell
1980	Morrison Kenneth L	Polk
1970	Morrison Kenneth	General Telephone Company of California

FINDINGS

4421 OLDS RD

Year	Uses	Source
2002	M 4 CH 1 UD 0 Manon	Haines & Company, Inc.
1976	No Return	R. L. Polk & Co.

4431 OLDS RD

Year	Uses	Source
2002	M 01 NTGOMERY Donald	Haines & Company, Inc.
1996	Montgomery Donald W	Pacific Bell
1993	Montgomery Donald W	GTE
	Montgomery Donald W	GTE
1986	Montgomery Donald W	Pacific Bell
1985	Montgomery Donald W	Pacific Telephone Co
1980	Montgomery Donald W	Polk
1976	Montgomery Donald	R. L. Polk & Co.
1975	Montgomery Donald W	Pacific Telephone Co
	Montgomery Donald W	General Telephone Company of California
1970	Fain Lawrence P	General Telephone Company of California

PLEASANT VALLEY RD E

2176 PLEASANT VALLEY RD E

Year	Uses	Source
1996	Okeason Priscllla	GTE Directories Corporation

2177 PLEASANT VALLEY RD E

Year	Uses	Source
1996	SUNh Y ACRES	Pacific Bell

2255 PLEASANT VALLEY RD E

Year	Uses	Source
1996	M SCOTT DRAKE MUSTANG I PARTS	GTE Directories Corporation
	DASIA CORP	GTE Directories Corporation
	Building	GTE Directories Corporation
	M TNT FISHING PRODUCTS	GTE Directories Corporation

REEDER AVE

4220 REEDER AVE

Year	Uses	Source
2002	CRESS Martin L	Haines & Company, Inc.

FINDINGS

Year	Uses	Source
1993	Cress Martin L	GTE
	Cress Martin L	GTE
	Cresse N @Santa Paula	GTE
1986	Cress Martin L	Pacific Bell
1985	Cress Martin L	Pacific Telephone Co
1980	Cress Martin L	Polk
1976	Cress Martin L	R. L. Polk & Co.
1975	Cress Martin L	Pacific Telephone Co
	Cress Martin L	General Telephone Company of California
1970	Cress Martin L	General Telephone Company of California

4230 REEDER AVE

Year	Uses	Source
2002	WILUAMSCharles	Haines & Company, Inc.
1976	Williams Charles	R. L. Polk & Co.
1975	Pappas Jas M	Pacific Telephone Co
	Pappas Jas M	General Telephone Company of California

4300 REEDER AVE

Year	Uses	Source
2002	NEILSON Ncholas	Haines & Company, Inc.
1986	Starkey Wm H	Pacific Bell
1985	Starkey Wm H	Pacific Telephone Co
1980	Misiura Eugene M	Polk
1976	Misiura Eug M	R. L. Polk & Co.
1975	Mislura Eugene M	General Telephone Company of California
	Miskel Leonard A CPA	General Telephone Company of California
	Misiura Eugene M	Pacific Telephone Co
1970	Miskel Leonard A CPA	General Telephone Company of California
	Mislura Eugene M	General Telephone Company of California

4301 REEDER AVE

Year	Uses	Source
1976	Peel Arth G	R. L. Polk & Co.

4310 REEDER AVE

Year	Uses	Source
2002	St SKOFrank	Haines & Company, Inc.
1996	Sisko F J	Pacific Bell
1976	Vacant	R. L. Polk & Co.

FINDINGS

Year	Uses	Source
1975	Ackley R M	Pacific Telephone Co
	Ackley R M	General Telephone Company of California
1970	Wells Jack E	General Telephone Company of California

4311 REEDER AVE

Year	Uses	Source
2002	ELDRIDGEClarence	Haines & Company, Inc.
1993	Casebeer Saml T	GTE
	Casebeer Saml T	GTE
1986	Casebeer Sami T	Pacific Bell
1985	Casebeer Sam I T	Pacific Telephone Co
1980	Casebeer Saml T	Polk
1976	Casebeer Samuel T	R. L. Polk & Co.
1975	Casebeer Sam I T	Pacific Telephone Co
1970	Casebeel Sam I T	General Telephone Company of California

4320 REEDER AVE

Year	Uses	Source
2002	ALBERTCraig	Haines & Company, Inc.
1986	Gonzalez Jesus	Pacific Bell
1985	Gonzalez Jesus	Pacific Telephone Co
1976	Woodward Tsin Mrs	R. L. Polk & Co.
1975	Robles Alex	Pacific Telephone Co
	Robles Alex	General Telephone Company of California

4321 REEDER AVE

Year	Uses	Source
2002	MARTINCD	Haines & Company, Inc.
1996	Martin CD	Pacific Bell
1993	Martin C D	GTE
	Martin C D	GTE
1986	Martin C D	Pacific Bell
1985	Martin C D	Pacific Telephone Co
1976	Martin Claude D	R. L. Polk & Co.
1975	Martin C D	General Telephone Company of California
	Martin C D	Pacific Telephone Co
1970	Pinebird C	General Telephone Company of California

FINDINGS

4330 REEDER AVE

Year	Uses	Source
2002	MANTES Raul	Haines & Company, Inc.
1986	Johnson Kenneth R	Pacific Bell
1985	Baumann Peter N	Pacific Telephone Co
1976	Whitmore Geo L	R. L. Polk & Co.
1970	ONeill Jas G	General Telephone Company of California

4331 REEDER AVE

Year	Uses	Source
2002	OVOSE Michael	Haines & Company, Inc.
1976	Ball David J	R. L. Polk & Co.

4340 REEDER AVE

Year	Uses	Source
2008	UNEX GLOBAL	Cole Information Services
2002	REYESLua	Haines & Company, Inc.
1980	Velasquez Jose M	Polk
1976	Me Kelvie Russel G	R. L. Polk & Co.
1975	Mc Kelvie Russell G	Pacific Telephone Co
	Mc Kelvie Russell G	General Telephone Company of California

4341 REEDER AVE

Year	Uses	Source
2003	J & L AIR SYSTEMS	Cole Information Services
2002	SIL 100 James	Haines & Company, Inc.
1996	SIMo Jas	Pacific Bell
1993	Silvio Jas	GTE
	Silvio Jas	GTE
1986	Silvio Jas	Pacific Bell
1985	Silvio Jas	Pacific Telephone Co
1980	Perin Valeria	Polk
1976	Buttler Kenneth H	R. L. Polk & Co.
1975	Chennault Vergit	Pacific Telephone Co
	Chennault Vergil	General Telephone Company of California
1970	Chennault Vergil	General Telephone Company of California

4400 REEDER AVE

Year	Uses	Source
2002	MONTANO Paticia	Haines & Company, Inc.
1985	Healy Earl & Ethel	Pacific Telephone Co

Year	Uses	Source
1980	Healy Earl	Polk
1976	Healy Earl	R. L. Polk & Co.
1975	Healy Earl	General Telephone Company of California
1970	Rensing Dale H	General Telephone Company of California

ROB IN AVE

2138 ROB IN AVE

Year	Uses	Source
1986	Wrennall Jas J	Pacific Bell
	Wride Blake E	Pacific Bell

ROBIN AVE

2128 ROBIN AVE

Year	Uses	Source
1976	Martin Jim	R. L. Polk & Co.
1970	Lewis Wm M	General Telephone Company of California

2130 ROBIN AVE

Year	Uses	Source
1976	Evans Earl V	R. L. Polk & Co.
1975	Evans Earl V	Pacific Telephone Co
	Evans Earl V	General Telephone Company of California
1970	Williams Geo	General Telephone Company of California

2132 ROBIN AVE

Year	Uses	Source
1976	Thomas Harold	R. L. Polk & Co.

2133 ROBIN AVE

Year	Uses	Source
1993	Goettman Jas R	GTE
	Goettman Jas R	GTE
1986	Goettman Jas R	Pacific Bell
	Goetz Dana & Richard TOks	Pacific Bell
1985	Goettman Jas R	Pacific Telephone Co
1980	Goettman Jas R	Polk
1976	Goettman James R	R. L. Polk & Co.
1970	Lowe Chas	General Telephone Company of California

FINDINGS

2134 ROBIN AVE

Year	Uses	Source
1986	Chapman Jacob	Pacific Bell
	Chapman Jan	Pacific Bell
1985	Chapman Jacob	Pacific Telephone Co
1980	Chapman Jacob	Polk
1976	Fairbanks Lillian R Mrs	R. L. Polk & Co.
1975	Fairbanks J C	General Telephone Company of California
1970	Fairbanks J C	General Telephone Company of California

2135 ROBIN AVE

Year	Uses	Source
1986	Zimmerman G E	Pacific Bell
1985	Zimmerman G E	Pacific Telephone Co
1980	Zimmerman G E	Polk
1976	Blevins Charles K	R. L. Polk & Co.

2136 ROBIN AVE

Year	Uses	Source
1986	Smith Henry E & Irene	Pacific Bell
	Smith Henry	Pacific Bell
1985	Smith Henry	Pacific Telephone Co
1980	Smith Henry	Polk
1976	Smith Henry G	R. L. Polk & Co.
1975	Smith Henry	General Telephone Company of California
	Smith Henry	Pacific Telephone Co

2137 ROBIN AVE

Year	Uses	Source
1976	Tampa Grace Mrs	R. L. Polk & Co.
1975	Tamura Tom S MD	General Telephone Company of California
	Tamura Brian H MD II OON Ventura Rd @Oxnard	General Telephone Company of California
	Tampa Grace	General Telephone Company of California
	Tampa Grace	Pacific Telephone Co

2138 ROBIN AVE

Year	Uses	Source
1993	Obon Cair @Thousand Oaks	GTE
	Oson Carl So	GTE
	Oson Carl So	GTE

FINDINGS

Year	Uses	Source
1985	Wrennall Jas J	Pacific Telephone Co
1980	Brottlund Clifford H & Frances	Polk
1976	Brottlund Clifford	R. L. Polk & Co.
1975	Brottlund Clifford	General Telephone Company of California
	Brottlund Clifford	Pacific Telephone Co
1970	Brottlund Clifford	General Telephone Company of California

2139 ROBIN AVE

Year	Uses	Source
1980	Walker Wm J	Polk
1976	Savage Donald	R. L. Polk & Co.
1975	Payne Randall	Pacific Telephone Co
	Payne Randall	General Telephone Company of California

2140 ROBIN AVE

Year	Uses	Source
1986	Cauthen J H	Pacific Bell
1985	Cauthen J H	Pacific Telephone Co
1980	Cauthen J H	Polk
1976	Huguenot Jo M	R. L. Polk & Co.

2141 ROBIN AVE

Year	Uses	Source
1986	Sayward Richard C	Pacific Bell
1985	Sayward Richard C	Pacific Telephone Co
1980	Sayward Richard C	Polk
1976	Sayward Richd C	R. L. Polk & Co.
1975	Sayward Richard C	Pacific Telephone Co
	Sayward Richard C	General Telephone Company of California

2146 ROBIN AVE

Year	Uses	Source
1993	Leeling Roy L	GTE
	Leeling Roy L	GTE
1986	Leeling Roy L	Pacific Bell
1985	Leeling Roy L	Pacific Telephone Co
1976	Brown Pearl Mrs	R. L. Polk & Co.
1970	Brown Pearl IVIrs	General Telephone Company of California
1964	Brown Pearl Mrs	Pacific Telephone Co

FINDINGS

2152 ROBIN AVE

Year	***Uses***	***Source***
1980	Merrill Kimball	Polk
1976	Peverley Hazel Mrs	R. L. Polk & Co.
1975	Peverley Keith E	Pacific Telephone Co
	Peverley Keith E	General Telephone Company of California
1970	Peverley Keith E	General Telephone Company of California

2160 ROBIN AVE

Year	***Uses***	***Source***
1976	De Berry Thelma Mrs	R. L. Polk & Co.
1975	De Berry T	General Telephone Company of California
	De Berry T	Pacific Telephone Co
1970	De Berry T	General Telephone Company of California
1964	Freeman Clyde R Rev	Pacific Telephone Co

2161 ROBIN AVE

Year	***Uses***	***Source***
1976	Matthews Leland C	R. L. Polk & Co.
1975	Matthews Leland C	Pacific Telephone Co
	Matthews Leland C	General Telephone Company of California
1970	Matthews Leland C	General Telephone Company of California

2162 ROBIN AVE

Year	***Uses***	***Source***
1980	Turner Marcia	Polk
1976	Egle Bryan S	R. L. Polk & Co.

2167 ROBIN AVE

Year	***Uses***	***Source***
1976	Ballash Andrew J	R. L. Polk & Co.
1970	Dobson Wayne E	General Telephone Company of California
1964	Rolison Jean Mrs	Pacific Telephone Co

2171 ROBIN AVE

Year	***Uses***	***Source***
1993	Grissom Robt W	GTE
	Grissom Robt W	GTE
1986	Grissom Robt W	Pacific Bell
1985	Grissom Robt W	Pacific Telephone Co
1980	Grissom Robt W	Polk

Year	Uses	Source
1976	Grissom Robt W	R. L. Polk & Co.
1975	Grissom Robt W	General Telephone Company of California
	Grissom Robt W	Pacific Telephone Co
1970	Grissom Robt W	General Telephone Company of California
1964	Grissom Robt W	Pacific Telephone Co

2177 ROBIN AVE

Year	Uses	Source
1993	Moyer Gilbert W	GTE
	Moyer Gilbert W	GTE
1986	Moyer Gilbert W	Pacific Bell
1985	Moyer Gilbert W	Pacific Telephone Co
1980	Moyer Gilbert W	Polk
1976	Moyer Gilbert W	R. L. Polk & Co.
1975	Moyer Gilbert W	Pacific Telephone Co
	Moyer Gilbert W	General Telephone Company of California
1970	Moyer Gilbert W	General Telephone Company of California
1964	Moyer Gilbert W	Pacific Telephone Co

ROBIN LN

2130 ROBIN LN

Year	Uses	Source
2002	XXXX	Haines & Company, Inc.

2132 ROBIN LN

Year	Uses	Source
1970	Noell Kathryn L	General Telephone Company of California

2133 ROBIN LN

Year	Uses	Source
2002	XX 0 X	Haines & Company, Inc.

2134 ROBIN LN

Year	Uses	Source
2002	XXXX	Haines & Company, Inc.

2135 ROBIN LN

Year	Uses	Source
1970	Blevins Chas K	General Telephone Company of California

FINDINGS

2136 ROBIN LN

Year	Uses	Source
2002	SMITH	Haines & Company, Inc.
1970	Burton Donald V	General Telephone Company of California

2137 ROBIN LN

Year	Uses	Source
2002	W 61 TE Sidney	Haines & Company, Inc.
1970	Horn Robt L	General Telephone Company of California

2138 ROBIN LN

Year	Uses	Source
2002	POPEBuddy	Haines & Company, Inc.

2139 ROBIN LN

Year	Uses	Source
2002	XXXX	Haines & Company, Inc.

2140 ROBIN LN

Year	Uses	Source
2002	XXXX	Haines & Company, Inc.
1965	GORMCNT DONA 2 C	R. L. Polk & Co.

2141 ROBIN LN

Year	Uses	Source
2002	X 0 XX	Haines & Company, Inc.
1970	Seay Jas H	General Telephone Company of California

2146 ROBIN LN

Year	Uses	Source
2002	MORKUSJuaus	Haines & Company, Inc.
1965	BROWN PEARL MRS	R. L. Polk & Co.

2152 ROBIN LN

Year	Uses	Source
2002	SUGIYAMAYukiko	Haines & Company, Inc.
1965	REDENIUS DICK	R. L. Polk & Co.
1964	Newton G T	Pacific Telephone Co

2161 ROBIN LN

Year	Uses	Source
1965	MATTHEWS LELAND C	R. L. Polk & Co.

2162 ROBIN LN

Year	Uses	Source
1965	EGLE BRIAN S	R. L. Polk & Co.

2171 ROBIN LN

Year	Uses	Source
1965	GRISSOM ROBT W	R. L. Polk & Co.

2177 ROBIN LN

Year	Uses	Source
2002	RUBIOSabmo	Haines & Company, Inc.
1965	MOYER G W	R. L. Polk & Co.

ROBIN WAY

2136 ROBIN WAY

Year	Uses	Source
1993	Smith Henry	GTE
	Smith Henry	GTE

W PLEASANT VALLEY RD

2255 W PLEASANT VALLEY RD

Year	Uses	Source
1986	Protofab	Pacific Bell
	Gold Coast Limousine Service	Pacific Bell
1985	Protofab	Pacific Telephone Co

FINDINGS

TARGET PROPERTY: ADDRESS NOT IDENTIFIED IN RESEARCH SOURCE

The following Target Property addresses were researched for this report, and the addresses were not identified in the research source.

Address Researched	Address Not Identified in Research Source
2295 Etting Road	2008, 2003, 2000, 1976, 1971, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926

ADJOINING PROPERTY: ADDRESSES NOT IDENTIFIED IN RESEARCH SOURCE

The following Adjoining Property addresses were researched for this report, and the addresses were not identified in research source.

Address Researched	Address Not Identified in Research Source
2110 CURRAN ST	2013, 2008, 2003, 2000, 1996, 1986, 1985, 1980, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2115 CURRAN ST	2013, 2008, 2003, 2000, 1996, 1993, 1980, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2120 CURRAN ST	2013, 2008, 2003, 2002, 2000, 1993, 1975, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2121 CURRAN ST	2013, 2008, 2003, 2000, 1996, 1993, 1986, 1985, 1980, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2122 CURRAN ST	2013, 2008, 2003, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2124 CURRAN ST	2013, 2008, 2003, 2000, 1996, 1993, 1985, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2125 CURRAN ST	2013, 2008, 2003, 2000, 1996, 1993, 1986, 1985, 1980, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2128 ROBIN AVE	2013, 2008, 2003, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1975, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2130 CURRAN ST	2013, 2008, 2003, 2000, 1986, 1985, 1980, 1975, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2130 ROBIN AVE	2013, 2008, 2003, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2130 ROBIN LN	2013, 2008, 2003, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2131 CURRAN ST	2013, 2008, 2003, 2000, 1996, 1993, 1980, 1975, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2132 ROBIN AVE	2013, 2008, 2003, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2132 ROBIN LN	2013, 2008, 2003, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2133 ROBIN AVE	2013, 2008, 2003, 2002, 2000, 1996, 1975, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2133 ROBIN LN	2013, 2008, 2003, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2134 CURRAN ST	2013, 2008, 2003, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1975, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926

FINDINGS

Address Researched	Address Not Identified in Research Source
2134 ROBIN AVE	2013, 2008, 2003, 2002, 2000, 1996, 1993, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2134 ROBIN LN	2013, 2008, 2003, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2135 CURRAN ST	2013, 2008, 2003, 2000, 1996, 1993, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2135 ROBIN AVE	2013, 2008, 2003, 2002, 2000, 1996, 1993, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2135 ROBIN LN	2013, 2008, 2003, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2136 ROBIN AVE	2013, 2008, 2003, 2002, 2000, 1996, 1993, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2136 ROBIN LN	2013, 2008, 2003, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2136 ROBIN WAY	2013, 2008, 2003, 2002, 2000, 1996, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2137 ROBIN AVE	2013, 2008, 2003, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2137 ROBIN LN	2013, 2008, 2003, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2138 ROB IN AVE	2013, 2008, 2003, 2002, 2000, 1996, 1993, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2138 ROBIN AVE	2013, 2008, 2003, 2002, 2000, 1996, 1986, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2138 ROBIN LN	2013, 2008, 2003, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2139 ROBIN AVE	2013, 2008, 2003, 2002, 2000, 1996, 1993, 1986, 1985, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2139 ROBIN LN	2013, 2008, 2003, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2140 CURRAN ST	2013, 2008, 2003, 2002, 2000, 1996, 1993, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2140 ROBIN AVE	2013, 2008, 2003, 2002, 2000, 1996, 1993, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2140 ROBIN LN	2013, 2008, 2003, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2141 ROBIN AVE	2013, 2008, 2003, 2002, 2000, 1996, 1993, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2141 ROBIN LN	2013, 2008, 2003, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2145 CURRAN ST	2013, 2008, 2003, 2000, 1996, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2146 ROBIN AVE	2013, 2008, 2003, 2002, 2000, 1996, 1980, 1975, 1971, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2146 ROBIN LN	2013, 2008, 2003, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2150 CURRAN ST	2013, 2008, 2003, 2000, 1996, 1980, 1975, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926

FINDINGS

Address Researched	Address Not Identified in Research Source
2151 CURRAN ST	2013, 2008, 2003, 2000, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2152 ROBIN AVE	2013, 2008, 2003, 2002, 2000, 1996, 1993, 1986, 1985, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2152 ROBIN LN	2013, 2008, 2003, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2154 CURRAN ST	2013, 2008, 2003, 2002, 2000, 1996, 1993, 1975, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2160 CURRAN ST	2013, 2008, 2003, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2160 ROBIN AVE	2013, 2008, 2003, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1971, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2161 CURRAN ST	2013, 2008, 2003, 2000, 1996, 1993, 1986, 1985, 1980, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2161 ETTING RD	2013, 2008, 2003, 2000, 1996, 1993, 1976, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2161 ROBIN AVE	2013, 2008, 2003, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2161 ROBIN LN	2013, 2008, 2003, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2162 ROBIN AVE	2013, 2008, 2003, 2002, 2000, 1996, 1993, 1986, 1985, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2162 ROBIN LN	2013, 2008, 2003, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2164 CURRAN ST	2013, 2008, 2003, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2165 CURRAN ST	2013, 2008, 2003, 2002, 2000, 1996, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2167 ROBIN AVE	2013, 2008, 2003, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1975, 1971, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2170 LANGLEY ST	2013, 2008, 2003, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2171 ROBIN AVE	2013, 2008, 2003, 2002, 2000, 1996, 1971, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2171 ROBIN LN	2013, 2008, 2003, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2176 E PLEASANT VALLEY RD	2013, 2008, 2003, 2000, 1996, 1993, 1985, 1976, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2176 PLEASANT VALLEY RD E	2013, 2008, 2003, 2002, 2000, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2177 E PLEASANT VA ILY RD	2013, 2008, 2003, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2177 E PLEASANT VALLEY RD	2013, 2008, 2003, 2000, 1996, 1971, 1968, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2177 E PLEASANT VALLEY RD	2008, 2003, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2177 PLEASANT VALLEY RD E	2013, 2008, 2003, 2002, 2000, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926

FINDINGS

Address Researched	Address Not Identified in Research Source
2177 ROBIN AVE	2013, 2008, 2003, 2002, 2000, 1996, 1971, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2177 ROBIN LN	2013, 2008, 2003, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2180 LANGLEY ST	2013, 2008, 2003, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2255 E PLEASANT VALLEY RD	2013, 2008, 2003, 2000, 1996, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2255 PLEASANT VALLEY RD E	2013, 2008, 2003, 2002, 2000, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2255 W PLEASANT VALLEY RD	2013, 2008, 2003, 2002, 2000, 1996, 1993, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2265 ETTING RD	2013, 2008, 2003, 2002, 2000, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2362 ETTING RD	2013, 2008, 2003, 2002, 2000, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2382 ETTING RD	2013, 2008, 2003, 2000, 1996, 1971, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
2438 ETTING RD	2013, 2008, 2003, 2000, 1976, 1971, 1970, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4071 CANARY LN	2013, 2008, 2003, 2000, 1996, 1993, 1986, 1985, 1971, 1968, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4080 BLUEBIRD AVE	2013, 2008, 2003, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4080 BLUEBIRD LN	2013, 2008, 2003, 2000, 1996, 1976, 1971, 1970, 1968, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4081 BLUEBIRD AVE	2013, 2008, 2003, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4081 BLUEBIRD LN	2013, 2008, 2003, 2002, 2000, 1996, 1993, 1985, 1976, 1971, 1968, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4090 BLUEBIRD AVE	2013, 2008, 2003, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4090 BLUEBIRD LN	2013, 2008, 2003, 2002, 2000, 1996, 1993, 1986, 1985, 1976, 1971, 1970, 1968, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4091 BLUEBIRD AVE	2013, 2008, 2003, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4091 BLUEBIRD LN	2013, 2008, 2003, 2002, 2000, 1996, 1993, 1986, 1985, 1976, 1971, 1968, 1965, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4100 BLUEBIRD AVE	2013, 2008, 2003, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4100 BLUEBIRD LN	2013, 2008, 2003, 2000, 1996, 1993, 1980, 1976, 1975, 1971, 1968, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4101 BLUEBIRD AVE	2013, 2008, 2003, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4101 BLUEBIRD CIR	2013, 2008, 2003, 2002, 2000, 1996, 1993, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4101 BLUEBIRD LN	2013, 2008, 2003, 2000, 1996, 1986, 1976, 1971, 1970, 1968, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926

FINDINGS

Address Researched	Address Not Identified in Research Source
4101 BLUEBIRD LN	2013, 2008, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4104 MOCKINGBIRD LN	2013, 2008, 2003, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4200 OLDS RD	2003, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4201 OLDS RD	2013, 2008, 2003, 2000, 1996, 1986, 1985, 1980, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4211 OLDS RD	2013, 2008, 2003, 2000, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4220 REEDER AVE	2013, 2008, 2003, 2000, 1996, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4221 OLDS RD	2013, 2008, 2003, 2000, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4230 REEDER AVE	2013, 2008, 2003, 2000, 1996, 1993, 1986, 1985, 1980, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4231 OLDS RD	2013, 2008, 2003, 2000, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4300 OLDS RD	2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4300 REEDER AVE	2013, 2008, 2003, 2000, 1996, 1993, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4301 OLDS RD	2013, 2008, 2003, 2000, 1996, 1993, 1980, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4301 REEDER AVE	2013, 2008, 2003, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4310 REEDER AVE	2013, 2008, 2003, 2000, 1993, 1986, 1985, 1980, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4311 OLDS RD	2013, 2008, 2003, 2000, 1980, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4311 REEDER AVE	2013, 2008, 2003, 2000, 1996, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4320 REEDER AVE	2013, 2008, 2003, 2000, 1996, 1993, 1980, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4321 OLDS RD	2013, 2008, 2003, 2000, 1996, 1993, 1986, 1985, 1980, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4321 REEDER AVE	2013, 2008, 2003, 2000, 1980, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4330 REEDER AVE	2013, 2008, 2003, 2000, 1996, 1993, 1980, 1975, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4331 OLDS RD	2013, 2008, 2003, 2000, 1996, 1993, 1986, 1985, 1980, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4331 REEDER AVE	2013, 2008, 2003, 2000, 1996, 1993, 1986, 1985, 1980, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4340 REEDER AVE	2013, 2008, 2003, 2000, 1996, 1993, 1986, 1985, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4340 REEDER AVE	2013, 2003, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926

FINDINGS

Address Researched	Address Not Identified in Research Source
4341 OLDS RD	2013, 2008, 2003, 2000, 1996, 1993, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4341 REEDER AVE	2013, 2008, 2003, 2000, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4341 REEDER AVE	2013, 2008, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4400 OLDS RD	2008, 2003, 2002, 2000, 1996, 1993, 1986, 1985, 1980, 1976, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4400 REEDER AVE	2013, 2008, 2003, 2000, 1996, 1993, 1986, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4401 OLDS RD	2013, 2008, 2003, 2000, 1993, 1985, 1980, 1975, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4411 OLDS RD	2013, 2008, 2003, 2000, 1993, 1986, 1985, 1976, 1975, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4421 OLDS RD	2013, 2008, 2003, 2000, 1996, 1993, 1986, 1985, 1980, 1975, 1971, 1970, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926
4431 OLDS RD	2013, 2008, 2003, 2000, 1971, 1968, 1965, 1964, 1961, 1957, 1953, 1949, 1940, 1930, 1926

Phase II Environmental Site Assessment

Daly/Dansk Pleasant Valley Road Apartments and Senior Living/ Memory Care Center Project
Oxnard, California

Prepared for:

City of Oxnard

Prepared by:

Rincon Consultants, Inc.
November 4, 2014

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November 4, 2014
Project 14-00624

Kathleen Mallory, MA, AICP
Principal Planner
Planning & Energy/Entitlement Services
Submitted via email: kmallory@pandes.net

Subject: **Phase II Environmental Site Assessment**
Daly/Dansk Pleasant Valley Road Apartments and Senior Living/ Memory Care Center Project,
Oxnard, California

Dear Ms. Mallory:

This report presents the findings of a Phase II Environmental Site Assessment consisting of two rounds of soil matrix sampling completed by Rincon Consultants, Inc. for the 7.4-acre property located at 2295 Etting Road, Oxnard, California. The purpose of this Phase II ESA was to determine if the historic use of the site for agricultural purposes, the former 250 gallon gasoline underground storage tank (UST), and observed motor oil staining has impacted the soil with elevated levels of pesticides, total petroleum hydrocarbons (TPH), metals, and volatile organic compounds (VOCs).

If you have any questions regarding this report, or if we can be of any future assistance, please contact us.

Sincerely,
RINCON CONSULTANTS, INC.

Jake Hurley
Environmental Scientist

Walt Hamann, PG, CEG, CHG
Vice President, Environmental Services

Table of Contents

Tables

Figures

Appendices

EXECUTIVE SUMMARY

This report presents the findings of a Phase II Environmental Site Assessment (ESA) conducted by Rincon Consultants, Inc. for the 7.4-acre property located at 2295 Etting Road, Oxnard, California (Figure 1, Vicinity Map). The site is currently vacant land and has historically been in use as agricultural land.

Rincon Consultants performed two rounds of soil matrix sampling at the site. The first round of sampling was completed on August 27, 2014. A Geoprobe rig was used to advance 22 borings on the site. Twenty soil borings (RS3 through RS22) were advanced to a depth of 3 feet below grade, and 2 borings (RS1 and RS2) were advanced to 20 feet below grade. Twelve soil borings were advanced from within the former agricultural areas of the site, and eight soil borings were advanced from within or adjacent to the agricultural structures (barn, shed, storage and workshop areas). At each of the agricultural area boring locations, soil samples were collected at 0 to 0.5 feet below grade, and 2.5 to 3 feet below grade. Two soil borings (RS1 and RS2) were advanced adjacent to the former 250 gallon gasoline underground storage tank (UST) to a depth of 20 feet below grade. Soil samples were collected at five foot intervals to total depth. Select soil samples were analyzed for organochlorine pesticides, metals, total petroleum hydrocarbons as gasoline (TPH-g), diesel (TPH-d) and oil (TPH-o), or volatile organic compounds (VOCs). Groundwater samples were collected from both RS1 and RS2 and analyzed for VOCs.

To better delineate the lateral and vertical extent of lead, TPH, and organochlorine pesticides in the near surface alluvium on the site, a second round of sampling was completed on October 9, 2014. Hand auger tools were utilized to advance 31 soil borings (RB1 through RB31). The soil boring locations were divided into four different areas of concern: former barn where elevated concentrations of lead were found, the southern portion of site where elevated concentrations of DDT, DDE and dieldrin were found, the northern property line where TPH was found, and the overall project area where chlordane was found. Soil samples were collected every six inches from the surface to a total depth of 3 feet below grade. All six soil samples from each boring were analyzed for organochlorine pesticides, total lead, or TPH.

The detected concentrations of pesticides and metals in the soil samples were compared to the following screening levels:

- California Human Health Screening Levels (CHHSLs) established for residential and commercial/industrial sites.
- United States Environmental Protection Agency (USEPA) Regional Screening Levels (RSLs).[1] The detected concentrations of VOCs in the soil samples were also compared to the RSLs.

The results of the TPH analyses were compared to the following screening levels:

[1] The Southern California office of the Department of Toxic Substances Control (DTSC) has directed that RSLs be used for screening level assessments. The RSLs published by the USEPA (May 2014) are the current ones available for this purpose.

- Regional Water Quality Control Board- San Francisco Bay Region (SFBRWQCB) Environmental Screening Levels (ESLs).

The surface samples analyzed from RS3, RS7, RS8, and RS9 contained elevated concentrations of total lead above 50 mg/kg. All 4 samples were then analyzed for soluble lead. Samples RS7 and RS8 contained concentrations of chlordane at 110 mg/kg and 310 mg/kg, which is above the residential CHHSL of 80 mg/kg.

The detected concentrations of arsenic in the soil samples analyzed for arsenic were within the range of background levels in California soils. The detected concentration of antimony collected from surface sample RS8 was below the established CHHSL, and above the RSL. All other detected levels of metals were below the established CHHSL and RSL for residential and industrial/commercial settings.

A total of 4 pesticides (DDE, DDT, chlordane, and dieldrin) were detected above the established CHHSLs and RSLs for residential settings in the surface sample RS14. Dieldrin was also detected above the CHHSL in the surface sample RS7. As shown in Figures 3 and 4, chlordane was detected above the established CHHSL for residential settings in 22 of the soil samples collected at the surface, 3 samples collected at 1 foot below grade (RB2, RB4, and RB29), and 1 sample collected from 2 feet below grade (RB2). All other soil samples analyzed for pesticides, including the bottom samples analyzed from 3 feet below grade, were below the established CHHSLs and RSLs for both residential and commercial/industrial setting.

The surface sample RS3 contained concentrations of TPH-d and TPH-o above the established ESL of 100 mg/kg, at concentrations of 140 mg/kg and 450 mg/kg respectively. The concentrations of TPH-d and TPH-o were not detected in the deeper sample analyzed from boring RS3 at 3 feet below grade. All other detected levels of TPH were below the established ESL.

No VOCs were detected above the established RSLs for soil, and no VOCs were detected above the established MCLs for groundwater.

Based on the soil sampling results, we recommend that the three areas with elevated concentrations of lead in the surface soil samples (RS7, RS8 and RS9), and the area with elevated DDE and DDT in the surface soil sample RS14 be remediated prior to residential development of the site. The remediation should include the excavation of the soil with elevated concentrations of lead. The soluble lead in soil at the surface in the vicinity of soil sample RS9 was above the STLC of 5 mg/L, and is considered Non RCRA hazardous waste, and will require disposal at a Class II California hazardous waste accepting facility. The soil in the vicinity of sample RS14 contained elevated concentrations of DDE and DDT above the established total threshold limit concentration (TTLC), and is also considered Non RCRA hazardous waste. Confirmation soil samples should be collected following the excavation of the soil within these four areas to confirm that all elevated concentrations of lead, DDE, and DDT have been removed from the surface.

For mitigation of chlordane impacted soil on site, we propose the following:

- Contact the Ventura County Environmental Health Department (VCEHD) or the Department of Toxic Substances Control (DTSC) to determine if they, or another agency, will provide oversight for the project. Corrective measures and/or engineering controls deemed necessary by the VCEHD, the DTSC, or other oversight agency may be implemented.

INTRODUCTION

A Phase II Environmental Site Assessment (ESA) was conducted by Rincon Consultants, Inc. for the 7.4-acre property located at 2295 Etting Road, Oxnard, California (Figure 1, Vicinity Map). The assessment included two rounds of sampling. It is our understanding that Dansk is proposing to develop the site with approximately 121 multi-family dwellings, and a 60-80 unit senior care facility.

PROJECT HISTORY

Rincon Consultants recently completed a Phase I ESA for the subject property. Several recognized environmental conditions (RECs) were identified in the Phase I ESA. The RECs identified include: (1) the use of the property for agricultural purposes (pesticide application, farm equipment and fuel storage), (2) the former 250 gallon gasoline underground storage tank (UST), and (3) motor oil staining in the vicinity of the drums located in the storage shed on the northern portions of the property. To determine if these RECs have impacted the property, the following measures were recommended:

- Shallow soil samples be collected in the orchards and barn/storage/workshop areas and analyzed for pesticides and arsenic. Equipment services areas should also be sampled for petroleum hydrocarbons and metals.
- A subsurface assessment be completed to determine if the 250-gallon gasoline UST was removed and if contamination if present.
- Shallow samples be collected and sampled in the storage shed on the northern portion of the property and analyzed for petroleum hydrocarbons (TPH).

PURPOSE AND SCOPE

The purpose of this Phase II ESA was to determine if the historic use of the site as agricultural land has impacted the soil with elevated levels of pesticides and arsenic, if the former UST has impacted the soil with TPH, volatile organic compounds (VOCs) and metals, and if the observed motor oil staining have impacted the soil with TPH. The concentrations of pesticides, metals, TPH, and VOCs were compared to screening levels to determine potential human health risk.

Our scope of work included the following:

- **Site Health and Safety Plan**. Prepare a Site Health and Safety Plan for the Phase II ESA sampling personnel.
- **Utility Notification**. Premark boring locations and contact Underground Service Alert (USA) to mark areas where underground public utilities might be located in the drilling area.
- **Soil Borings-Initial assessment.** Collect surface and 3 foot deep soil samples at 20 locations on the site. Collect soil samples to 20 feet below grade at two locations adjacent to the former gasoline UST.
- **Soil Borings- Additional assessment**. Based on the results of the initial phase II ESA assessment, collect samples every six inches starting at the surface to 3 feet below grade at 31 locations on the site.
- **Laboratory Analyses.** Analyze select soil samples for organochlorine pesticides, total petroleum hydrocarbons as gasoline (TPH-g), diesel (TPH-d) and oil (TPH-o), VOCs, and metals. Analyze two groundwater samples collected for VOCs.
- **Reporting**. Prepare this report documenting our findings.

GEOLOGIC AND HYDROGEOLOGIC SETTING

Topography

The current USGS topographic map (Oxnard Quadrangle, 1967) indicates that the subject property is situated at an elevation of about 32 feet above mean sea level with topography sloping slightly to the south.

Site Geology

According to the USGS geologic map (California: Los Angeles Sheet, 1969) the subject property is underlain by alluvium, which is described by the USGS as “clay, silt, sand, gravel, or similar unconsolidated detrital material, deposited during comparatively recent geologic time by a stream or other body of running water, as a sorted or semi-sorted sediment.”

Regional Groundwater Occurrence and Quality

According to the *Case Closure Summary, Ocean View School District, 2382 Etting Road, Oxnard, California* prepared by the Ventura County Environmental Health and dated March 6, 2003, groundwater is encountered between 6 and 9 feet below grade and flows towards the southeast/southwest. This property is located adjacent to the southeast of the subject property.

During the initial Phase II ESA, groundwater was encountered at approximately 10 feet below grade in soil borings RS1 and RS2.

METHODOLOGY

SOIL SAMPLING

A Geoprobe rig was used on August 27, 2014, to advance 22 borings on the site, as depicted on Figure 2, Site Map. Twenty soil borings (RS3 through RS22) were advanced to a depth of 3 feet below grade, and 2 borings (RS1 and RS2) were advanced to 20 feet below grade. The soil borings were advanced by Choice Drilling of Pacoima, California. Soil samples were obtained from the borings advanced by hydraulically driving a two-inch-diameter rod equipped with a soil sampling tool as follows:

- A continuous soil sample was collected from each probe to the proposed sampling depth. The soil sampler was lined with a one-inch-diameter acetate tube. By advancing this sampler into the soil, soil is forced into the opening of the sampling tube and a sample is obtained. Once the sampler is filled, it is retrieved and the acetate liner is removed. The designated sampling section (6-inch length) is cut and retained for laboratory analysis. The samples are sealed with Teflon, capped, labeled, and stored in a cooler with ice pending delivery to the analytical laboratory. Soil within the rest of the acetate liner sections is used for soil classification and to screen for volatile organics using a photoionization detector (PID).

Twelve soil borings were advanced from within the former agricultural areas of the site, and eight soil borings were advanced from within or adjacent of the agricultural structures (barn, shed, storage and workshop areas). At each of the agricultural area boring locations, soil samples were collected at 0 to 0.5 feet below grade, and 2.5 to 3 feet below grade. Two soil borings (RS1 and RS2) were advanced adjacent to the former 250 gallon gasoline UST to a depth of 20 feet below grade. Soil samples were collected at five foot intervals to total depth.

Groundwater was encountered at approximately 10 feet below grade in soil borings RS1 and RS2. Groundwater samples were collected from both RS1 and RS2. Groundwater samples were collected by advancing a probe equipped with a groundwater sampling device at the end of the rod to the target sampling depth (approximately 3 feet below where groundwater is first encountered). The probe is retracted about 4 feet to allow a screened retractable tip to be exposed to the aquifer. A one-quarter-inch diameter polyethylene tube is then inserted into the rod and a groundwater sample is extracted. Samples are collected in containers provided by the analytical laboratory. The samples are labeled, sealed, and stored in a cooler chilled to 4 degrees Celsius pending delivery to the analytical laboratory.

Upon completion of the soil sampling program, all soil borings were backfilled with the soil cuttings and bentonite and capped to match the surface. The sampling equipment was decontaminated between each use by washing with a non-phosphate solution (Alconox detergent) followed by a double potable water rinse.

ADDITIONAL SOIL ASSESSMENT

On October 9, 2014, hand auger tools were used to advance 31 soil borings (RB1 through RB31) throughout the site at the locations depicted on Figure 2. The borings were advanced to a total depth of 3 feet below grade and discrete soil samples were collected at the following depths:

- 0.0-0.5 feet
- 0.5-1.0 feet
- 1.0-1.5 feet
- 1.5-2.0 feet
- 2.0-2.5 feet
- 2.5-3.0 feet

The soil samples were collected in 4-ounce glass jars, labeled, and stored in a cooler with ice. Upon completion of the soil sampling program, all soil borings were backfilled with the soil cuttings. The hand auger was decontaminated between each use by washing with a non-phosphate solution (Alconox detergent) followed by a double potable water rinse.

All soil sampling was performed under the oversight of a California Professional Geologist. Soil boring logs for soil borings RS1 and RS2 are included in Appendix 2.

LABORATORY ANALYSIS

The samples were couriered to the state certified analytical laboratory BC Laboratories of Bakersfield, CA using chain-of-custody protocol. For the initial assessment, select soil samples were analyzed for organochlorine pesticides by EPA Method 8081A, metals by EPA Method 6010B/7471A, TPH by EPA Method 8015, and VOCs by EPA Method 8260B. Groundwater samples were analyzed for VOCs by EPA Method 8260B. For the additional assessment, all six soil samples from each boring were analyzed for organochlorine pesticides by EPA method 8081A, total lead by EPA method 6010B, or for TPH by EPA method 8015M. A copy of the analytical results is included in Appendix 1.

LABORATORY QUALITY ASSURANCE/ QUALITY CONTROL

BC Laboratories performed a Tier II data validation documenting the quality assurance/quality control (QA/QC) measures employed during laboratory analysis of soil samples. The data quality review ensured that data quality objectives were met for each of the following quality control measures:

- Data completeness
- Holding times and preservation
- Laboratory blanks
- Laboratory control standards
- Matrix spike/matrix spike duplicates

Overall, the QA/QC measures met BC Laboratories' data quality objectives as described in the analytical report provided in Appendix A of this report.

HUMAN HEALTH RISK SCREENING CRITERIA

Soil sample results analyzed for pesticides and metals were compared to the California Human Health Screening Levels (CHHSLs) established for residential sites. The CHHSLs are concentrations of hazardous chemicals in soil that the California Environmental Protection Agency (Cal/EPA) considers to be below thresholds of concern for risks to human health. They were developed using conservative standard exposure assumptions and chemical toxicity values. Under most circumstances, the presence of a chemical in soil, soil gas or indoor air at concentrations below the corresponding CHHSLs can be assumed to not pose a significant health risk to people who may live (residential CHHSLs) at the site. CHHSLs are solely an advisory number and have no regulatory effect. Furthermore, the presence of a chemical at concentrations in excess of a CHHSL does not indicate that adverse impacts to human health are occurring or will occur but suggests that further evaluation of potential human health concerns is warranted.

The soil sample results analyzed for pesticides, metals and VOCs were also compared to United States Environmental Protection Agency (USEPA) Regional Screening Levels (RSL) for Chemical Contaminants at Superfund Sites. The RSLs are chemical-specific concentrations for individual contaminants in air, drinking water, and soil that may warrant further investigation or site cleanup. The RSLs are based upon human health risk as determined based on standard exposure assumptions and chemical toxicity values.

Since there are no established CHHSLs or RSLs for TPH, concentrations of TPH in soil samples were compared to the Regional Water Quality Control Board - San Francisco Bay Region (SFBRWQCB) Environmental Screening Levels (ESLs). Similar to the two above screening criteria, ESLs have been established for chemicals commonly found in soil and groundwater at sites where releases of hazardous chemicals have occurred. The ESLs are considered to be conservative. Under most circumstances, the presence of a chemical in soil, soil gas or groundwater at concentrations below the corresponding ESL can be assumed to not pose a significant, long term (chronic) threat to human health and the environment. Additional evaluation is generally necessary at sites where a chemical is present at concentrations above the corresponding ESL.

Groundwater sample results analyzed for VOCs were compared to the Maximum Contaminant Levels (MCLs) established for California drinking water standards to be met by public water systems.

RESULTS

SOIL SAMPLING

Pesticides

Elevated concentrations of DDT and DDE were detected in surface sample RS14 at concentrations of 4.9 milligrams per kilogram (mg/kg) and 5.6 mg/kg, and elevated concentrations of dieldrin were detected in surface samples RS7 and RS14 at concentrations of 0.2 mg/kg and 0.55 mg/kg, respectively. Chlordane was detected above the established CHHSL in 14 surface samples, and ranged from 0.43 mg/kg to 24 mg/kg. A J-flag indicates that the detection is below the practical quantitation limit and above the method detection limit. The elevated concentrations of DDT, DDE, dieldrin, and chlordane were at or above the respective CHHSLs for residential settings. All other detected concentrations of pesticides in the surface soil samples and the deeper (3 feet below grade) soil samples analyzed for pesticides were below their respective CHHSL and RSL for pesticides in soil at residential sites.

Additional Soil Assessment

Soil borings RB1 through RB5 were advanced on the southern portion of the site adjacent to soil boring RS14, which contained the highest concentrations of detected pesticides during the initial assessment. Soil borings RB22 through RB31 were advanced throughout the site to further delineate chlordane on the site. A total of 90 soil samples were collected and analyzed for pesticides during the second round of sampling. As shown in Figures 3 and 4, 8 of the surface soil samples, 3 of the soil samples from 1 foot below grade, and 1 soil sample from 2 feet below grade contained concentrations of chlordane above the established CHHSL, and ranged from 0.49 mg/kg to 2.3 mg/kg. Soil boring RB2 contained elevated concentrations of chlordane at the surface, 1 foot below grade, and 2 feet below grade. All other soil samples analyzed for pesticides, including the bottom samples analyzed from 3 feet below grade, were below the established CHHSLs and RSLs for both residential and commercial/industrial setting. Therefore, the vertical extent of pesticides has been defined.

TPH

Concentrations of TPH-g, TPH-d, and TPH-o were not detected above the laboratory detection limit in any of the soil samples analyzed from RS1 and RS2, adjacent to the former 250 gallon gasoline UST.

Eight soil samples contained concentrations of TPH-d (ranging from 8J mg/kg to 140 mg/kg) and TPH-o (ranging from 8.7J mg/kg to 450 mg/kg) above the laboratory detection limit. The surface sample RS3 contained concentrations of TPH-d and TPH-o above the established ESL of 100 mg/kg, at concentrations of 140 mg/kg and 450 mg/kg respectively. The concentrations of TPH-d and TPH-o were not detected in the deeper sample analyzed from boring RS3 at 3 feet below grade. A J-flag indicates that the detection is below the practical quantitation limit and above the method detection limit. With the exception of the surface sample from RS3, the detected concentrations of TPH-d and TPH-o were below the established ESL of 100 mg/kg.

Concentrations of TPH-g were not detected above the laboratory detection limits in any of the samples analyzed, and were below the established ESLs.

Additional Soil Assessment

Soil borings RB17 through RB21 were advanced on the northern portion of the site where elevated concentrations of TPH-d and TPH-o were detected in soil boring RS3. A total of 30 soil samples were collected and analyzed for TPH-d and TPH-o during the second round of soil sampling. Ten of the samples contained concentrations of TPH-d above the detection limit, and ranged from 8.6J mg/kg to 35 mg/kg. The detected concentrations of TPH-d and TPH-o were below the established ESL. The detected concentrations of TPH-d and TPH-o in the samples analyzed from 3 feet below grade were below the established ESL. Therefore, the vertical extent of TPH has been defined.

VOCs

Two samples collected from boring RS1 and two samples from boring RS2 were analyzed for VOCs. No VOCs were detected above the laboratory detection limit in any of the four samples analyzed. None of the soil samples collected during the second round of sampling were analyzed for VOCs.

Metals

Antimony

An elevated concentration of antimony was detected in the surface sample collected from RS8 (6 mg/kg), which is above the residential RSL (3.1 mg/kg) and range of background concentrations for antimony, but below the residential CHHSL. Background concentrations of antimony found in California soils range from 0.15 mg/kg to 1.95 mg/kg (Kearney, 1996). However, the concentration of antimony in the deeper soil sample analyzed from 3 feet below grade was below the laboratory detection limit.

Thallium

The surface samples analyzed from borings RS10 and RS14 contained concentrations of thallium at 1.3J mg/kg and 1.5J mg/kg, respectively of thallium above the range of background concentrations (ranging from 0.17 mg/kg to 1.1 mg/kg), but were below the established CHHSL for residential and commercial/industrial settings.

Lead

Four of the surface samples collected near the former barn (borings RS3, and RS7, RS8, and RS9) contained concentrations of total lead that exceeded 50 mg/kg (ranging from 55 mg/kg to 310 mg/kg). A soluble analysis for lead was conducted for these four surface samples and compared to the established Soluble Threshold Limit Concentration (STLC) of 5 milligrams per liter (mg/L) for lead. Soil samples analyzed from borings RS3, RS7, and RS8 contained STLC concentrations of lead below 5 mg/L. Soil boring RS9 contained an STLC concentration of 8.3 mg/L of lead, above the 5 mg/L threshold. The surface soil sample from RS9 was then analyzed for lead by the Toxicity Characteristic Leaching Procedure (TCLP). The detected concentration was 0.052 mg/L, below the established TCLP for lead of 5 mg/L.

The deeper 3 foot samples were analyzed from these four locations and concentrations of total lead were below 50 mg/kg. All other detected concentrations of lead were below 50 mg/kg and below the established CHHSL and RSL for residential settings.

<u>Arsenic</u>

As shown in Table 2, varying concentrations of arsenic (ranging from 1.0 mg/kg to 4.6 mg/kg) were detected in the 28 soil samples analyzed. The detected concentrations of arsenic in all of the soil samples exceeded the CHHSLs and RSLs for arsenic in residential soil. However, for arsenic, normal background concentrations found in California soils are typically above CHHSLs and RSLs for both residential and commercial/industrial settings. Background concentrations of arsenic found in California soils range from 0.6 mg/kg to 11 mg/kg. The USEPA states that generally they do not require cleanup if arsenic is within or below natural background levels. The detected concentrations of arsenic in the 28 soil samples analyzed (1.0 mg/kg to 4.6 mg/kg) fall within the range of normal background concentrations of arsenic found in California soils.

All other concentrations of metals detected above the laboratory detection limits were below the background concentrations or screening levels.

Additional Soil Assessment

Soil borings RB6 through RB11 were advanced in the area of the former barn where elevated concentrations of lead were detected in the initial assessment. A total of 66 soil samples were collected and analyzed for lead during the second round of soil sampling. Detected concentrations of lead ranged from 2.1 mg/kg to 32 mg/kg, and were below the established CHHSL and RSL for residential settings.

GROUNDWATER SAMPLING

Grab groundwater samples were obtained from the two borings advanced adjacent to the former 250 gallon gasoline UST (RS1 and RS2). Low levels of toluene and styrene were detected in both groundwater samples analyzed for VOCs, and were below the respective MCLs. No other VOCs were detected above the laboratory detection limits.

CONCLUSIONS

The surface samples analyzed from RS3, RS7, RS8, and RS9 contained elevated concentrations of total lead above 50 mg/kg. Samples RS7 and RS8 contained concentrations of chlordane at 110 mg/kg and 310 mg/kg, which is above the residential CHHSL of 80 mg/kg. All 4 samples were then analyzed for soluble lead.

The detected concentrations of arsenic in the soil samples analyzed for arsenic were within the range of background levels in California soils. The detected concentration of antimony collected from surface sample RS8 was below the established CHHSL, and above the RSL. All other detected levels of metals were below the established CHHSL and RSL for residential and industrial/commercial settings.

A total of 4 pesticides (DDE, DDT, chlordane, and dieldrin) were detected above the established CHHSLs and RSLs for residential settings, and above the established TTLC in the surface sample RS14. Dieldrin was also detected above the CHHSL in the surface sample RS7. As shown in Figures 3 and 4, chlordane was detected above the established CHHSL for residential settings in 22 of the soil samples collected at the surface, 3 samples collected at 1 foot below grade (RB2, RB4, and RB29), and 1 sample collected from 2 feet below grade (RB2). All other soil samples analyzed for pesticides, including the bottom samples analyzed from 3 feet below grade, were below the established CHHSLs and RSLs for both residential and commercial/industrial setting.

The surface sample RS3 contained concentrations of TPH-d and TPH-o above the established ESL of 100 mg/kg, at concentrations of 140 mg/kg and 450 mg/kg respectively. The concentrations of TPH-d and TPH-o were not detected in the deeper sample analyzed from boring RS3 at 3 feet below grade. All other detected levels of TPH were below the established ESL.

No VOCs were detected above the established RSLs for soil, and no VOCs were detected above the established MCLs for groundwater.

RECOMMENDATIONS

Based on the soil sampling results, we recommend that the three areas with elevated concentrations of lead in the surface soil samples (RS7, RS8 and RS9), and the area with elevated DDE and DDT in the surface soil sample RS14 be remediated prior to residential development of the site. The remediation should include the excavation of the soil with elevated concentrations of lead. The soluble lead in soil at the surface in the vicinity of soil sample RS9 was above the STLC of 5 mg/L, and is considered Non RCRA hazardous waste, and will require disposal at a Class II California hazardous waste accepting facility. The soil in the vicinity of sample RS14 contained elevated concentrations of DDE and DDT above the established TTLC, and is also considered Non RCRA hazardous waste. Confirmation soil samples should be collected following the excavation of the soil within these four areas to confirm that all elevated concentrations of lead, DDE, and DDT have been removed from the surface.

For mitigation of chlordane impacted soil on site, we propose the following:

- Contact the Ventura County Environmental Health Department (VCEHD) or the Department of Toxic Substances Control (DTSC) to determine if they, or another agency, will provide oversight for the project. Corrective measures and/or engineering controls deemed necessary by the VCEHD, the DTSC, or other oversight agency may be implemented.

LIMITATIONS

This report has been prepared for and is intended for the exclusive use of the City of Oxnard. The contents of this report should not be relied upon by any other party other than Dansk Investments, LLC without the written consent of Rincon Consultants, Inc.

Our conclusions regarding the site are based on observations of existing site conditions and the results of a limited subsurface sampling program. The results of this evaluation are qualified by the fact that only limited sampling and analytical testing was conducted during this assessment.

This scope was not intended to completely establish the quantities and distribution of contaminants present at the site. The concentrations of contaminants measured at any given location may not be representative of conditions at other locations. Further, conditions may change at any particular location as a function of time in response to natural conditions, chemical reactions and other events. Conclusions regarding the condition of the site do not represent a warranty that all areas within the site are similar to those sampled.

Table 1- Soil Analytical Summary - Organochlorine Pesticides

Daly/Dansk Pleasant Valley Road Apartments and Senior Living/Memory Care Project, Oxnard, California

Sample Designation	Sample Depth (feet)	Sample Date	Organochlorine Pesticides					
			4,4-DDD mg/kg	4,4-DDE mg/kg	4,4-DDT mg/kg	Chlordane mg/kg	Dieldrin mg/kg	Other Pesticides mg/kg
RS3	0.5	8/27/2014	0.017	0.038	0.045	ND<0.42	0.017	ND
RS4	0.5	8/27/2014	0.0072	0.068	0.068	ND<0.38	ND<0.0005	ND
RS5	0.5	8/27/2014	0.026J	0.27	0.12	**0.76**	0.0049	Endrin- 0.016J
RS6	0.5	8/27/2014	ND<0.0005	0.00049J	0.00034J	ND<0.015	ND<0.0005	ND
RS7	0.5	8/27/2014	0.11	0.4	0.49	**3.5**	**0.2**	Endrin- 0.055
	3	8/27/2014	ND<0.0005	ND<0.0005	ND<0.0005	0.034	ND<0.0005	delta-BHC-0.00056
RS8	0.5	8/27/2014	0.052J	0.14	0.35	**0.8J**	0.021	gamma-BHC-0.0058J, heptachlor-0.025
RS9	0.5	8/27/2014	0.13	0.19	0.78	**2.4**	0.0095J	ND
	3	8/27/2014	ND<0.0005	0.00023	ND<0.0005	0.058J	ND<0.0005	delta-BHC-0.00093
RS10	0.5	8/27/2014	0.035J	0.068	0.16	**0.43**	0.0051	ND
RS11	0.5	8/27/2014	0.028J	0.073	0.18	**0.66**	0.0027	ND
RS12	0.5	8/27/2014	0.029J	0.12	0.13	**0.67**	ND>0.0005	alpha-BHC-0.0017
RS13	0.5	8/27/2014	0.066	0.52	0.55	**1.8**	0.0023	ND
	3	8/27/2014	ND<0.0005	0.0026	0.0021	ND<0.05	ND<0.0005	delta-BHC-0.00086
RS14	0.5	8/27/2014	1J	**4.9**	**5.6**	**24**	**0.55**	ND
	3	8/27/2014	ND<0.0005	0.0026	ND<0.0005	ND<0.05	ND<0.0005	delta-BHC-0.00055
RS15	0.5	8/27/2014	0.018J	0.32	0.26	**1.4**	0.027J	ND
RS16	0.5	8/27/2014	0.011J	0.47	0.16	**1.7**	0.004	ND
	3	8/27/2014	ND<0.0005	ND<0.0005	ND<0.0005	ND<0.05	ND<0.0005	ND
RS17	0.5	8/27/2014	0.0058	0.062	0.033	**2.5**	0.0006	ND
RS18	0.5	8/27/2014	0.013J	0.27	0.18	**3.3**	ND<0.0005	ND
	3	8/27/2014	ND<0.0005	ND<0.0005	ND<0.0005	ND<0.05	ND<0.0005	ND
RS19	0.5	8/27/2014	0.0091J	0.083	0.11	0.3	0.0021	ND
RS20	0.5	8/27/2014	0.07	0.36	0.28	**1.8**	0.03J	ND
	3	8/27/2014	ND<0.0005	ND<0.0005	ND<0.0005	ND<0.05	0.00023J	ND
RS21	0.5	8/27/2014	0.0041	0.019	0.019	0.3J	ND<0.0005	ND
RB1	0.5	10/9/2014	ND<0.0016	0.5	0.07	**0.87**	ND<0.0015	ND
	1	10/9/2014	ND<0.0016	ND<0.0016	ND<0.0016	ND<0.047	ND<0.0016	ND
	1.5	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015	ND
	2	10/9/2014	ND<0.0014	0.015	0.0039	ND<0.043	ND<0.0014	ND
	2.5	10/9/2014	ND<0.0016	ND<0.0016	ND<0.0016	ND<0.047	ND<0.0016	ND
	3	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015	ND
RB2	0.5	10/9/2014	ND<0.0015	0.76	0.098	**1.2**	ND<0.0015	ND
	1	10/9/2014	ND<0.0015	0.48	0.23	**1.2**	ND<0.0015	ND
	1.5	10/9/2014	ND<0.0014	ND<0.0014	ND<0.0014	ND<0.043	ND<0.0014	ND
	2	10/9/2014	ND<0.0014	0.14	0.09	**0.52**	ND<0.0014	ND
	2.5	10/9/2014	ND<0.0014	ND<0.0014	ND<0.0014	ND<0.043	ND<0.0014	ND
	3	10/9/2014	ND<0.0014	ND<0.0014	ND<0.0014	ND<0.043	ND<0.0014	ND
RB3	0.5	10/9/2014	0.018	1.5	0.31	**2.3**	ND<0.0015	ND
	1	10/9/2014	ND<0.0015	0.044	0.0017	ND<0.045	ND<0.0015	ND
	1.5	10/9/2014	0.0041J	0.0064	0.0018	ND<0.044	ND<0.0015	ND
	2	10/9/2014	ND<0.0014	0.0011	ND<0.0014	0.074	ND<0.0014	ND
	2.5	10/9/2014	ND<0.0016	0.00038J	ND<0.0016	ND<0.047	ND<0.0015	ND
	3	10/9/2014	ND<0.0015	0.0022	0.00053J	ND<0.046	ND<0.0015	ND
RB4	0.5	10/9/2014	0.0043	0.33	0.052	**0.58**	ND<0.0014	ND
	1	10/9/2014	0.0079	0.23	0.13	**0.67**	ND<0.0015	ND
	1.5	10/9/2014	ND<0.0016	ND<0.0016	0.017	ND<0.047	ND<0.0016	ND
	2	10/9/2014	ND<0.0015	0.001J	0.00049J	ND<0.045	ND<0.0015	ND
	2.5	10/9/2014	ND<0.0014	ND<0.0014	0.0014	ND<0.041	ND<0.0014	ND
	3	10/9/2014	ND<0.0015	ND<0.0015	0.00022J	ND<0.045	ND<0.0015	ND
RB5	0.5	10/9/2014	0.011	0.62	0.29	ND<0.044	ND<0.0015	ND
	1	10/9/2014	ND<0.0015	0.0024	0.00093J	ND<0.046	ND<0.0015	ND
	1.5	10/9/2014	ND<0.0016	0.0012J	0.0005J	ND<0.047	ND<0.0016	ND
	2	10/9/2014	ND<0.0015	0.0015	0.00065J	ND<0.046	ND<0.0015	ND
	2.5	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015	ND
	3	10/9/2014	ND<0.0015	0.00051J	0.00029J	ND<0.045	ND<0.0015	ND
RB22	0.5	10/9/2014	ND<0.0014	0.032	0.021	0.17	ND<0.0014	Toxaphene-0.075J
	1	10/9/2014	ND<0.0015	0.0072	0.0079	0.12J	ND<0.0015	Toxaphene-0.035J
	1.5	10/9/2014	ND<0.0015	0.0012J	0.0012J	ND<0.045	ND<0.0015	ND
	2	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015	ND
	2.5	10/9/2014	ND<0.0014	0.0017	0.0014	ND<0.042	ND<0.0014	ND
	3	10/9/2014	ND<0.0014	ND<0.0014	ND<0.0014	ND<0.042	ND<0.0014	ND
RB23	0.5	10/9/2014	ND<0.0015	0.002	0.001J	ND<0.045	ND<0.0015	ND
	1	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.044	ND<0.0015	ND
	1.5	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015	ND
	2	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015	ND
	2.5	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.044	ND<0.0015	ND
	3	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015	ND

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			4,4-DDD mg/kg	4,4-DDE mg/kg	4,4-DDT mg/kg	Chlordane mg/kg	Dieldrin mg/kg	Other Pesticides mg/kg
RB24	0.5	10/9/2014	ND<0.0014	0.11	0.057	**0.49**	ND<0.0014	Toxaphene-0.3
	1	10/9/2014	ND<0.0015	0.032	0.018	ND<0.045	ND<0.0015	ND
	1.5	10/9/2014	ND<0.0014	0.032	0.019	0.19	ND<0.0014	Toxaphene-0.084J
	2	10/9/2014	ND<0.0015	ND<0.0015	0.00064J	ND<0.045	ND<0.0015	ND
	2.5	10/9/2014	ND<0.0014	0.0022	0.00098J	ND<0.042	ND<0.0014	ND
	3	10/9/2014	ND<0.0015	0.0048	0.0034	ND<0.045	ND<0.0015	ND
RB25	0.5	10/9/2014	ND<0.0014	0.03	0.025	0.22	ND<0.0014	Toxaphene-0.13J
	1	10/9/2014	ND<0.0015	0.0082	0.0055	0.1J	ND<0.0015	Toxaphene-0.029J
	1.5	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.044	ND<0.0015	ND
	2	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.044	ND<0.0015	ND
	2.5	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015	ND
	3	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015	ND
RB26	0.5	10/9/2014	0.063	0.54	0.2	**1.9**	0.021	ND
	1	10/9/2014	0.0022	0.029	0.011	0.13	ND<0.0016	ND
	1.5	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015	ND
	2	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015	ND
	2.5	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.044	ND<0.0015	ND
	3	10/9/2014	ND<0.0015	ND<0.0015	0.00093J	ND<0.045	ND<0.0015	ND
RB27	0.5	10/9/2014	0.00024J	0.0021	0.00066J	ND<0.043	ND<0.0014	ND
	1	10/9/2014	ND<0.0014	ND<0.0014	ND<0.0014	ND<0.043	ND<0.0014	ND
	1.5	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.044	ND<0.0015	ND
	2	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015	ND
	2.5	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.046	ND<0.0015	ND
	3	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.046	ND<0.0015	ND
RB28	0.5	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.046	ND<0.0015	ND
	1	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015	ND
	1.5	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015	ND
	2	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015	ND
	2.5	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015	ND
	3	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.043	ND<0.0015	ND
RB29	0.5	10/9/2014	ND<0.0015	0.31	0.12	**0.67**	ND<0.0015	ND
	1	10/9/2014	ND<0.0015	0.21	0.063	**0.54**	ND<0.0015	ND
	1.5	10/9/2014	ND<0.0015	0.0032	0.0014J	ND<0.045	ND<0.0015	ND
	2	10/9/2014	ND<0.0014	0.0065	0.0041	ND<0.043	ND<0.0014	ND
	2.5	10/9/2014	ND<0.0014	0.0008J	0.0006J	ND<0.043	ND<0.0014	ND
	3	10/9/2014	ND<0.0014	0.0015	0.0008J	ND<0.043	ND<0.0014	ND
RB30	0.5	10/9/2014	ND<0.0016	0.53	0.4	**1.3**	ND<0.0016	ND
	1	10/9/2014	ND<0.0014	0.055	0.019	ND<0.043	ND<0.0014	ND
	1.5	10/9/2014	ND<0.0015	0.0016	0.00076J	ND<0.045	ND<0.0015	ND
	2	10/9/2014	ND<0.0014	ND<0.0014	ND<0.0014	ND<0.043	ND<0.0014	ND
	2.5	10/9/2014	ND<0.0015	0.0015	0.00033J	ND<0.045	ND<0.0015	ND
	3	10/9/2014	ND<0.0014	0.00085J	0.00034J	ND<0.043	ND<0.0014	ND
RB31	0.5	10/9/2014	ND<0.0014	0.17	0.015	ND<0.043	ND<0.0014	ND
	1	10/9/2014	ND<0.0014	0.0032	0.0022	ND<0.043	ND<0.0014	ND
	1.5	10/9/2014	ND<0.0015	0.00057J	ND<0.0015	ND<0.045	ND<0.0015	ND
	2	10/9/2014	ND<0.0014	0.00042J	ND<0.0014	ND<0.043	ND<0.0014	ND
	2.5	10/9/2014	ND<0.0015	0.00038J	0.00036J	ND<0.046	ND<0.0015	ND
	3	10/9/2014	ND<0.0015	0.00035J	ND<0.0015	ND<0.044	ND<0.0015	ND
Residential CHHSL			2.3	1.6	1.6	0.43	0.035	varies
Commercial/ Industrial CHHSL			9.0	6.3	6.3	1.7	0.13	varies
Residential USEPA RSL			2.2	1.6	1.9	1.8	0.033	varies
Commercial/ Industrial USEPA RSL			9.6	6.8	6.8	8.0	0.14	varies

mg/kg = milligrams per kilogram
ND = Not detected above laboratory detection limits
J -Flag indicates detection is below the practical quantitation limit and above the method detection limit.
Background Concentration = Kearney, *Background Concentrations of Trace and Major Elements in California Soils,* University of California, 1996
CHHSL = California Human Health Screening Levels, January 2005
RSLs = USEPA Regional Screening Levels for Chemical Contaminants at Superfund Sites, May 2014
Concentrations in BOLD exceed the residential CHHSL
Soil samples analyzed by BC Laboratories, Inc.
Analysis: organochlorine pesticides by EPA Method 8081A

Table 2 - Soil Analytical Summary- Title 22 Metals
Daly/Dansk Pleasant Valley Road Apartments and Senior Living/Memory Care Project, Oxnard, California

Sample Designation	Depth (Feet)	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
			Results in milligrams per kilogram (mg/kg)																
RS1	10	8/27/2014	ND<0.33	2.0	23	0.11J	0.16J	3.4	1.4J	2.5	1.5J	ND<0.036	0.45J	3.6	1.1	ND<0.067	ND<0.64	7.7	11
RS1	15	8/27/2014	ND<0.33	1.9	30	0.12J	0.12J	4.6	1.8J	5.6	1.5J	ND<0.036	0.48J	4.5	ND<0.98	ND<0.067	ND<0.64	9.7	13
RS2	10	8/27/2014	0.47J	1.0	19	0.11J	0.14J	3.4	1.4J	2.5	1.2J	ND<0.036	0.19J	3.2	0.98J	ND<0.067	ND<0.64	7.6	10
RS2	15	8/27/2014	ND<0.33	2.2	34	0.14J	0.2J	4.5	2J	3.4	1.6J	ND<0.036	0.56J	4.7	1.3	ND<0.067	0.99J	9.5	14
RS3	0.5	8/27/2014	0.54J	2.2	56	0.16J	0.64	8.9	2.4J	17	55/*2.3**	ND<0.036	0.99J	8.4	2.1	ND<0.067	ND<0.64	17	81
	3	8/27/2014	ND<0.33	2.5	59	0.21J	0.34J	8.2	3.1	6.6	3.3	ND<0.036	0.65J	8.2	1.9	ND<0.067	0.83J	17	25
RS4	0.5	8/27/2014	--	2.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RS5	0.5	8/27/2014	0.37J	4.6	82	0.29 J	ND<0.50	6.0	5.4	8.9	2.6	0.13 J	1.0 J	5.0	1.1	0.074 J	ND<5.0	33	38
RS6	0.5	8/27/2014	ND<0.33	2.7	64	0.23J	0.45J	8.6	3.2	7.2	3.3	ND<0.036	0.8J	8.9	1.4	ND<0.067	ND<0.64	18	25
RS7	0.5	8/27/2014	ND<0.33	2.5	97	0.22J	0.61	15	4.3	16	**110**/*3.4**	ND<0.036	0.74J	13	2.5	0.14J	ND<0.64	24	88
	3	8/27/2014	NA	NA	NA	NA	NA	NA	NA	NA	3.0	NA	NA	NA	NA	NA	NA	NA	NA
RS8	0.5	8/27/2014	6	3.4	69	0.24J	0.51	9.6	3.7	11	**310**/*4.3**	ND<0.036	0.92J	10	3.1	ND<0.067	0.79J	21	73
	3	8/27/2014	ND<0.33	3.4	87	0.27J	0.54	11	4.1	8.2	3.5	ND<0.036	1J	11	1.6	ND<0.067	ND<0.64	21	29
RS9	0.5	8/27/2014	ND<0.33	3.7	75	0.24J	0.53	10	3.8	11	60/***8.3***/*0.052**	ND<0.036	0.79J	9.5	2.7	ND<0.067	ND<0.64	19	89
	3	8/27/2014	ND<0.33	3.7	82	0.26J	0.46J	10	4	7.9	3.5	ND<0.036	0.85J	11	2.2	ND<0.067	ND<0.64	21	29
RS10	0.5	8/27/2014	ND<0.33	2.7	67	0.22J	0.46J	8.6	3.2	9.1	12	ND<0.036	0.68J	8.7	2.1	ND<0.067	1.5J	18	58
	3	8/27/2014	0.38J	3.7	76	0.27J	0.48J	10	4.1	8.6	3.5	ND<0.036	1.1J	11	2	ND<0.067	ND<0.64	21	34
RS11	0.5	8/27/2014	--	1.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RS12	0.5	8/27/2014	--	3.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RS13	0.5	8/27/2014	ND<0.33	4.4	61	0.26J	0.69	12	3.9	14	20	ND<0.036	0.8J	10	2.4	ND<0.067	ND<0.64	20	65
RS14	0.5	8/27/2014	ND<0.33	3.2	61	0.24J	0.7	13	3.4	21	20	ND<0.036	0.84J	9.0	1.5	ND<0.067	1.3J	20	120
RS15	0.5	8/27/2014	--	4.2	--	--	--	--	--	--	12	--	--	--	--	--	--	--	--
RS16	0.5	8/27/2014	--	3.9	--	--	--	--	--	--	12	--	--	--	--	--	--	--	--
RS17	0.5	8/27/2014	--	3.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RS18	0.5	8/27/2014	--	3.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RS19	0.5	8/27/2014	--	3.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RS20	0.5	8/27/2014	--	3.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RS21	0.5	8/27/2014	--	3.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RS22	0.5	8/27/2014	--	2.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RB6	0.5	10/9/2014	--	--	--	--	--	--	--	--	14	--	--	--	--	--	--	--	--
	1	10/9/2014	--	--	--	--	--	--	--	--	4	--	--	--	--	--	--	--	--
	1.5	10/9/2014	--	--	--	--	--	--	--	--	4	--	--	--	--	--	--	--	--
	2	10/9/2014	--	--	--	--	--	--	--	--	3.5	--	--	--	--	--	--	--	--
	2.5	10/9/2014	--	--	--	--	--	--	--	--	3.2	--	--	--	--	--	--	--	--
	3	10/9/2014	--	--	--	--	--	--	--	--	5.8	--	--	--	--	--	--	--	--
RB7	0.5	10/9/2014	--	--	--	--	--	--	--	--	19	--	--	--	--	--	--	--	--
	1	10/9/2014	--	--	--	--	--	--	--	--	5.2	--	--	--	--	--	--	--	--
	1.5	10/9/2014	--	--	--	--	--	--	--	--	3.4	--	--	--	--	--	--	--	--
	2	10/9/2014	--	--	--	--	--	--	--	--	3.9	--	--	--	--	--	--	--	--
	2.5	10/9/2014	--	--	--	--	--	--	--	--	2.8	--	--	--	--	--	--	--	--
	3	10/9/2014	--	--	--	--	--	--	--	--	2.5	--	--	--	--	--	--	--	--
RB8	0.5	10/9/2014	--	--	--	--	--	--	--	--	12	--	--	--	--	--	--	--	--
	1	10/9/2014	--	--	--	--	--	--	--	--	5.2	--	--	--	--	--	--	--	--
	1.5	10/9/2014	--	--	--	--	--	--	--	--	4.7	--	--	--	--	--	--	--	--
	2	10/9/2014	--	--	--	--	--	--	--	--	7.2	--	--	--	--	--	--	--	--
	2.5	10/9/2014	--	--	--	--	--	--	--	--	6.8	--	--	--	--	--	--	--	--
	3	10/9/2014	--	--	--	--	--	--	--	--	4.8	--	--	--	--	--	--	--	--
RB9	0.5	10/9/2014	--	--	--	--	--	--	--	--	26	--	--	--	--	--	--	--	--
	1	10/9/2014	--	--	--	--	--	--	--	--	8.7	--	--	--	--	--	--	--	--
	1.5	10/9/2014	--	--	--	--	--	--	--	--	5.2	--	--	--	--	--	--	--	--
	2	10/9/2014	--	--	--	--	--	--	--	--	6.2	--	--	--	--	--	--	--	--
	2.5	10/9/2014	--	--	--	--	--	--	--	--	4.9	--	--	--	--	--	--	--	--
	3	10/9/2014	--	--	--	--	--	--	--	--	7.6	--	--	--	--	--	--	--	--

Table 2 - Soil Analytical Summary- Title 22 Metals
Daly/Dansk Pleasant Valley Road Apartments and Senior Living/Memory Care Project, Oxnard, California

Sample Designation	Depth (Feet)	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
			Results in milligrams per kilogram (mg/kg)																
RB10	0.5	10/9/2014	--	--	--	--	--	--	--	--	14	--	--	--	--	--	--	--	--
	1	10/9/2014	--	--	--	--	--	--	--	--	12	--	--	--	--	--	--	--	--
	1.5	10/9/2014	--	--	--	--	--	--	--	--	12	--	--	--	--	--	--	--	--
	2	10/9/2014	--	--	--	--	--	--	--	--	4	--	--	--	--	--	--	--	--
	2.5	10/9/2014	--	--	--	--	--	--	--	--	4.2	--	--	--	--	--	--	--	--
	3	10/9/2014	--	--	--	--	--	--	--	--	4.5	--	--	--	--	--	--	--	--
RB11	0.5	10/9/2014	--	--	--	--	--	--	--	--	5.5	--	--	--	--	--	--	--	--
	1	10/9/2014	--	--	--	--	--	--	--	--	5.4	--	--	--	--	--	--	--	--
	1.5	10/9/2014	--	--	--	--	--	--	--	--	8.7	--	--	--	--	--	--	--	--
	2	10/9/2014	--	--	--	--	--	--	--	--	9.1	--	--	--	--	--	--	--	--
	2.5	10/9/2014	--	--	--	--	--	--	--	--	4.9	--	--	--	--	--	--	--	--
	3	10/9/2014	--	--	--	--	--	--	--	--	3.4	--	--	--	--	--	--	--	--
RB12	0.5	10/9/2014	--	--	--	--	--	--	--	--	32	--	--	--	--	--	--	--	--
	1	10/9/2014	--	--	--	--	--	--	--	--	16	--	--	--	--	--	--	--	--
	1.5	10/9/2014	--	--	--	--	--	--	--	--	7.9	--	--	--	--	--	--	--	--
	2	10/9/2014	--	--	--	--	--	--	--	--	5.5	--	--	--	--	--	--	--	--
	2.5	10/9/2014	--	--	--	--	--	--	--	--	3.6	--	--	--	--	--	--	--	--
	3	10/9/2014	--	--	--	--	--	--	--	--	5.3	--	--	--	--	--	--	--	--
RB13	0.5	10/9/2014	--	--	--	--	--	--	--	--	2	--	--	--	--	--	--	--	--
	1	10/9/2014	--	--	--	--	--	--	--	--	7.6	--	--	--	--	--	--	--	--
	1.5	10/9/2014	--	--	--	--	--	--	--	--	5.4	--	--	--	--	--	--	--	--
	2	10/9/2014	--	--	--	--	--	--	--	--	4.9	--	--	--	--	--	--	--	--
	2.5	10/9/2014	--	--	--	--	--	--	--	--	3.5	--	--	--	--	--	--	--	--
	3	10/9/2014	--	--	--	--	--	--	--	--	2.7	--	--	--	--	--	--	--	--
RB14	0.5	10/9/2014	--	--	--	--	--	--	--	--	8.4	--	--	--	--	--	--	--	--
	1	10/9/2014	--	--	--	--	--	--	--	--	7.8	--	--	--	--	--	--	--	--
	1.5	10/9/2014	--	--	--	--	--	--	--	--	7.9	--	--	--	--	--	--	--	--
	2	10/9/2014	--	--	--	--	--	--	--	--	7.4	--	--	--	--	--	--	--	--
	2.5	10/9/2014	--	--	--	--	--	--	--	--	4.2	--	--	--	--	--	--	--	--
	3	10/9/2014	--	--	--	--	--	--	--	--	3.2	--	--	--	--	--	--	--	--
RB15	0.5	10/9/2014	--	--	--	--	--	--	--	--	22	--	--	--	--	--	--	--	--
	1	10/9/2014	--	--	--	--	--	--	--	--	15	--	--	--	--	--	--	--	--
	1.5	10/9/2014	--	--	--	--	--	--	--	--	27	--	--	--	--	--	--	--	--
	2	10/9/2014	--	--	--	--	--	--	--	--	4.4	--	--	--	--	--	--	--	--
	2.5	10/9/2014	--	--	--	--	--	--	--	--	4.3	--	--	--	--	--	--	--	--
	3	10/9/2014	--	--	--	--	--	--	--	--	2.1	--	--	--	--	--	--	--	--
RB16	0.5	10/9/2014	--	--	--	--	--	--	--	--	22	--	--	--	--	--	--	--	--
	1	10/9/2014	--	--	--	--	--	--	--	--	5.7	--	--	--	--	--	--	--	--
	1.5	10/9/2014	--	--	--	--	--	--	--	--	4.1	--	--	--	--	--	--	--	--
	2	10/9/2014	--	--	--	--	--	--	--	--	4	--	--	--	--	--	--	--	--
	2.5	10/9/2014	--	--	--	--	--	--	--	--	3.9	--	--	--	--	--	--	--	--
	3	10/9/2014	--	--	--	--	--	--	--	--	2.8	--	--	--	--	--	--	--	--
Background Concentration			*0.15- 1.95*	*0.6- 11*	*133- 1,400*	*0.25-2.70*	*0.05-1.70*	*23-1,579*	*2.7-46.9*	*9.1-96.4*	*12.4-97.1*	*0.05-0.90*	*0.1-9.6*	*9.0-509*	*0.015-0.430*	*0.10- 8.3*	*0.17-1.1*	*39- 288*	*88-236*
CHHSL- (R)			*30*	*0.07*	*5,200*	*150*	*1.7*	*100,000*	*660*	*3,000*	*80*	*18*	*380*	*1,600*	*380*	*380*	*5*	*530*	*23,000*
CHHSL- (C/I)			*380*	*0.24*	*63,000*	*1,700*	*7.5*	*100,000*	*3,200*	*38,000*	*320*	*180*	*4,800*	*16,000*	*4,800*	*4,800*	*63*	*6,700*	*100,000*
USEPA RSL- Soil (R)			*3.1*	*0.67*	*1,500*	*16*	*7.0*	*12,000*	*2.3*	*310*	*400*	*0.94*	*39*	*NE*	*39*	*39*	*NE*	*66*	*2,300*
USEPA RSL- Soil (C/I)			*47*	*3.0*	*22,000*	*230*	*98*	*150,000*	*35*	*4,700*	*800*	*4.0*	*580*	*NE*	*580*	*580*	*NE*	*840*	*35,000*
TTLC			*500*	*500*	*10,000*	*75*	*100*	*2,500*	*8,000*	*2,500*	*1,000*	*20*	*3,500*	*2,000*	*100*	*500*	*700*	*2,400*	*5,000*
STLC (mg/L)			*15*	*5*	*100*	*0.75*	*1*	*5*	*80*	*25*	*5*	*0.2*	*350*	*20*	*1*	*5*	*7*	*24*	*250*

ND = not detected at or above the laboratory detection limit
"--" = Not analyzed
NE = Not established. RSLs have not been established for total thallium and total nickel
J -Flag indicates detection is below the practical quantitation limit and above the method detection limit.
Lead concentrations detected above the residential CHHSL for lead in soil is **bold,** below STLC is *italicized*, above STLC is **bold** and ***italicized,*** TCLP result is red and *italicized*
* = STLC concentrations in milligrams per liter
Background Concentration = Kearney, *Background Concentrations of Trace and Major Elements in California Soils,* University of California, 1996
CHHSL = California Human Health Screening Levels (Cal/EPA - *Use of California Human Health Screening Levels in Evaluation of Contaminated Properties, January* 2005)
RSLs = USEPA Regional Screening Levels for Chemical Contaminants at Superfund Sites, May 2014
(R) = Residential
(C/I) = Commercial/Industrial
TTLC = Total Threshold Limit Concentration
STLC = Soluble Threshold Limit Concentration (in milligrams per liter [mg/L])
Soil samples analyzed by BC Laboratories, Inc.
Metals analyzed by Environmental Protection Agency (EPA) Method 6010B/7471A

Table 3 - Soil Analytical Summary- TPH and VOCs
Daly/Dansk Pleasant Valley Road Apartments and Senior Living/Memory Care Project, Oxnard, California

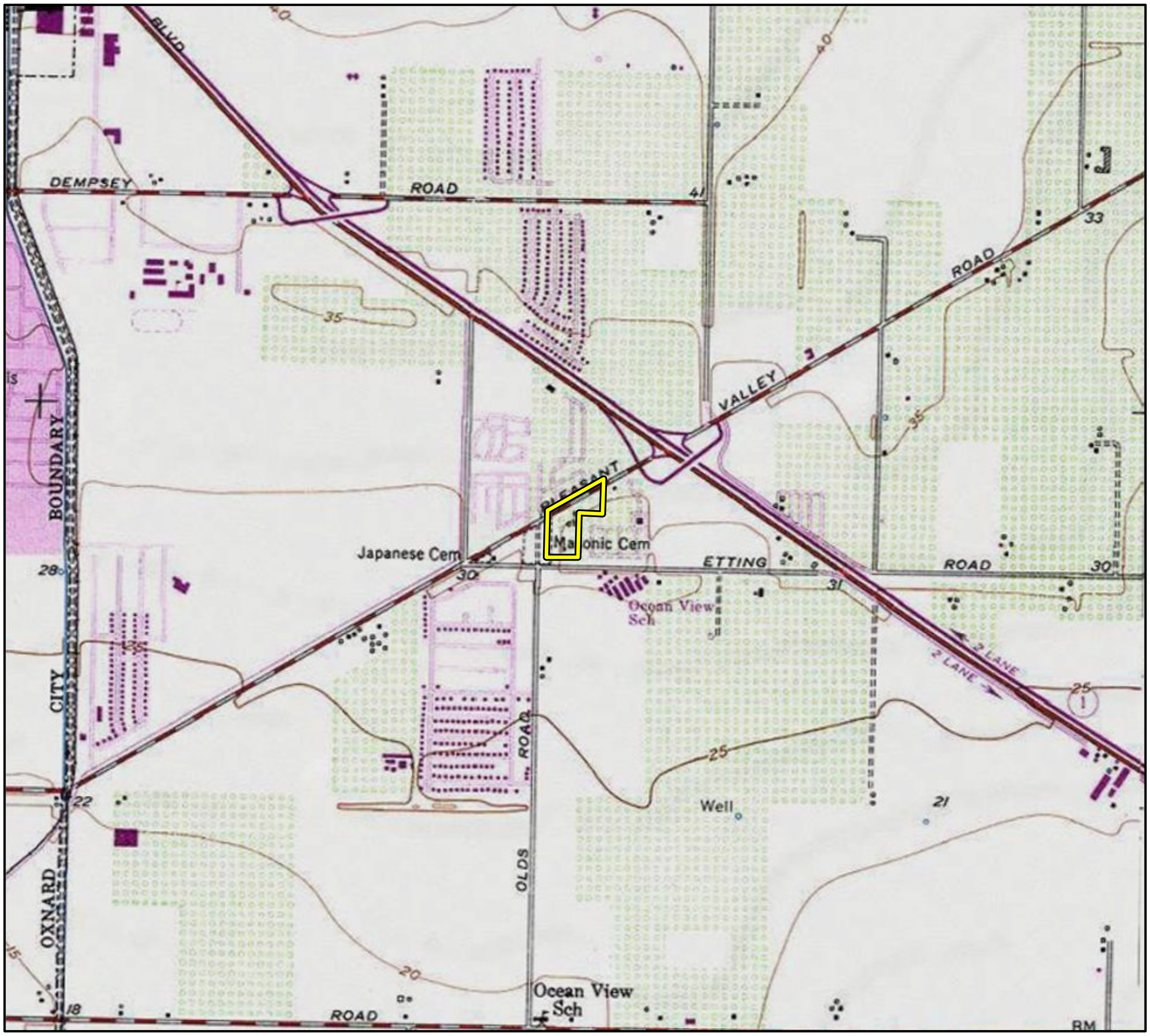
Sample Designation	Depth (Feet)	Sample Date	TPH-g (mg/kg)	TPH-d (mg/kg)	TPH-o (mg/kg)	VOCs (mg/kg)
RS1	10	8/27/2014	ND<0.1	ND<1.2	ND<6.5	ND
	15	8/27/2014	ND<0.1	ND<1.2	ND<6.5	ND
RS2	10	8/27/2014	ND<0.1	ND<1.2	ND<6.5	ND
	15	8/27/2014	ND<0.1	ND<1.2	ND<6.5	ND
RS3	0.5	8/27/2014	ND<0.1	**140**	**450**	--
	3	8/27/2014	ND<0.1	ND<1.2	ND<6.5	--
RS5	0.5	8/27/2014	ND<0.1	31	46	--
RS6	0.5	8/27/2014	ND<0.1	ND<1.2	ND<6.5	--
RS7	0.5	8/27/2014	ND<0.1	20	47	--
RS8	0.5	8/27/2014	ND<0.1	12	27	--
	3	8/27/2014	ND<0.1	8J	9.5J	--
RS9	0.5	8/27/2014	ND<0.1	21	61	--
	3	8/27/2014	ND<0.1	14	16J	--
RS10	0.5	8/27/2014	ND<0.1	42	60	--
	3	8/27/2014	ND<0.1	16	10J	--
RS13	0.5	8/27/2014	ND<0.1	14	14J	--
RS14	0.5	8/27/2014	ND<0.1	8.3J	8.7J	--
RB17	0.5	10/9/2014	--	15	12J	--
	1	10/9/2014	--	ND<1.2	ND<6.5	--
	1.5	10/9/2014	--	ND<1.2	ND<6.5	--
	2	10/9/2014	--	ND<1.2	ND<6.5	--
	2.5	10/9/2014	--	ND<1.2	7.3J	--
	3	10/9/2014	--	ND<1.2	ND<6.5	--
RB18	0.5	10/9/2014	--	35	27	--
	1	10/9/2014	--	8.6J	ND<6.5	--
	1.5	10/9/2014	--	ND<1.2	ND<6.5	--
	2	10/9/2014	--	ND<1.2	ND<6.5	--
	2.5	10/9/2014	--	ND<1.2	ND<6.5	--
	3	10/9/2014	--	7.9J	ND<6.5	--
RB19	0.5	10/9/2014	--	8.7J	7.7J	--
	1	10/9/2014	--	11	7.2J	--
	1.5	10/9/2014	--	13	7.5J	--
	2	10/9/2014	--	ND<1.2	ND<6.5	--
	2.5	10/9/2014	--	ND<1.2	ND<6.5	--
	3	10/9/2014	--	ND<1.2	ND<6.5	--
RB20	0.5	10/9/2014	--	62	33	--
	1	10/9/2014	--	13	14J	--
	1.5	10/9/2014	--	ND<1.2	ND<6.5	--
	2	10/9/2014	--	ND<1.2	ND<6.5	--
	2.5	10/9/2014	--	ND<1.2	ND<6.5	--
	3	10/9/2014	--	ND<1.2	8.6J	--
RB21	0.5	10/9/2014	--	14	14J	--
	1	10/9/2014	--	ND<1.2	ND<6.5	--
	1.5	10/9/2014	--	ND<1.2	ND<6.5	--
	2	10/9/2014	--	ND<1.2	ND<6.5	--
	2.5	10/9/2014	--	ND<1.2	ND<6.5	--
	3	10/9/2014	--	ND<1.2	ND<6.5	--
		USEPA RSL- Soil (R)	NE	NE	NE	varies
		USEPA RSL- Soil (C/I)	NE	NE	NE	varies
		ESL-Soil	100	100	100	varies

mg/kg = milligrams per kilogram
J -Flag indicates detection is below the practical quantitation limit and above the method detection limit.
TPH-g=total petroleum hydrocarbon-gasoline
TPH-d=total petroleum hydrocarbon-diesel
TPH-o=total petroleum hydrocarbon-oil
VOCs = volatile organic compounds
ND = not detected at or above the laboratory reporting limits
"--" = Not analyzed
NE = Not established
RSLs = USEPA Regional Screening Levels for Chemical Contaminants at Superfund Sites, November 2013
SFBRWQCB ESL = San Francisco Bay Regional Water Quality Control Board
Levels (Direct Exposure Soil Screening Levels for Protection of Human Health
Soil samples analyzed by BC Laboratories, Inc.
Analysis: TPH by EPA method 8015M, VOCs by EPA method 8260B

Table 4 - Groundwater Analytical Summary- VOCs
Daly/Dansk Pleasant Valley Road Apartments and Senior Living/Memory Care Project, Oxnard, California

Sample Designation	Depth (Feet)	Styrene (µg/L)	Toluene (µg/L)	Other VOCs (µg/L)
RS1	5	0.14J	0.27J	ND
RS2	10	1.2	0.2J	ND
MCL		100	150	varies

Groundwater samples collected on August 27, 2014.
(µg/L) = micrograms per liter
J -Flag indicates detection is below the practical quantitation limit and above the method detection limit.
VOCs = volatile organic compounds
ND = not detected at or above the laboratory reporting limits
MCL- Maximum Contaminant Levels California Department of Public Health, Drinking Water Standards, Title 22 CCR, November 2008.
Groundwater samples analyzed by BC Laboratories, Inc.
Analysis: VOCs by EPA method 8260B



Imagery provided by National Geographic Society, ESRI and its licensors © 2014. Oxnard Quadrangle. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

Project Boundary

0 1,000 2,000
Feet
1:24,000

N

Vicinity Map

Figure 1

Imagery provided by Google and its licensors © 2014.

Site Map

Figure 2

Imagery provided by Google and its licensors © 2014.

Chlordane Concentrations in Surface Samples

Figure 3

Imagery provided by Google and its licensors ©2014

Chlordane Conentrations in Soil Samples 1 Foot Below Grade

Figure 4

Imagery provided by Google and its licensors © 2014.

Lead Concentrations in Surface Soil Samples

Figure 5

environmental
services

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Orange, CA 92865

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March 11, 2015

Mr. Vince Daly
Pleasant Valley Ventures, LLC
6591 Collins Drive
Suite E-11
Moorpark, California 93021

Project No. 922

Approval of Workplan for Soil Excavation and Sequestration of Pesticide-Impacted Soil

Pleasant Valley Senior Apartments
2250 Pleasant Valley Road
Oxnard, California

Dear Mr. Daly:

ES Engineering, Inc. (ES) discussed the *Workplan for Soil Excavation and Sequestration of Pesticide-Impacted Soil* (Workplan) with the Ventura County Environmental Health Division (VCEHD) for the proposed Pleasant Valley Senior Apartments, 2250 Pleasant Valley Road, Oxnard, California. Based on the telephone discussion, Chlordane impacted soil below the 1.8 mg/kg regional screening level (RSL) were not required to be removed from the site or sequestered onsite. Therefore, VCEHD recommended:

- Soil sample locations with detectable concentrations of Chlordane (soil sample locations RS-17, RS-18 and RB-26) above the accepted RSL (1.8 mg/kg) are to be excavated, transported and disposed of offsite.
- Excavation, transportation and disposal of the DDE, DDT impacted soil (soil sample location RS-14) is required, as discussed in the Workplan.
- ES should provide an addendum to the Workplan via email for approval by VCEHD.

The Workplan addendum has been approved by the VCEHD (**Appendix A**). For reference, the Workplan is also attached (**Appendix B**). The excavation and soil sampling activities for the Chlordane impacted soil (locations RS-17, RS-18 and RB-26) and the DDE, DDT impacted soil (location RS-14) has been scheduled to be conducted on Thursday, March 12, 2015. Soil samples will be collected from the excavation sidewalls and bottoms and submitted to an analytical laboratory for analysis. The excavations will remain open until the soil sample analytical results have been reviewed, and the results indicate the Chlordane and DDE, DDT impacted soil exceeding their respective RSLs has been removed.

Soil generated during the excavation activities will be contained in Department of Transportation (DOT)-approved bins, sealed, labeled, and staged in a secure location pending transportation and disposal. Copies of the manifests documenting the transportation and disposal of the waste material will be presented in the Well Destruction Report. All other waste material, including extracted well casing, well boxes, and construction debris, will be transported to an appropriate disposal/recycling facility.

The excavation activities will be summarized in a Pesticide Impacted Soil Removal Report, and submitted approximately one week after completion of field activities.

Environ Strategy is pleased to be of service to Pleasant Valley Ventures, LLC. If there are any questions regarding this workplan or if additional site information is required, please do not hesitate to contact Environ Strategy at (714) 919-6500.

Sincerely,

ES Engineering

CERTIFIED ENGINEERING GEOLOGIST
CHRIS A. GUESNON
No. CEG 2361
Exp. 9-30-15
STATE OF CALIFORNIA

Chris Guesnon, PG, CEG
Project Geologist

Dane Nygaard
Project Manager

cc: Mr. Mark Pettit, Lauterbach and Associates Architects

Appendices:

Appendix A: Email Correspondence with Ventura County Environmental Health Division

Appendix B: Workplan for Soil Excavation and Sequestration of Pesticide-Impacted Soil

APPENDIX A

EMAIL CORRESPONDENCE WITH VENTURA COUNTY ENVIRONMNETAL HEALTH DIVISION

Chris Guesnon

From:	Teresa, Gina <Gina.Teresa@ventura.org>
Sent:	Monday, March 09, 2015 4:59 PM
To:	Chris Guesnon; Vince Daly
Cc:	Dane Nygaard
Subject:	RE: Workplan for Soil Excavation and Sequestration of Pesticide-Impacted Soil

Chris,
The revised scope of work is approved. Please proceed.
Thanks

Gina L. Teresa, P.G.
Environmental Health Specialist

Hazardous Materials Program
Voluntary Cleanup Program
County of Ventura
800 South Victoria Avenue
Ventura, CA 93009-1730
Phone: 805-662-6510
Fax: 805-477-1595

From: Chris Guesnon [mailto:cguesnon@es-online.com]
Sent: Monday, March 09, 2015 4:57 PM
To: Teresa, Gina; Vince Daly
Cc: Dane Nygaard
Subject: RE: Workplan for Soil Excavation and Sequestration of Pesticide-Impacted Soil

Gina, correct. The proposed pesticide excavation area at RS-14 will be removed also. I apologize, RB-26 has not been removed, but will be addressed also when in the field.

Thank You.

Chris A. Guesnon
Project Manager

petroleum services

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m (714) 514-9056

Please consider the environment before printing

From: Teresa, Gina [mailto:Gina.Teresa@ventura.org]
Sent: Monday, March 09, 2015 4:51 PM
To: Chris Guesnon; Vince Daly
Cc: Dane Nygaard
Subject: RE: Workplan for Soil Excavation and Sequestration of Pasticide-Impacted Soil

Chris,
To confirm, this is in addition to the proposed pesticide excavation area at RS-14? And has RB-26 (1.9mg/kg) been removed?

Gina Teresa

From: Chris Guesnon [mailto:cguesnon@es-online.com]
Sent: Monday, March 09, 2015 4:14 PM
To: Teresa, Gina; Vince Daly
Cc: Dane Nygaard
Subject: RE: Workplan for Soil Excavation and Sequestration of Pasticide-Impacted Soil

Gina, thank you for discussing the site with us and the recommended changes to the Workplan. Based on our discussion, Chlordane identified in soil exceeding the RSL (1.8 mg/kg) should be removed from the site to satisfy DTSC cleanup requirements. Chlordane impacted soil exceeding the RSL have been identified in the RS-17 and RS-18 locations. Therefore, ES will excavate the RS-17 and RS-18 locations, and conduct verification sampling in those areas to mitigate the pesticide impacts.

The excavation areas at the RS-17 and RS-18 locations are anticipated to be approximately 6-foot by 6-foot areas, and extend to approximately 18-inches below grade. Soil samples will be collected from the excavation sidewalls and bottoms and submitted to an analytical laboratory for analysis. The excavations will remain open until the soil sample analytical results have been reviewed, and the results indicate the Chlordane impacted soil exceeding the RSL has been removed. The Chlordane excavation activities can be conducted concurrently with the DDE, DDT excavation work described in our previous workplan, and wells exploration activities scheduled to be completed later this week.

If this revised Workplan is acceptable to the VCEHD, please reply accordingly.

Thank You.

Chris A. Guesnon
Project Manager

petroleum services

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m (714) 514-9056

From: Teresa, Gina [mailto:Gina.Teresa@ventura.org]
Sent: Monday, March 09, 2015 2:07 PM
To: Vince Daly
Cc: Chris Guesnon; Dane Nygaard
Subject: Workplan for Soil Excavation and Sequestration of Pesticide-Impacted Soil

Hi Vince,
I'm a little confused. Do you guys want me to write a letter rejecting this workplan or should I wait until the supplemental workplan is submitted.
From my understanding we had talked about amending the workplan to eliminate the residential CHHSLs as the cleanup goal and replace them with the residential RSLs.
The amended workplan should propose removing all concentrations of chlordane at 1.8 mg/kg or greater. And I would recommend some confirmation samples at the potholed or over-excavated locations.
Thanks,

Gina L. Teresa, P.G.
Environmental Health Specialist

Hazardous Materials Program
Voluntary Cleanup Program
County of Ventura
800 South Victoria Avenue
Ventura, CA 93009-1730
Phone: 805-662-6510
Fax: 805-477-1595

APPENDIX B

WORKPLAN FOR SOIL EXCAVATION AND SEQUESTRATION OF PESTICIDE-IMPACTED SOIL

environmental
services
ES Engineering, Inc.
1036 W. Taft Avenue
Orange, CA 92865
t 714.919.6500
f 714.919.6501

January 15, 2015

County of Ventura
Environmental Health Division
Attn: Gina Teresa, PG
800 S. Victoria Ave. #1730
Ventura, CA 93009-1730

Workplan for Soil Excavation and
Sequestration of Pesticide-Impacted Soil
Pleasant Valley Road Apartments
2250 East Pleasant Valley Road
Oxnard, California 93033

Ms. Teresa,

ES Engineering, Inc. (ES – formerly Environ Strategy Consultants, Inc.) is providing this *Workplan for Soil Excavation and Sequestration of Pesticide-Impacted Soil* (Workplan) for the site located at 2250 East Pleasant Valley Road in Oxnard (**Figure 1**). This Workplan presents a summary of the proposed scope of work to conduct an excavation of the known pesticide-impacted soil, conducting sampling and laboratory analysis, and transportation and disposal of the soil at an appropriate facility.

Based on recent soil sampling, a total of 4 pesticides (DDE, DDT, chlordane, and dieldrin) were detected above the established CHHSLs and regional screening levels (RSLs) for residential settings. It is recommended that the soil with the highest concentrations of the pesticides DDE and DDT be excavated and disposed of off-site; the remainder of the chlordane and dieldrin-impacted soil to be sequestered onsite.

SITE BACKGROUND

The site is located in a predominately residential area in the City of Oxnard, located at 2295 Etting Road near the intersection of Pleasant Valley Road and Etting Road (**Figure 1**). The property is comprised of an approximately 7 acre, roughly rectangular shaped lot, previously used primarily for agricultural purposes. Daly/Dansk is proposing to develop the site with approximately 121 multi-family dwellings, and a 60 to 80 unit senior care facility (**Figure 2**). The plan includes driveways, parking areas and open space areas.

A Phase I Environmental Site Assessment (ESA) for the subject property was conducted by the City of Oxnard's consultant, Rincon Consultants, Inc. (Rincon). Rincon identified several recognized environmental conditions (RECs) during the Phase I, including:

- the former use of the property for agricultural purposes (pesticide application, farm equipment and fuel storage);
- a former 250 gallon gasoline underground storage tank (UST); and
- motor oil staining in the vicinity of the former drums storage located in the shed on the northern portions of the property.

To determine if the RECs impacted the property, a Phase II Environmental Site Assessment was conducted at the site, as detailed in the *Phase II Environmental Site Assessment Report*, dated November 4, 2014 (**Appendix A**). On August 27, 2014, a Geoprobe rig was used to advance 22 borings on the site (**Figure 3**). Twenty soil borings (RS3 through RS22) were advanced to a depth of 3 feet below grade, and 2 borings (RS1 and RS2) were advanced to 20 feet below grade. Twelve soil borings were advanced from within the former agricultural areas of the site, and eight soil borings were advanced from within or adjacent to the agricultural structures (barn, shed, storage and workshop areas). Thirty-one additional delineation borings were advanced on October 9, 2014, to better delineate identified lead, TPH, and organochloride pesticides.

At each of the agricultural area boring locations, soil samples were collected from ground surface to 0.5 feet below grade and 2.5 to 3 feet below grade. Two soil borings (RS1 and RS2) were advanced adjacent to the former 250 gallon gasoline underground storage tank (UST) to a depth of 20 feet below grade. Soil samples were collected at five foot intervals to total depth. Select soil samples were analyzed for organochlorine pesticides, metals, total petroleum hydrocarbons as gasoline (TPH-g), diesel (TPH-d) and oil (TPH-o), or volatile organic compounds (VOCs). Groundwater samples were collected from both RS1 and RS2 and analyzed for VOCs.

Analytical results indicated that the surface samples collected from RS3, RS7, RS8, and RS9 contained elevated concentrations of total lead above 50 milligrams per kilogram (mg/kg). Samples RS7 and RS8 contained concentrations of chlordane at 110 mg/kg and 310 mg/kg, which is above the residential CHHSL of 80 mg/kg.

The detected concentrations of arsenic, in the soil samples analyzed for arsenic, were within the range of background levels in California soils. The detected concentration of antimony collected from surface sample RS8 was below the established CHHSL, and above the RSL. All other detected levels of metals were below the established CHHSL and RSL for residential and industrial/commercial settings.

The surface sample RS3 contained concentrations of TPH-d and TPH-o above the established ESL of 100 mg/kg, at concentrations of 140 mg/kg and 450 mg/kg respectively. The concentrations of TPH-d and TPH-o were not detected in the deeper sample analyzed from boring RS3 at 3 feet below grade. All other detected levels of TPH were below the established ESL. No VOCs were detected above the established RSLs for soil, and no VOCs were detected above the established MCLs for groundwater.

A total of 4 pesticides (DDE, DDT, chlordane and dieldrin) were detected above the established CHHSLs and RSLs for residential settings, and above the established TTLC in the surface sample RS14. Dieldrin was also detected above the CHHSL in the surface sample RS7. As shown in Figures 3 and 4, chlordane was detected above the established CHHSL for residential settings in 22 of the soil samples collected at the surface, 3 samples collected at 1 foot below grade (RB2, RB4, and RB29), and 1 sample collected from 2 feet below grade (RB2). All other soil samples analyzed for pesticides, including all the bottom samples analyzed from 3 feet below grade, were below the established CHHSLs and RSLs for both residential and commercial/industrial setting.

Based on the soil sampling results, Rincon recommended that the three areas with elevated concentrations of lead in the surface soil samples (RS7, RS8 and RS9) and the soil in the vicinity of sample RS14 be excavated prior to residential development. Rincon recommended that soil samples be collected following the soil excavation to confirm that all elevated concentrations of lead, DDE, DDT, chlordane, and dieldrin had been removed from the surface.

For mitigation of the chlordane-impacted soil (located throughout the site), Rincon proposed contacting the Ventura County Environmental Health Department (VCEHD) or the Department of Toxic Substances Control (DTSC) to determine if they, or another agency, will provide oversight for the project. Corrective measures and/or engineering controls deemed necessary by the VCEHD, the DTSC, or other oversight agency may need to be implemented in order to develop the site.

ES concurs with Rincon's recommendation of excavating impacted soil in the vicinity of sample RS14 the DDE and DDT for offsite disposal. ES proposes that the chlordane and dieldrin-impacted soil be excavated during the rough grading activities, and stockpile onsite pending sequester. The chlordane and dieldrin-impacted soil is recommended to the sequestered beneath the proposed driveways and parking areas, and if necessary, beneath proposed structures at sufficient depth to ensure residents will not be exposed.

Completed Work

The areas containing elevated concentrations of lead (RS7, RS8 and RS9) were excavated on January 6 and 7, 2015. Confirmation soil samples were collected from the sidewalls and bottom of each excavated area and sent to a State-certified laboratory for analysis of organochlorine pesticides, metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, total lead, mercury, molybdenum, nickel, selenium, silver, vanadium and zinc), full scan TPH and VOCs. Analytical results indicate that impacted soil in the vicinity of soil sampling locations RS7, RS8 and RS9 has been removed. Confirmation soil samples did not contain concentrations of constituents of concern exceeding the CHHSLs or the RSLs for residential settings. Approximately

27.1 cubic yards (yd^3) of impacted soil was placed into four roll-off bins and stored onsite pending disposal.

In addition, the area around soil sample location RS3 containing elevated levels of TPHd and TPHo was also excavated on January 6, 2015 and confirmation soil samples were collected for laboratory analysis. Based on the laboratory analytical results, the TPHd and TPHo-impacted soil has been removed. Approximately 3.7 yd^3 of TPHd and TPHo-impacted soil was placed into thirteen DOT-approved, 55-gallon drums pending off-site disposal.

The completed work described above is detailed in the *Summary of Lead and TPH Excavation Sample Results* (ES, January 2015, **Appendix B**).

WORKPLAN

The following subsections present a summary of the proposed activities to remediate pesticide-impacted soils at the site.

Proposed Scope of Work

It is our understanding that rough grading of site soils will be necessary to construct the proposed apartment structures, attendant roadways and parking areas. To accomplish this, the entire site will be over-excavated 3 feet below existing surface grades prior to engineered fill placement. Additional soil will be imported to the site to achieve proposed finish pad grades. The resulting fill thickness will be on the order of approximately 5 feet total thickness.

The scope of work described herein consists of excavation and off-site disposal of the DDE and DDT-impacted soil in the area of RS-14 prior to the rough grading activities. Confirmation soil samples will be collected for laboratory analysis to verify all of the impacted soil has been removed. The excavation limits will be verified using laboratory analysis.

The remaining surficial chlordane and dieldrin-impacted soil located throughout the site, will be excavated to approximately 1 foot below ground surface (bgs) during the rough grade activities, and separately stockpiled from other site soils, pending sequester.

The preferred sequester area will be in the areas proposed to be roadways and parking areas. If necessary, remaining chlordane and dieldrin impacted soil are proposed to be sequestered beneath the proposed structures, at depths sufficient to ensure residents are not exposed.

The following sections summarize the field activities and anticipated schedule to complete the proposed scope of work.

Site Health and Safety Plan

Field work will be conducted in accordance with the updated site specific Health and Safety Plan (HASP). Before commencing field activities, a daily "tailgate" health and safety meeting will be conducted with ES personnel and contracted employees. The HASP will be reviewed to address potential physical, chemical, mechanical and biological hazards associated with the proposed scope of work. A copy of the HASP will be furnished as a separate document upon request.

Permitting, Access and Agency Notification

Before initiating field activities, ES will obtain the necessary excavation permits as required by State and Local Agencies. Sampling locations will be pre-marked and Underground Services Alert will be notified a minimum of 72 hours in advance to locate potential underground utilities servicing the Site. Additionally, the VCEHD or appropriate agency will be notified a minimum of 5 days prior to field activities.

Soil Sampling and Excavation

Pesticide-Impacted Soil – Area of Sample RS-14

An approximate 10 foot by 10 foot excavation extending to 1 feet bgs is proposed for the area encompassing soil sample RS-14. One confirmation soil sample will be collected from the excavation bottom, one confirmation soil sample will be collected from each of the excavation sidewalls. At a minimum, one confirmatory soil sample will be collected from each sidewall face from each excavation. If the excavation exceeds 15 linear feet of sidewall, additional samples will be collected at a schedule of 1 sample for every 15 linear feet of sidewall face. The collected excavation bottom sample will be transported to the analytical by laboratory. If the excavation bottom exceeds the anticipated 1 foot depth (verified by the laboratory analysis) one sample will be collected from each additional foot excavated. Water will be used as necessary during the excavation activities to reduce the amount of dust generated.

The soil samples will be collected directly from the excavation into 8-oz glass jars for laboratory analysis. Each sample will be immediately sealed, labeled, placed on ice in a cooler and delivered to a state-certified, analytical laboratory under chain-of-custody. The soil samples will be analyzed for organochlorine pesticides by EPA Method 8081A. The excavation will remain open until the laboratory analysis of the soil samples has been completed and reviewed.

The soil removed from the location of RS14 will be placed in a roll-off bin and transported for off-site disposal in an approved facility.

Pesticide-Impacted Surficial Soil – Remainder of Site

The remaining soil impacted with dieldrin and chlordane above the CHHSLs (**Figure 3**) will be excavated to an approximate depth of 1 foot bgs during rough grading for the site, and stockpiled systematically. Sequestration necessitates isolation from human and wildlife contact and would require that the soil be buried onsite at depths unlikely to be disrupted, or would require capping by pavement or asphalt.

Based on concurrence of this Workplan by the VCEHD, the stockpiled soil will be sequestered onsite in an agreed upon manner. Recommended areas for sequester include beneath the access driveways and parking stalls. If necessary, the soil impacted with dieldrin and chlordane may be buried a minimum of three feet below the proposed building slabs. Onsite sequestration will be conducted as directed by the VCEHD.

Schedule and Report Preparation

Project coordination will begin upon receiving Workplan approval. Activities and laboratory results will be included in a Summary Report.

CLOSURE

Environ Strategy is pleased to be of service to Pleasant Valley Venture, LLC, and the VCEHD. If there are any questions regarding this workplan or if additional site information is required, please do not hesitate to contact Environ Strategy at (714) 919-6500.

Sincerely,

ES ENGINEERING

Chris Guesnon, PG, CEG
Project Geologist

CERTIFIED ENGINEERING GEOLOGIST
CHRIS A. GUESNON
No. CEG 2361
Exp. 9-30-15
STATE OF CALIFORNIA

Dane Nygaard
Project Manager

ATTACHMENTS:

Figure 1:	Site Location Map
Figure 2:	Conceptual Plan for Pleasant Valley Road Apartments
Figure 3:	Site Plan

APPENDICES:

Appendix A - Phase II Environmental Site Assessment - Rincon Consultants, Inc.
Appendix B - Summary of Lead and TPH Excavation Sample Results - ES Engineering, Inc.

Figures

Map Information:
TOPO! 2001 National Geographic Holdings
Disk 9: Los Angeles
34°09'44"N 119°08'50"W

environmental services
ES Engineering, Inc.
1036 W. Taft Avenue • Orange, CA 92865 • (714) 919-6500

N

0 2000

APPROX. SCALE: 1" = 2000'

FIGURE 1

SITE LOCATION MAP

Daly/Dansk Pleasant Valley Road Apartments
2250 E. Pleasant Valley Road
Oxnard, California

DATE 01/08/2015

PROJECT NO. 922

FILE NO. 922F1-SLM

W:\03_Site Assessment & Remediation\USA\USA-SoCAl\Daly_Dansk_Pleasant Valley\DWG\922F1-SLM.dwg


1 BENCH


2 ORCHARD


3 ROSE GARDEN

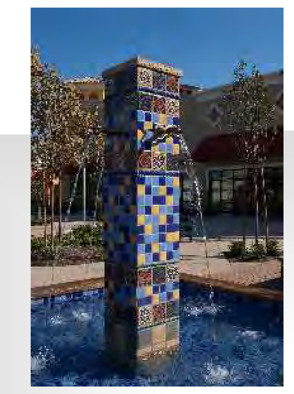

4 FOUNTAIN


5 COURTYARD PLANTING


6 VOLLEYBALL COURT

14 CACTUS GARDEN

15 SEATING AREA


16 FOUNTAIN

PLANT LEGEND

SYMBOL	QTY.	SIZE	BOTANICAL NAME/ COMMON NAME	WUCOLS RATING
	*12	36" BOX	ASSORTED FRUIT TREES	M
	5	24" BOX	LAGUNARIA PATERSONII PRIMROSE TREE	M
	15	24" BOX	PINUS CANARIENSIS CANARY ISLAND PINE	M
	45	24" BOX	MAGNOLIA GRANDIFLORA 'ST. MARY' ST. MARY MAGNOLIA	M
	*30	24" BOX & 48" BOX	PYRUS 'KAWAKAMII' EVERGREEN PEAR OR FRUITLESS OLIVE (MULTI) OLEA EUROPAEA 'SWAN HILL'	M / L
	*15	24" BOX & 36" BOX	KOELREUTERIA PANICULATA GOLDENRAIN TREE	M
	*31	24" BOX & 48" BOX	TRISTANIA LAURINA WATER GUM	L
	56	24" BOX	PYRUS C. 'CHANTICLEER' CHANTICLEER FLOWERING PEAR	M
	*15	24" BOX 36" BOX 48" BOX	CEDRUS DEODARA DEODAR CEDAR	M
	965	2" PLUGS	NASSELLA TENUISSIMA MEXICAN FEATHER GRASS	L
	64	5 GAL	PHORMIUM TENAX NEW ZEALAND FLAX	L
	23	5 GAL	PENNISETUM SETACEUM 'RUBRUM' PURPLE FOUNTAIN GRASS	L
	562	5 GAL	CARISSA 'GREEN CARPET' NATAL PLUM	M
	107	5 GAL	ROSA 'MEIDILAND RED' RED LANDSCAPE ROSE	M
	54	5 GAL	AGAVE ATTENUATA FOX TAIL AGAVE	L
	29	5 GAL	LAURUS NOBILIS GRECIAN LAUREL	L
	163	5 GAL	BOUTELOUA GRACILIS 'BLONDE AMBITION' BLONDE AMBITION BLUE GRAMA GRASS	M
	320	5 GAL	CALLISTEMON 'LITTLE JOHN' DWARF BOTTLEBRUSH	L
	296	5 GAL	NANDINA DOMESTICA HEAVENLY BAMBOO	M

SYMBOL	QTY.	SIZE	BOTANICAL NAME/ COMMON NAME	WUCOLS RATING
	296	5 GAL	NANDINA DOMESTICA HEAVENLY BAMBOO	M
	516	5 GAL	HEMEROCALLIS HYBRID DAY LILY	M
	48	5 GAL	OPUNTIA LITTORALIS BARREL CACTUS	L
	6	5 GAL	CUPRESSA 'TINY TOWER' TINY TOWER ITALIAN CYPRESS	M
	307	5 GAL	HEBE 'PATTY'S PURPLE' HEBE	L
	27	5 GAL	PARTHENOCISSUS TRICUSPIDATA BOSTON IVY	M
	81	5 GAL	ASPLEIUM BULBIFERUM MOTHER FERN	M
	37	5 GAL	PORTULACARIA AFRA ELEPHANT'S FOOD	L
	167	5 GAL	PHILODENDRON 'XANADU' DWARF PHILODENDRON	M
	79	5 GAL	CLIVIA MINIATA KAFFIR LILY	M
	277	5 GAL	PRUNUS C. 'BRIGHT 'N' TIGHT' CATALINA CHERRY	M
	5	15 GAL ESPALIER	TRACHELOSPERMUM JASMINOIDES STAR JASMINE	M
	244	5 GAL	RHAPHIOLEPIS UMBELLATA 'MINOR' DWARF YEDDO	M
	7	5 GAL	SARCOCOCCA RUSCIFOLIA SWEET BOX	M
	131	5 GAL	STRELETZIA NICOLAI GIANT BIRD OF PARADISE	M
	35	5 GAL	ROSA 'FLOWER CARPET WHITE' WHITE GROUND COVER ROSE	M
	314	5 GAL	RHAPIOEPIS I. 'CLARA' INDIAN HAWTHORN	M
	192	5 GAL	DIANELLA T. 'VARIEGATA' VARIEGATED PAROO LILY	M
	141	5 GAL	COTONEASTER 'CORAL BEAUTY' BEARBERRY	M
	79	5 GAL	ROSA FLORIBUNDA 'ICEBURG' ICEBURG ROSE	M
	11	5 GAL	ALOE 'BIG MAC' MIG MAC ALOE	L
	20	5 GAL	EQUISETUM (PLANTED IN POTS) HORSETAIL	H
	4	5 GAL	ABUTILON 'MOONCHIMES' CHINESE LANTERN	L
	15	5 GAL	PHORMIUM HYBRID NEW ZEALAND FLAX	L

SHRUBS & GROUNDCOVERS

SYMBOL	QTY.	SIZE	BOTANICAL NAME/ COMMON NAME	WUCOLS RATING
	1,429 SQ.FT.	SOD	NATIVE BIOFILTRATION MIX (BY S&S SEEDS)	M
	725 SQ.FT.	FLATS @ 6" O.C.	OPHIOPOGON JAPONICUS 'NANA' DWARF MONDO GRASS	M
	27,464 SQ.FT.	SOD	PACIFIC SOD 'MEDALLION DWARF WITH BONZAI'	H
	26,086 SQ.FT.	--	DROUGHT TOLERANT GROUND COVER	L
	5,345 SQ.FT.	3" DEPTH	DECOMPOSED GRANITE	N/A
	1,522 SQ.FT.	1 GAL @ 18" O.C.	KLEINIA MANDRALISCAE BLUE CHALK STICKS	L
	2,684 SQ.FT.	2" DEPTH	ROCK GROUND COVER TO BE SELECTED	N/A

EXISTING TREES LEGEND

SYMBOL	DEFINITION	QNTY.
	EXISTING TREE TO REMAIN	16

TREE MITIGATION CALCULATIONS

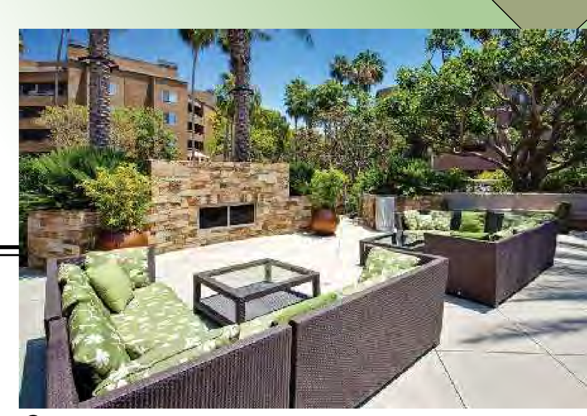
PROPOSED TREE REPLACEMENT CACULATIONS

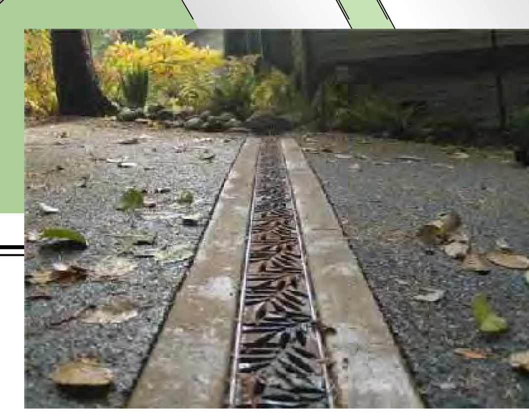
1. 8 - 24" BOX TREES @ 275 ea. = 2,200
(THESE ARE EXTRA PERIMETER TREES BEYOND REQUIRED AMOUNT)
2. 9 - 48" BOX TREES @ 1,600 ea. = 14,400
(THESE ARE COURTYARD SIZE UPGRADES)

TOTAL VALUE OF ADDITIONS = $16,600
TOTAL MITIGATION REQUIREMENT = $12,770
MITIGATION SURPLUS = 3,830


7 BIKE RACK


8 BBQ


9 FIREPLACE


10 DECORATIVE DRAINAGE CHANNEL


11 CONCRETE SEATING PODS


12 CONCRETE TABLE TENNIS


13 BOCCE BALL COURT

SCALE: 1"=30'

JORDAN, GILBERT & BAIN
LANDSCAPE ARCHITECTS, INC.
3350 LOMA VISTA ROAD, VENTURA CA 93003
(805) 642-3641 FAX (805) 642-9614

Mark S. Pettit, AIA NCARB
LAUTERBACH & ASSOCIATES ARCHITECTS • INC.
300 MONTGOMERY AVE. • OXNARD • CA • 93036 • TEL (805)988-0912 • FAX (805)986-6072 • www.la-arch.com

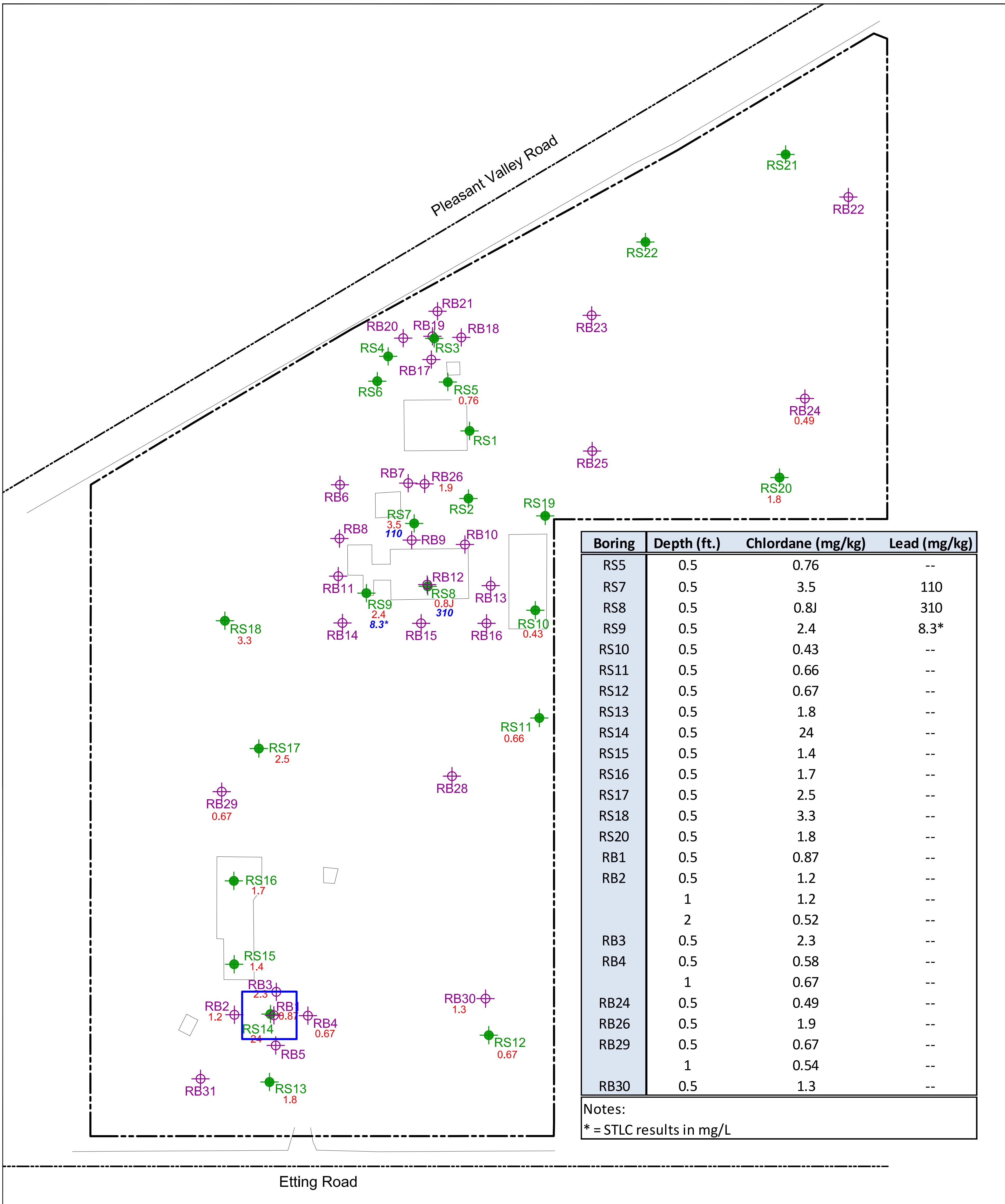
PRELIMINARY LANDSCAPE PLAN
DANSK INVESTMENTS
6591 COLLINS, STE. E11, MOORPARK, CA 93021

CONCEPT 01/06/2014

Proj. No.:20-131103

SENIOR LIVING WITH MEMORY CARE & APARTMENT COMMUNITY
DANSK INVESTMENTS
PLEASANT VALLEY RD., OXNARD, CA 93033

L-1



Boring	Depth (ft.)	Chlordane (mg/kg)	Lead (mg/kg)
RS5	0.5	0.76	--
RS7	0.5	3.5	110
RS8	0.5	0.8J	310
RS9	0.5	2.4	8.3*
RS10	0.5	0.43	--
RS11	0.5	0.66	--
RS12	0.5	0.67	--
RS13	0.5	1.8	--
RS14	0.5	24	--
RS15	0.5	1.4	--
RS16	0.5	1.7	--
RS17	0.5	2.5	--
RS18	0.5	3.3	--
RS20	0.5	1.8	--
RB1	0.5	0.87	--
RB2	0.5	1.2	--
	1	1.2	--
	2	0.52	--
RB3	0.5	2.3	--
RB4	0.5	0.58	--
	1	0.67	--
RB24	0.5	0.49	--
RB26	0.5	1.9	--
RB29	0.5	0.67	--
	1	0.54	--
RB30	0.5	1.3	--

Notes:
* = STLC results in mg/L

LEGEND

RS12	August 2014 Soil Boring Location
RB30	October 2014 Soil Boring Location
0.87	Chlordane Concentration exceeds CHHSL (mg/kg)
110	Lead Concentration exceeds CHHSL (mg/kg)
J	Trace Value Detected Between Practical Quantation Limit and Above the Method Detection Limit

Approximate Area Proposed for Pesticide Excavation Activities

N

80 0 80

APPROXIMATE SCALE: 1" = 80'

environmental services
ES Engineering, Inc.
1036 W. Taft Avenue • Orange, CA 92865 • (714) 919-6500

FIGURE 2

SITE PLAN
SHOWING PROPOSED PESTICIDE
EXCAVATION AREA

Daly/Dansk Pleasant Valley Road Apartments
2250 E. Pleasant Valley Road
Oxnard, California

DATE
01/08/2015

PROJECT NO.
922

FILE NO.
922F2-SP

W:\03_Site Assessment & Remediation\USA\USA-SoCAl\Daly_Dansk_Pleasant Valley\DWG\922F2-SP (Pesticides).dwg

Appendix A

Phase II Environmental Site Assessment

Rincon Consultants, Inc.

Phase II Environmental Site Assessment

Daly/Dansk Pleasant Valley Road Apartments and Senior Living/ Memory Care Center Project
Oxnard, California

Prepared for:

City of Oxnard

Prepared by:

Rincon Consultants, Inc.
November 4, 2014

rincon

Environmental Scientists Planners Engineers

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Ventura, California 93003

805 644 4455
FAX 644 4240

info@rinconconsultants.com
www.rinconconsultants.com

November 4, 2014
Project 14-00624

Kathleen Mallory, MA, AICP
Principal Planner
Planning & Energy/Entitlement Services
Submitted via email: kmallory@pandes.net

Subject: Phase II Environmental Site Assessment
Daly/Dansk Pleasant Valley Road Apartments and Senior Living/ Memory Care Center Project,
Oxnard, California

Dear Ms. Mallory:

This report presents the findings of a Phase II Environmental Site Assessment consisting of two rounds of soil matrix sampling completed by Rincon Consultants, Inc. for the 7.4-acre property located at 2295 Etting Road, Oxnard, California. The purpose of this Phase II ESA was to determine if the historic use of the site for agricultural purposes, the former 250 gallon gasoline underground storage tank (UST), and observed motor oil staining has impacted the soil with elevated levels of pesticides, total petroleum hydrocarbons (TPH), metals, and volatile organic compounds (VOCs).

If you have any questions regarding this report, or if we can be of any future assistance, please contact us.

Sincerely,
RINCON CONSULTANTS, INC.

Jake Hurley
Environmental Scientist

Walt Hamann, PG, CEG, CHG
Vice President, Environmental Services

Table of Contents

Tables

Figures

Appendices

EXECUTIVE SUMMARY

This report presents the findings of a Phase II Environmental Site Assessment (ESA) conducted by Rincon Consultants, Inc. for the 7.4-acre property located at 2295 Etting Road, Oxnard, California (Figure 1, Vicinity Map). The site is currently vacant land and has historically been in use as agricultural land.

Rincon Consultants performed two rounds of soil matrix sampling at the site. The first round of sampling was completed on August 27, 2014. A Geoprobe rig was used to advance 22 borings on the site. Twenty soil borings (RS3 through RS22) were advanced to a depth of 3 feet below grade, and 2 borings (RS1 and RS2) were advanced to 20 feet below grade. Twelve soil borings were advanced from within the former agricultural areas of the site, and eight soil borings were advanced from within or adjacent to the agricultural structures (barn, shed, storage and workshop areas). At each of the agricultural area boring locations, soil samples were collected at 0 to 0.5 feet below grade, and 2.5 to 3 feet below grade. Two soil borings (RS1 and RS2) were advanced adjacent to the former 250 gallon gasoline underground storage tank (UST) to a depth of 20 feet below grade. Soil samples were collected at five foot intervals to total depth. Select soil samples were analyzed for organochlorine pesticides, metals, total petroleum hydrocarbons as gasoline (TPH-g), diesel (TPH-d) and oil (TPH-o), or volatile organic compounds (VOCs). Groundwater samples were collected from both RS1 and RS2 and analyzed for VOCs.

To better delineate the lateral and vertical extent of lead, TPH, and organochlorine pesticides in the near surface alluvium on the site, a second round of sampling was completed on October 9, 2014. Hand auger tools were utilized to advance 31 soil borings (RB1 through RB31). The soil boring locations were divided into four different areas of concern: former barn where elevated concentrations of lead were found, the southern portion of site where elevated concentrations of DDT, DDE and dieldrin were found, the northern property line where TPH was found, and the overall project area where chlordane was found. Soil samples were collected every six inches from the surface to a total depth of 3 feet below grade. All six soil samples from each boring were analyzed for organochlorine pesticides, total lead, or TPH.

The detected concentrations of pesticides and metals in the soil samples were compared to the following screening levels:

- California Human Health Screening Levels (CHHSLs) established for residential and commercial/industrial sites.
- United States Environmental Protection Agency (USEPA) Regional Screening Levels (RSLs). [1] The detected concentrations of VOCs in the soil samples were also compared to the RSLs.

The results of the TPH analyses were compared to the following screening levels:

[1] The Southern California office of the Department of Toxic Substances Control (DTSC) has directed that RSLs be used for screening level assessments. The RSLs published by the USEPA (May 2014) are the current ones available for this purpose.

- Regional Water Quality Control Board- San Francisco Bay Region (SFBRWQCB) Environmental Screening Levels (ESLs).

The surface samples analyzed from RS3, RS7, RS8, and RS9 contained elevated concentrations of total lead above 50 mg/kg. All 4 samples were then analyzed for soluble lead. Samples RS7 and RS8 contained concentrations of chlordane at 110 mg/kg and 310 mg/kg, which is above the residential CHHSL of 80 mg/kg.

The detected concentrations of arsenic in the soil samples analyzed for arsenic were within the range of background levels in California soils. The detected concentration of antimony collected from surface sample RS8 was below the established CHHSL, and above the RSL. All other detected levels of metals were below the established CHHSL and RSL for residential and industrial/commercial settings.

A total of 4 pesticides (DDE, DDT, chlordane, and dieldrin) were detected above the established CHHSLs and RSLs for residential settings in the surface sample RS14. Dieldrin was also detected above the CHHSL in the surface sample RS7. As shown in Figures 3 and 4, chlordane was detected above the established CHHSL for residential settings in 22 of the soil samples collected at the surface, 3 samples collected at 1 foot below grade (RB2, RB4, and RB29), and 1 sample collected from 2 feet below grade (RB2). All other soil samples analyzed for pesticides, including the bottom samples analyzed from 3 feet below grade, were below the established CHHSLs and RSLs for both residential and commercial/industrial setting.

The surface sample RS3 contained concentrations of TPH-d and TPH-o above the established ESL of 100 mg/kg, at concentrations of 140 mg/kg and 450 mg/kg respectively. The concentrations of TPH-d and TPH-o were not detected in the deeper sample analyzed from boring RS3 at 3 feet below grade. All other detected levels of TPH were below the established ESL.

No VOCs were detected above the established RSLs for soil, and no VOCs were detected above the established MCLs for groundwater.

Based on the soil sampling results, we recommend that the three areas with elevated concentrations of lead in the surface soil samples (RS7, RS8 and RS9), and the area with elevated DDE and DDT in the surface soil sample RS14 be remediated prior to residential development of the site. The remediation should include the excavation of the soil with elevated concentrations of lead. The soluble lead in soil at the surface in the vicinity of soil sample RS9 was above the STLC of 5 mg/L, and is considered Non RCRA hazardous waste, and will require disposal at a Class II California hazardous waste accepting facility. The soil in the vicinity of sample RS14 contained elevated concentrations of DDE and DDT above the established total threshold limit concentration (TTLC), and is also considered Non RCRA hazardous waste. Confirmation soil samples should be collected following the excavation of the soil within these four areas to confirm that all elevated concentrations of lead, DDE, and DDT have been removed from the surface.

For mitigation of chlordane impacted soil on site, we propose the following:

- Contact the Ventura County Environmental Health Department (VCEHD) or the Department of Toxic Substances Control (DTSC) to determine if they, or another agency, will provide oversight for the project. Corrective measures and/or engineering controls deemed necessary by the VCEHD, the DTSC, or other oversight agency may be implemented.

INTRODUCTION

A Phase II Environmental Site Assessment (ESA) was conducted by Rincon Consultants, Inc. for the 7.4-acre property located at 2295 Etting Road, Oxnard, California (Figure 1, Vicinity Map). The assessment included two rounds of sampling. It is our understanding that Dansk is proposing to develop the site with approximately 121 multi-family dwellings, and a 60-80 unit senior care facility.

PROJECT HISTORY

Rincon Consultants recently completed a Phase I ESA for the subject property. Several recognized environmental conditions (RECs) were identified in the Phase I ESA. The RECs identified include: (1) the use of the property for agricultural purposes (pesticide application, farm equipment and fuel storage), (2) the former 250 gallon gasoline underground storage tank (UST), and (3) motor oil staining in the vicinity of the drums located in the storage shed on the northern portions of the property. To determine if these RECs have impacted the property, the following measures were recommended:

- Shallow soil samples be collected in the orchards and barn/storage/workshop areas and analyzed for pesticides and arsenic. Equipment services areas should also be sampled for petroleum hydrocarbons and metals.
- A subsurface assessment be completed to determine if the 250-gallon gasoline UST was removed and if contamination if present.
- Shallow samples be collected and sampled in the storage shed on the northern portion of the property and analyzed for petroleum hydrocarbons (TPH).

PURPOSE AND SCOPE

The purpose of this Phase II ESA was to determine if the historic use of the site as agricultural land has impacted the soil with elevated levels of pesticides and arsenic, if the former UST has impacted the soil with TPH, volatile organic compounds (VOCs) and metals, and if the observed motor oil staining have impacted the soil with TPH. The concentrations of pesticides, metals, TPH, and VOCs were compared to screening levels to determine potential human health risk.

Our scope of work included the following:

- **Site Health and Safety Plan**. Prepare a Site Health and Safety Plan for the Phase II ESA sampling personnel.
- **Utility Notification**. Premark boring locations and contact Underground Service Alert (USA) to mark areas where underground public utilities might be located in the drilling area.
- **Soil Borings-Initial assessment.** Collect surface and 3 foot deep soil samples at 20 locations on the site. Collect soil samples to 20 feet below grade at two locations adjacent to the former gasoline UST.
- **Soil Borings- Additional assessment**. Based on the results of the initial phase II ESA assessment, collect samples every six inches starting at the surface to 3 feet below grade at 31 locations on the site.
- **Laboratory Analyses.** Analyze select soil samples for organochlorine pesticides, total petroleum hydrocarbons as gasoline (TPH-g), diesel (TPH-d) and oil (TPH-o), VOCs, and metals. Analyze two groundwater samples collected for VOCs.
- **Reporting**. Prepare this report documenting our findings.

GEOLOGIC AND HYDROGEOLOGIC SETTING

Topography

The current USGS topographic map (Oxnard Quadrangle, 1967) indicates that the subject property is situated at an elevation of about 32 feet above mean sea level with topography sloping slightly to the south.

Site Geology

According to the USGS geologic map (California: Los Angeles Sheet, 1969) the subject property is underlain by alluvium, which is described by the USGS as "clay, silt, sand, gravel, or similar unconsolidated detrital material, deposited during comparatively recent geologic time by a stream or other body of running water, as a sorted or semi-sorted sediment."

Regional Groundwater Occurrence and Quality

According to the *Case Closure Summary, Ocean View School District, 2382 Etting Road, Oxnard, California* prepared by the Ventura County Environmental Health and dated March 6, 2003, groundwater is encountered between 6 and 9 feet below grade and flows towards the southeast/southwest. This property is located adjacent to the southeast of the subject property.

During the initial Phase II ESA, groundwater was encountered at approximately 10 feet below grade in soil borings RS1 and RS2.

METHODOLOGY

SOIL SAMPLING

A Geoprobe rig was used on August 27, 2014, to advance 22 borings on the site, as depicted on Figure 2, Site Map. Twenty soil borings (RS3 through RS22) were advanced to a depth of 3 feet below grade, and 2 borings (RS1 and RS2) were advanced to 20 feet below grade. The soil borings were advanced by Choice Drilling of Pacoima, California. Soil samples were obtained from the borings advanced by hydraulically driving a two-inch-diameter rod equipped with a soil sampling tool as follows:

- A continuous soil sample was collected from each probe to the proposed sampling depth. The soil sampler was lined with a one-inch-diameter acetate tube. By advancing this sampler into the soil, soil is forced into the opening of the sampling tube and a sample is obtained. Once the sampler is filled, it is retrieved and the acetate liner is removed. The designated sampling section (6-inch length) is cut and retained for laboratory analysis. The samples are sealed with Teflon, capped, labeled, and stored in a cooler with ice pending delivery to the analytical laboratory. Soil within the rest of the acetate liner sections is used for soil classification and to screen for volatile organics using a photoionization detector (PID).

Twelve soil borings were advanced from within the former agricultural areas of the site, and eight soil borings were advanced from within or adjacent of the agricultural structures (barn, shed, storage and workshop areas). At each of the agricultural area boring locations, soil samples were collected at 0 to 0.5 feet below grade, and 2.5 to 3 feet below grade. Two soil borings (RS1 and RS2) were advanced adjacent to the former 250 gallon gasoline UST to a depth of 20 feet below grade. Soil samples were collected at five foot intervals to total depth.

Groundwater was encountered at approximately 10 feet below grade in soil borings RS1 and RS2. Groundwater samples were collected from both RS1 and RS2. Groundwater samples were collected by advancing a probe equipped with a groundwater sampling device at the end of the rod to the target sampling depth (approximately 3 feet below where groundwater is first encountered). The probe is retracted about 4 feet to allow a screened retractable tip to be exposed to the aquifer. A one-quarter-inch diameter polyethylene tube is then inserted into the rod and a groundwater sample is extracted. Samples are collected in containers provided by the analytical laboratory. The samples are labeled, sealed, and stored in a cooler chilled to 4 degrees Celsius pending delivery to the analytical laboratory.

Upon completion of the soil sampling program, all soil borings were backfilled with the soil cuttings and bentonite and capped to match the surface. The sampling equipment was decontaminated between each use by washing with a non-phosphate solution (Alconox detergent) followed by a double potable water rinse.

ADDITIONAL SOIL ASSESSMENT

On October 9, 2014, hand auger tools were used to advance 31 soil borings (RB1 through RB31) throughout the site at the locations depicted on Figure 2. The borings were advanced to a total depth of 3 feet below grade and discrete soil samples were collected at the following depths:

- 0.0-0.5 feet
- 0.5-1.0 feet
- 1.0-1.5 feet
- 1.5-2.0 feet
- 2.0-2.5 feet
- 2.5-3.0 feet

The soil samples were collected in 4-ounce glass jars, labeled, and stored in a cooler with ice. Upon completion of the soil sampling program, all soil borings were backfilled with the soil cuttings. The hand auger was decontaminated between each use by washing with a non-phosphate solution (Alconox detergent) followed by a double potable water rinse.

All soil sampling was performed under the oversight of a California Professional Geologist. Soil boring logs for soil borings RS1 and RS2 are included in Appendix 2.

LABORATORY ANALYSIS

The samples were couriered to the state certified analytical laboratory BC Laboratories of Bakersfield, CA using chain-of-custody protocol. For the initial assessment, select soil samples were analyzed for organochlorine pesticides by EPA Method 8081A, metals by EPA Method 6010B/7471A, TPH by EPA Method 8015, and VOCs by EPA Method 8260B. Groundwater samples were analyzed for VOCs by EPA Method 8260B. For the additional assessment, all six soil samples from each boring were analyzed for organochlorine pesticides by EPA method 8081A, total lead by EPA method 6010B, or for TPH by EPA method 8015M. A copy of the analytical results is included in Appendix 1.

LABORATORY QUALITY ASSURANCE/ QUALITY CONTROL

BC Laboratories performed a Tier II data validation documenting the quality assurance/quality control (QA/QC) measures employed during laboratory analysis of soil samples. The data quality review ensured that data quality objectives were met for each of the following quality control measures:

- Data completeness
- Holding times and preservation
- Laboratory blanks
- Laboratory control standards
- Matrix spike/matrix spike duplicates

Overall, the QA/QC measures met BC Laboratories' data quality objectives as described in the analytical report provided in Appendix A of this report.

HUMAN HEALTH RISK SCREENING CRITERIA

Soil sample results analyzed for pesticides and metals were compared to the California Human Health Screening Levels (CHHSLs) established for residential sites. The CHHSLs are concentrations of hazardous chemicals in soil that the California Environmental Protection Agency (Cal/EPA) considers to be below thresholds of concern for risks to human health. They were developed using conservative standard exposure assumptions and chemical toxicity values. Under most circumstances, the presence of a chemical in soil, soil gas or indoor air at concentrations below the corresponding CHHSLs can be assumed to not pose a significant health risk to people who may live (residential CHHSLs) at the site. CHHSLs are solely an advisory number and have no regulatory effect. Furthermore, the presence of a chemical at concentrations in excess of a CHHSL does not indicate that adverse impacts to human health are occurring or will occur but suggests that further evaluation of potential human health concerns is warranted.

The soil sample results analyzed for pesticides, metals and VOCs were also compared to United States Environmental Protection Agency (USEPA) Regional Screening Levels (RSL) for Chemical Contaminants at Superfund Sites. The RSLs are chemical-specific concentrations for individual contaminants in air, drinking water, and soil that may warrant further investigation or site cleanup. The RSLs are based upon human health risk as determined based on standard exposure assumptions and chemical toxicity values.

Since there are no established CHHSLs or RSLs for TPH, concentrations of TPH in soil samples were compared to the Regional Water Quality Control Board - San Francisco Bay Region (SFBRWQCB) Environmental Screening Levels (ESLs). Similar to the two above screening criteria, ESLs have been established for chemicals commonly found in soil and groundwater at sites where releases of hazardous chemicals have occurred. The ESLs are considered to be conservative. Under most circumstances, the presence of a chemical in soil, soil gas or groundwater at concentrations below the corresponding ESL can be assumed to not pose a significant, long term (chronic) threat to human health and the environment. Additional evaluation is generally necessary at sites where a chemical is present at concentrations above the corresponding ESL.

Groundwater sample results analyzed for VOCs were compared to the Maximum Contaminant Levels (MCLs) established for California drinking water standards to be met by public water systems.

RESULTS

SOIL SAMPLING

Pesticides

Elevated concentrations of DDT and DDE were detected in surface sample RS14 at concentrations of 4.9 milligrams per kilogram (mg/kg) and 5.6 mg/kg, and elevated concentrations of dieldrin were detected in surface samples RS7 and RS14 at concentrations of 0.2 mg/kg and 0.55 mg/kg, respectively. Chlordane was detected above the established CHHSL in 14 surface samples, and ranged from 0.43 mg/kg to 24 mg/kg. A J-flag indicates that the detection is below the practical quantitation limit and above the method detection limit. The elevated concentrations of DDT, DDE, dieldrin, and chlordane were at or above the respective CHHSLs for residential settings. All other detected concentrations of pesticides in the surface soil samples and the deeper (3 feet below grade) soil samples analyzed for pesticides were below their respective CHHSL and RSL for pesticides in soil at residential sites.

Additional Soil Assessment

Soil borings RB1 through RB5 were advanced on the southern portion of the site adjacent to soil boring RS14, which contained the highest concentrations of detected pesticides during the initial assessment. Soil borings RB22 through RB31 were advanced throughout the site to further delineate chlordane on the site. A total of 90 soil samples were collected and analyzed for pesticides during the second round of sampling. As shown in Figures 3 and 4, 8 of the surface soil samples, 3 of the soil samples from 1 foot below grade, and 1 soil sample from 2 feet below grade contained concentrations of chlordane above the established CHHSL, and ranged from 0.49 mg/kg to 2.3 mg/kg. Soil boring RB2 contained elevated concentrations of chlordane at the surface, 1 foot below grade, and 2 feet below grade. All other soil samples analyzed for pesticides, including the bottom samples analyzed from 3 feet below grade, were below the established CHHSLs and RSLs for both residential and commercial/industrial setting. Therefore, the vertical extent of pesticides has been defined.

TPH

Concentrations of TPH-g, TPH-d, and TPH-o were not detected above the laboratory detection limit in any of the soil samples analyzed from RS1 and RS2, adjacent to the former 250 gallon gasoline UST.

Eight soil samples contained concentrations of TPH-d (ranging from 8J mg/kg to 140 mg/kg) and TPH-o (ranging from 8.7J mg/kg to 450 mg/kg) above the laboratory detection limit. The surface sample RS3 contained concentrations of TPH-d and TPH-o above the established ESL of 100 mg/kg, at concentrations of 140 mg/kg and 450 mg/kg respectively. The concentrations of TPH-d and TPH-o were not detected in the deeper sample analyzed from boring RS3 at 3 feet below grade. A J-flag indicates that the detection is below the practical quantitation limit and above the method detection limit. With the exception of the surface sample from RS3, the detected concentrations of TPH-d and TPH-o were below the established ESL of 100 mg/kg.

Concentrations of TPH-g were not detected above the laboratory detection limits in any of the samples analyzed, and were below the established ESLs.

Additional Soil Assessment

Soil borings RB17 through RB21 were advanced on the northern portion of the site where elevated concentrations of TPH-d and TPH-o were detected in soil boring RS3. A total of 30 soil samples were collected and analyzed for TPH-d and TPH-o during the second round of soil sampling. Ten of the samples contained concentrations of TPH-d above the detection limit, and ranged from 8.6J mg/kg to 35 mg/kg. The detected concentrations of TPH-d and TPH-o were below the established ESL. The detected concentrations of TPH-d and TPH-o in the samples analyzed from 3 feet below grade were below the established ESL. Therefore, the vertical extent of TPH has been defined.

VOCs

Two samples collected from boring RS1 and two samples from boring RS2 were analyzed for VOCs. No VOCs were detected above the laboratory detection limit in any of the four samples analyzed. None of the soil samples collected during the second round of sampling were analyzed for VOCs.

Metals

<u>Antimony</u>

An elevated concentration of antimony was detected in the surface sample collected from RS8 (6 mg/kg), which is above the residential RSL (3.1 mg/kg) and range of background concentrations for antimony, but below the residential CHHSL. Background concentrations of antimony found in California soils range from 0.15 mg/kg to 1.95 mg/kg (Kearney, 1996). However, the concentration of antimony in the deeper soil sample analyzed from 3 feet below grade was below the laboratory detection limit.

<u>Thallium</u>

The surface samples analyzed from borings RS10 and RS14 contained concentrations of thallium at 1.3J mg/kg and 1.5J mg/kg, respectively of thallium above the range of background concentrations (ranging from 0.17 mg/kg to 1.1 mg/kg), but were below the established CHHSL for residential and commercial/industrial settings.

<u>Lead</u>

Four of the surface samples collected near the former barn (borings RS3, and RS7, RS8, and RS9) contained concentrations of total lead that exceeded 50 mg/kg (ranging from 55 mg/kg to 310 mg/kg). A soluble analysis for lead was conducted for these four surface samples and compared to the established Soluble Threshold Limit Concentration (STLC) of 5 milligrams per liter (mg/L) for lead. Soil samples analyzed from borings RS3, RS7, and RS8 contained STLC concentrations of lead below 5 mg/L. Soil boring RS9 contained an STLC concentration of 8.3 mg/L of lead, above the 5 mg/L threshold. The surface soil sample from RS9 was then analyzed for lead by the Toxicity Characteristic Leaching Procedure (TCLP). The detected concentration was 0.052 mg/L, below the established TCLP for lead of 5 mg/L.

The deeper 3 foot samples were analyzed from these four locations and concentrations of total lead were below 50 mg/kg. All other detected concentrations of lead were below 50 mg/kg and below the established CHHSL and RSL for residential settings.

<u>Arsenic</u>

As shown in Table 2, varying concentrations of arsenic (ranging from 1.0 mg/kg to 4.6 mg/kg) were detected in the 28 soil samples analyzed. The detected concentrations of arsenic in all of the soil samples exceeded the CHHSLs and RSLs for arsenic in residential soil. However, for arsenic, normal background concentrations found in California soils are typically above CHHSLs and RSLs for both residential and commercial/industrial settings. Background concentrations of arsenic found in California soils range from 0.6 mg/kg to 11 mg/kg. The USEPA states that generally they do not require cleanup if arsenic is within or below natural background levels. The detected concentrations of arsenic in the 28 soil samples analyzed (1.0 mg/kg to 4.6 mg/kg) fall within the range of normal background concentrations of arsenic found in California soils.

All other concentrations of metals detected above the laboratory detection limits were below the background concentrations or screening levels.

Additional Soil Assessment

Soil borings RB6 through RB11 were advanced in the area of the former barn where elevated concentrations of lead were detected in the initial assessment. A total of 66 soil samples were collected and analyzed for lead during the second round of soil sampling. Detected concentrations of lead ranged from 2.1 mg/kg to 32 mg/kg, and were below the established CHHSL and RSL for residential settings.

GROUNDWATER SAMPLING

Grab groundwater samples were obtained from the two borings advanced adjacent to the former 250 gallon gasoline UST (RS1 and RS2). Low levels of toluene and styrene were detected in both groundwater samples analyzed for VOCs, and were below the respective MCLs. No other VOCs were detected above the laboratory detection limits.

CONCLUSIONS

The surface samples analyzed from RS3, RS7, RS8, and RS9 contained elevated concentrations of total lead above 50 mg/kg. Samples RS7 and RS8 contained concentrations of chlordane at 110 mg/kg and 310 mg/kg, which is above the residential CHHSL of 80 mg/kg. All 4 samples were then analyzed for soluble lead.

The detected concentrations of arsenic in the soil samples analyzed for arsenic were within the range of background levels in California soils. The detected concentration of antimony collected from surface sample RS8 was below the established CHHSL, and above the RSL. All other detected levels of metals were below the established CHHSL and RSL for residential and industrial/commercial settings.

A total of 4 pesticides (DDE, DDT, chlordane, and dieldrin) were detected above the established CHHSLs and RSLs for residential settings, and above the established TTLC in the surface sample RS14. Dieldrin was also detected above the CHHSL in the surface sample RS7. As shown in Figures 3 and 4, chlordane was detected above the established CHHSL for residential settings in 22 of the soil samples collected at the surface, 3 samples collected at 1 foot below grade (RB2, RB4, and RB29), and 1 sample collected from 2 feet below grade (RB2). All other soil samples analyzed for pesticides, including the bottom samples analyzed from 3 feet below grade, were below the established CHHSLs and RSLs for both residential and commercial/industrial setting.

The surface sample RS3 contained concentrations of TPH-d and TPH-o above the established ESL of 100 mg/kg, at concentrations of 140 mg/kg and 450 mg/kg respectively. The concentrations of TPH-d and TPH-o were not detected in the deeper sample analyzed from boring RS3 at 3 feet below grade. All other detected levels of TPH were below the established ESL.

No VOCs were detected above the established RSLs for soil, and no VOCs were detected above the established MCLs for groundwater.

RECOMMENDATIONS

Based on the soil sampling results, we recommend that the three areas with elevated concentrations of lead in the surface soil samples (RS7, RS8 and RS9), and the area with elevated DDE and DDT in the surface soil sample RS14 be remediated prior to residential development of the site. The remediation should include the excavation of the soil with elevated concentrations of lead. The soluble lead in soil at the surface in the vicinity of soil sample RS9 was above the STLC of 5 mg/L, and is considered Non RCRA hazardous waste, and will require disposal at a Class II California hazardous waste accepting facility. The soil in the vicinity of sample RS14 contained elevated concentrations of DDE and DDT above the established TTLC, and is also considered Non RCRA hazardous waste. Confirmation soil samples should be collected following the excavation of the soil within these four areas to confirm that all elevated concentrations of lead, DDE, and DDT have been removed from the surface.

For mitigation of chlordane impacted soil on site, we propose the following:

- Contact the Ventura County Environmental Health Department (VCEHD) or the Department of Toxic Substances Control (DTSC) to determine if they, or another agency, will provide oversight for the project. Corrective measures and/or engineering controls deemed necessary by the VCEHD, the DTSC, or other oversight agency may be implemented.

LIMITATIONS

This report has been prepared for and is intended for the exclusive use of the City of Oxnard. The contents of this report should not be relied upon by any other party other than Dansk Investments, LLC without the written consent of Rincon Consultants, Inc.

Our conclusions regarding the site are based on observations of existing site conditions and the results of a limited subsurface sampling program. The results of this evaluation are qualified by the fact that only limited sampling and analytical testing was conducted during this assessment.

This scope was not intended to completely establish the quantities and distribution of contaminants present at the site. The concentrations of contaminants measured at any given location may not be representative of conditions at other locations. Further, conditions may change at any particular location as a function of time in response to natural conditions, chemical reactions and other events. Conclusions regarding the condition of the site do not represent a warranty that all areas within the site are similar to those sampled.

Table 1- Soil Analytical Summary - Organochlorine Pesticides

Daly/Dansk Pleasant Valley Road Apartments and Senior Living/Memory Care Project, Oxnard, California

Sample Designation	Sample Depth (feet)	Sample Date	Organochlorine Pesticides					
			4,4-DDD mg/kg	4,4-DDE mg/kg	4,4-DDT mg/kg	Chlordane mg/kg	Dieldrin mg/kg	Other Pesticides mg/kg
RS3	0.5	8/27/2014	0.017	0.038	0.045	ND<0.42	0.017	ND
RS4	0.5	8/27/2014	0.0072	0.068	0.068	ND<0.38	ND<0.0005	ND
RS5	0.5	8/27/2014	0.026J	0.27	0.12	**0.76**	0.0049	Endrin- 0.016J
RS6	0.5	8/27/2014	ND<0.0005	0.00049J	0.00034J	ND<0.015	ND<0.0005	ND
RS7	0.5	8/27/2014	0.11	0.4	0.49	**3.5**	**0.2**	Endrin- 0.055
	3	8/27/2014	ND<0.0005	ND<0.0005	ND<0.0005	0.034	ND<0.0005	delta-BHC-0.00056
RS8	0.5	8/27/2014	0.052J	0.14	0.35	**0.8J**	0.021	gamma-BHC-0.0058J, heptachlor-0.025
RS9	0.5	8/27/2014	0.13	0.19	0.78	**2.4**	0.0095J	ND
	3	8/27/2014	ND<0.0005	0.00023	ND<0.0005	0.058J	ND<0.0005	delta-BHC-0.00093
RS10	0.5	8/27/2014	0.035J	0.068	0.16	**0.43**	0.0051	ND
RS11	0.5	8/27/2014	0.028J	0.073	0.18	**0.66**	0.0027	ND
RS12	0.5	8/27/2014	0.029J	0.12	0.13	**0.67**	ND>0.0005	alpha-BHC-0.0017
RS13	0.5	8/27/2014	0.066	0.52	0.55	**1.8**	0.0023	ND
	3	8/27/2014	ND<0.0005	0.0026	0.0021	ND<0.05	ND<0.0005	delta-BHC-0.00086
RS14	0.5	8/27/2014	1J	**4.9**	**5.6**	**24**	**0.55**	ND
	3	8/27/2014	ND<0.0005	0.0026	ND<0.0005	ND<0.05	ND<0.0005	delta-BHC-0.00055
RS15	0.5	8/27/2014	0.018J	0.32	0.26	**1.4**	0.027J	ND
RS16	0.5	8/27/2014	0.011J	0.47	0.16	**1.7**	0.004	ND
	3	8/27/2014	ND<0.0005	ND<0.0005	ND<0.0005	ND<0.05	ND<0.0005	ND
RS17	0.5	8/27/2014	0.0058	0.062	0.033	**2.5**	0.0006	ND
RS18	0.5	8/27/2014	0.013J	0.27	0.18	**3.3**	ND<0.0005	ND
	3	8/27/2014	ND<0.0005	ND<0.0005	ND<0.0005	ND<0.05	ND<0.0005	ND
RS19	0.5	8/27/2014	0.0091J	0.083	0.11	0.3	0.0021	ND
RS20	0.5	8/27/2014	0.07	0.36	0.28	**1.8**	0.03J	ND
	3	8/27/2014	ND<0.0005	ND<0.0005	ND<0.0005	ND<0.05	0.00023J	ND
RS21	0.5	8/27/2014	0.0041	0.019	0.019	0.3J	ND<0.0005	ND
RB1	0.5	10/9/2014	ND<0.0016	0.5	0.07	**0.87**	ND<0.0015	ND
	1	10/9/2014	ND<0.0016	ND<0.0016	ND<0.0016	ND<0.047	ND<0.0016	ND
	1.5	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015	ND
	2	10/9/2014	ND<0.0014	0.015	0.0039	ND<0.043	ND<0.0014	ND
	2.5	10/9/2014	ND<0.0016	ND<0.0016	ND<0.0016	ND<0.047	ND<0.0016	ND
	3	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015	ND
RB2	0.5	10/9/2014	ND<0.0015	0.76	0.098	**1.2**	ND<0.0015	ND
	1	10/9/2014	ND<0.0015	0.48	0.23	**1.2**	ND<0.0015	ND
	1.5	10/9/2014	ND<0.0014	ND<0.0014	ND<0.0014	ND<0.043	ND<0.0014	ND
	2	10/9/2014	ND<0.0014	0.14	0.09	**0.52**	ND<0.0014	ND
	2.5	10/9/2014	ND<0.0014	ND<0.0014	ND<0.0014	ND<0.043	ND<0.0014	ND
	3	10/9/2014	ND<0.0014	ND<0.0014	ND<0.0014	ND<0.043	ND<0.0014	ND
RB3	0.5	10/9/2014	0.018	1.5	0.31	**2.3**	ND<0.0015	ND
	1	10/9/2014	ND<0.0015	0.044	0.0017	ND<0.045	ND<0.0015	ND
	1.5	10/9/2014	0.0041J	0.0064	0.0018	ND<0.044	ND<0.0015	ND
	2	10/9/2014	ND<0.0014	0.0011	ND<0.0014	0.074	ND<0.0014	ND
	2.5	10/9/2014	ND<0.0016	0.00038J	ND<0.0016	ND<0.047	ND<0.0015	ND
	3	10/9/2014	ND<0.0015	0.0022	0.00053J	ND<0.046	ND<0.0015	ND
RB4	0.5	10/9/2014	0.0043	0.33	0.052	**0.58**	ND<0.0014	ND
	1	10/9/2014	0.0079	0.23	0.13	**0.67**	ND<0.0015	ND
	1.5	10/9/2014	ND<0.0016	ND<0.0016	0.017	ND<0.047	ND<0.0016	ND
	2	10/9/2014	ND<0.0015	0.001J	0.00049J	ND<0.045	ND<0.0015	ND
	2.5	10/9/2014	ND<0.0014	ND<0.0014	0.0014	ND<0.041	ND<0.0014	ND
	3	10/9/2014	ND<0.0015	ND<0.0015	0.00022J	ND<0.045	ND<0.0015	ND
RB5	0.5	10/9/2014	0.011	0.62	0.29	ND<0.044	ND<0.0015	ND
	1	10/9/2014	ND<0.0015	0.0024	0.00093J	ND<0.046	ND<0.0015	ND
	1.5	10/9/2014	ND<0.0016	0.0012J	0.0005J	ND<0.047	ND<0.0016	ND
	2	10/9/2014	ND<0.0015	0.0015	0.00065J	ND<0.046	ND<0.0015	ND
	2.5	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015	ND
	3	10/9/2014	ND<0.0015	0.00051J	0.00029J	ND<0.045	ND<0.0015	ND
RB22	0.5	10/9/2014	ND<0.0014	0.032	0.021	0.17	ND<0.0014	Toxaphene-0.075J
	1	10/9/2014	ND<0.0015	0.0072	0.0079	0.12J	ND<0.0015	Toxaphene-0.035J
	1.5	10/9/2014	ND<0.0015	0.0012J	0.0012J	ND<0.045	ND<0.0015	ND
	2	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015	ND
	2.5	10/9/2014	ND<0.0014	0.0017	0.0014	ND<0.042	ND<0.0014	ND
	3	10/9/2014	ND<0.0014	ND<0.0014	ND<0.0014	ND<0.042	ND<0.0014	ND
RB23	0.5	10/9/2014	ND<0.0015	0.002	0.001J	ND<0.045	ND<0.0015	ND
	1	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.044	ND<0.0015	ND
	1.5	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015	ND
	2	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015	ND
	2.5	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.044	ND<0.0015	ND
	3	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015	ND

Table 1- Soil Analytical Summary - Organochlorine Pesticides

Daly/Dansk Pleasant Valley Road Apartments and Senior Living/Memory Care Project, Oxnard, California

Sample Designation	Sample Depth (feet)	Sample Date	Organochlorine Pesticides					
			4,4-DDD mg/kg	4,4-DDE mg/kg	4,4-DDT mg/kg	Chlordane mg/kg	Dieldrin mg/kg	Other Pesticides mg/kg
RB24	0.5	10/9/2014	ND<0.0014	0.11	0.057	**0.49**	ND<0.0014	Toxaphene-0.3
	1	10/9/2014	ND<0.0015	0.032	0.018	ND<0.045	ND<0.0015	ND
	1.5	10/9/2014	ND<0.0014	0.032	0.019	0.19	ND<0.0014	Toxaphene-0.084J
	2	10/9/2014	ND<0.0015	ND<0.0015	0.00064J	ND<0.045	ND<0.0015	ND
	2.5	10/9/2014	ND<0.0014	0.0022	0.00098J	ND<0.042	ND<0.0014	ND
	3	10/9/2014	ND<0.0015	0.0048	0.0034	ND<0.045	ND<0.0015	ND
RB25	0.5	10/9/2014	ND<0.0014	0.03	0.025	0.22	ND<0.0014	Toxaphene-0.13J
	1	10/9/2014	ND<0.0015	0.0082	0.0055	0.1J	ND<0.0015	Toxaphene-0.029J
	1.5	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.044	ND<0.0015	ND
	2	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.044	ND<0.0015	ND
	2.5	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015	ND
	3	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015	ND
RB26	0.5	10/9/2014	0.063	0.54	0.2	**1.9**	0.021	ND
	1	10/9/2014	0.0022	0.029	0.011	0.13	ND<0.0016	ND
	1.5	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015	ND
	2	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015	ND
	2.5	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.044	ND<0.0015	ND
	3	10/9/2014	ND<0.0015	ND<0.0015	0.00093J	ND<0.045	ND<0.0015	ND
RB27	0.5	10/9/2014	0.00024J	0.0021	0.00066J	ND<0.043	ND<0.0014	ND
	1	10/9/2014	ND<0.0014	ND<0.0014	ND<0.0014	ND<0.043	ND<0.0014	ND
	1.5	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.044	ND<0.0015	ND
	2	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015	ND
	2.5	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.046	ND<0.0015	ND
	3	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.046	ND<0.0015	ND
RB28	0.5	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.046	ND<0.0015	ND
	1	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015	ND
	1.5	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015	ND
	2	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015	ND
	2.5	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015	ND
	3	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.043	ND<0.0015	ND
RB29	0.5	10/9/2014	ND<0.0015	0.31	0.12	**0.67**	ND<0.0015	ND
	1	10/9/2014	ND<0.0015	0.21	0.063	**0.54**	ND<0.0015	ND
	1.5	10/9/2014	ND<0.0015	0.0032	0.0014J	ND<0.045	ND<0.0015	ND
	2	10/9/2014	ND<0.0014	0.0065	0.0041	ND<0.043	ND<0.0014	ND
	2.5	10/9/2014	ND<0.0014	0.0008J	0.0006J	ND<0.043	ND<0.0014	ND
	3	10/9/2014	ND<0.0014	0.0015	0.0008J	ND<0.043	ND<0.0014	ND
RB30	0.5	10/9/2014	ND<0.0016	0.53	0.4	**1.3**	ND<0.0016	ND
	1	10/9/2014	ND<0.0014	0.055	0.019	ND<0.043	ND<0.0014	ND
	1.5	10/9/2014	ND<0.0015	0.0016	0.00076J	ND<0.045	ND<0.0015	ND
	2	10/9/2014	ND<0.0014	ND<0.0014	ND<0.0014	ND<0.043	ND<0.0014	ND
	2.5	10/9/2014	ND<0.0015	0.0015	0.00033J	ND<0.045	ND<0.0015	ND
	3	10/9/2014	ND<0.0014	0.00085J	0.00034J	ND<0.043	ND<0.0014	ND
RB31	0.5	10/9/2014	ND<0.0014	0.17	0.015	ND<0.043	ND<0.0014	ND
	1	10/9/2014	ND<0.0014	0.0032	0.0022	ND<0.043	ND<0.0014	ND
	1.5	10/9/2014	ND<0.0015	0.00057J	ND<0.0015	ND<0.045	ND<0.0015	ND
	2	10/9/2014	ND<0.0014	0.00042J	ND<0.0014	ND<0.043	ND<0.0014	ND
	2.5	10/9/2014	ND<0.0015	0.00038J	0.00036J	ND<0.046	ND<0.0015	ND
	3	10/9/2014	ND<0.0015	0.00035J	ND<0.0015	ND<0.044	ND<0.0015	ND
Residential CHHSL			2.3	1.6	1.6	0.43	0.035	varies
Commercial/ Industrial CHHSL			9.0	6.3	6.3	1.7	0.13	varies
Residential USEPA RSL			2.2	1.6	1.9	1.8	0.033	varies
Commercial/ Industrial USEPA RSL			9.6	6.8	6.8	8.0	0.14	varies

mg/kg = milligrams per kilogram
ND = Not detected above laboratory detection limits
J -Flag indicates detection is below the practical quantitation limit and above the method detection limit.
Background Concentration = Kearney, *Background Concentrations of Trace and Major Elements in California Soils,* University of California, 1996
CHHSL = California Human Health Screening Levels, January 2005
RSLs = USEPA Regional Screening Levels for Chemical Contaminants at Superfund Sites, May 2014
Concentrations in BOLD exceed the residential CHHSL
Soil samples analyzed by BC Laboratories, Inc.
Analysis: organochlorine pesticides by EPA Method 8081A

Table 2 - Soil Analytical Summary- Title 22 Metals
Daly/Dansk Pleasant Valley Road Apartments and Senior Living/Memory Care Project, Oxnard, California

Sample Designation	Depth (Feet)	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
			Results in milligrams per kilogram (mg/kg)																
RS1	10	8/27/2014	ND<0.33	2.0	23	0.11J	0.16J	3.4	1.4J	2.5	1.5J	ND<0.036	0.45J	3.6	1.1	ND<0.067	ND<0.64	7.7	11
RS1	15	8/27/2014	ND<0.33	1.9	30	0.12J	0.12J	4.6	1.8J	5.6	1.5J	ND<0.036	0.48J	4.5	ND<0.98	ND<0.067	ND<0.64	9.7	13
RS2	10	8/27/2014	0.47J	1.0	19	0.11J	0.14J	3.4	1.4J	2.5	1.2J	ND<0.036	0.19J	3.2	0.98J	ND<0.067	ND<0.64	7.6	10
RS2	15	8/27/2014	ND<0.33	2.2	34	0.14J	0.2J	4.5	2J	3.4	1.6J	ND<0.036	0.56J	4.7	1.3	ND<0.067	0.99J	9.5	14
RS3	0.5	8/27/2014	0.54J	2.2	56	0.16J	0.64	8.9	2.4J	17	55/*2.3**	ND<0.036	0.99J	8.4	2.1	ND<0.067	ND<0.64	17	81
	3	8/27/2014	ND<0.33	2.5	59	0.21J	0.34J	8.2	3.1	6.6	3.3	ND<0.036	0.65J	8.2	1.9	ND<0.067	0.83J	17	25
RS4	0.5	8/27/2014	--	2.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RS5	0.5	8/27/2014	0.37J	4.6	82	0.29 J	ND<0.50	6.0	5.4	8.9	2.6	0.13 J	1.0 J	5.0	1.1	0.074 J	ND<5.0	33	38
RS6	0.5	8/27/2014	ND<0.33	2.7	64	0.23J	0.45J	8.6	3.2	7.2	3.3	ND<0.036	0.8J	8.9	1.4	ND<0.067	ND<0.64	18	25
RS7	0.5	8/27/2014	ND<0.33	2.5	97	0.22J	0.61	15	4.3	16	**110**/*3.4**	ND<0.036	0.74J	13	2.5	0.14J	ND<0.64	24	88
	3	8/27/2014	NA	NA	NA	NA	NA	NA	NA	NA	3.0	NA	NA	NA	NA	NA	NA	NA	NA
RS8	0.5	8/27/2014	6	3.4	69	0.24J	0.51	9.6	3.7	11	**310**/*4.3**	ND<0.036	0.92J	10	3.1	ND<0.067	0.79J	21	73
	3	8/27/2014	ND<0.33	3.4	87	0.27J	0.54	11	4.1	8.2	3.5	ND<0.036	1J	11	1.6	ND<0.067	ND<0.64	21	29
RS9	0.5	8/27/2014	ND<0.33	3.7	75	0.24J	0.53	10	3.8	11	60/***8.3***/*0.052* *	ND<0.036	0.79J	9.5	2.7	ND<0.067	ND<0.64	19	89
	3	8/27/2014	ND<0.33	3.7	82	0.26J	0.46J	10	4	7.9	3.5	ND<0.036	0.85J	11	2.2	ND<0.067	ND<0.64	21	29
RS10	0.5	8/27/2014	ND<0.33	2.7	67	0.22J	0.46J	8.6	3.2	9.1	12	ND<0.036	0.68J	8.7	2.1	ND<0.067	1.5J	18	58
	3	8/27/2014	0.38J	3.7	76	0.27J	0.48J	10	4.1	8.6	3.5	ND<0.036	1.1J	11	2	ND<0.067	ND<0.64	21	34
RS11	0.5	8/27/2014	--	1.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RS12	0.5	8/27/2014	--	3.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RS13	0.5	8/27/2014	ND<0.33	4.4	61	0.26J	0.69	12	3.9	14	20	ND<0.036	0.8J	10	2.4	ND<0.067	ND<0.64	20	65
RS14	0.5	8/27/2014	ND<0.33	3.2	61	0.24J	0.7	13	3.4	21	20	ND<0.036	0.84J	9.0	1.5	ND<0.067	1.3J	20	120
RS15	0.5	8/27/2014	--	4.2	--	--	--	--	--	--	12	--	--	--	--	--	--	--	--
RS16	0.5	8/27/2014	--	3.9	--	--	--	--	--	--	12	--	--	--	--	--	--	--	--
RS17	0.5	8/27/2014	--	3.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RS18	0.5	8/27/2014	--	3.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RS19	0.5	8/27/2014	--	3.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RS20	0.5	8/27/2014	--	3.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RS21	0.5	8/27/2014	--	3.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RS22	0.5	8/27/2014	--	2.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
RB6	0.5	10/9/2014	--	--	--	--	--	--	--	--	14	--	--	--	--	--	--	--	--
	1	10/9/2014	--	--	--	--	--	--	--	--	4	--	--	--	--	--	--	--	--
	1.5	10/9/2014	--	--	--	--	--	--	--	--	4	--	--	--	--	--	--	--	--
	2	10/9/2014	--	--	--	--	--	--	--	--	3.5	--	--	--	--	--	--	--	--
	2.5	10/9/2014	--	--	--	--	--	--	--	--	3.2	--	--	--	--	--	--	--	--
	3	10/9/2014	--	--	--	--	--	--	--	--	5.8	--	--	--	--	--	--	--	--
RB7	0.5	10/9/2014	--	--	--	--	--	--	--	--	19	--	--	--	--	--	--	--	--
	1	10/9/2014	--	--	--	--	--	--	--	--	5.2	--	--	--	--	--	--	--	--
	1.5	10/9/2014	--	--	--	--	--	--	--	--	3.4	--	--	--	--	--	--	--	--
	2	10/9/2014	--	--	--	--	--	--	--	--	3.9	--	--	--	--	--	--	--	--
	2.5	10/9/2014	--	--	--	--	--	--	--	--	2.8	--	--	--	--	--	--	--	--
	3	10/9/2014	--	--	--	--	--	--	--	--	2.5	--	--	--	--	--	--	--	--
RB8	0.5	10/9/2014	--	--	--	--	--	--	--	--	12	--	--	--	--	--	--	--	--
	1	10/9/2014	--	--	--	--	--	--	--	--	5.2	--	--	--	--	--	--	--	--
	1.5	10/9/2014	--	--	--	--	--	--	--	--	4.7	--	--	--	--	--	--	--	--
	2	10/9/2014	--	--	--	--	--	--	--	--	7.2	--	--	--	--	--	--	--	--
	2.5	10/9/2014	--	--	--	--	--	--	--	--	6.8	--	--	--	--	--	--	--	--
	3	10/9/2014	--	--	--	--	--	--	--	--	4.8	--	--	--	--	--	--	--	--
RB9	0.5	10/9/2014	--	--	--	--	--	--	--	--	26	--	--	--	--	--	--	--	--
	1	10/9/2014	--	--	--	--	--	--	--	--	8.7	--	--	--	--	--	--	--	--
	1.5	10/9/2014	--	--	--	--	--	--	--	--	5.2	--	--	--	--	--	--	--	--
	2	10/9/2014	--	--	--	--	--	--	--	--	6.2	--	--	--	--	--	--	--	--
	2.5	10/9/2014	--	--	--	--	--	--	--	--	4.9	--	--	--	--	--	--	--	--
	3	10/9/2014	--	--	--	--	--	--	--	--	7.6	--	--	--	--	--	--	--	--

Table 2 - Soil Analytical Summary- Title 22 Metals
Daly/Dansk Pleasant Valley Road Apartments and Senior Living/Memory Care Project, Oxnard, California

Sample Designation	Depth (Feet)	Sample Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
			Results in milligrams per kilogram (mg/kg)																
RB10	0.5	10/9/2014	--	--	--	--	--	--	--	--	14	--	--	--	--	--	--	--	--
	1	10/9/2014	--	--	--	--	--	--	--	--	12	--	--	--	--	--	--	--	--
	1.5	10/9/2014	--	--	--	--	--	--	--	--	12	--	--	--	--	--	--	--	--
	2	10/9/2014	--	--	--	--	--	--	--	--	4	--	--	--	--	--	--	--	--
	2.5	10/9/2014	--	--	--	--	--	--	--	--	4.2	--	--	--	--	--	--	--	--
	3	10/9/2014	--	--	--	--	--	--	--	--	4.5	--	--	--	--	--	--	--	--
RB11	0.5	10/9/2014	--	--	--	--	--	--	--	--	5.5	--	--	--	--	--	--	--	--
	1	10/9/2014	--	--	--	--	--	--	--	--	5.4	--	--	--	--	--	--	--	--
	1.5	10/9/2014	--	--	--	--	--	--	--	--	8.7	--	--	--	--	--	--	--	--
	2	10/9/2014	--	--	--	--	--	--	--	--	9.1	--	--	--	--	--	--	--	--
	2.5	10/9/2014	--	--	--	--	--	--	--	--	4.9	--	--	--	--	--	--	--	--
	3	10/9/2014	--	--	--	--	--	--	--	--	3.4	--	--	--	--	--	--	--	--
RB12	0.5	10/9/2014	--	--	--	--	--	--	--	--	32	--	--	--	--	--	--	--	--
	1	10/9/2014	--	--	--	--	--	--	--	--	16	--	--	--	--	--	--	--	--
	1.5	10/9/2014	--	--	--	--	--	--	--	--	7.9	--	--	--	--	--	--	--	--
	2	10/9/2014	--	--	--	--	--	--	--	--	5.5	--	--	--	--	--	--	--	--
	2.5	10/9/2014	--	--	--	--	--	--	--	--	3.6	--	--	--	--	--	--	--	--
	3	10/9/2014	--	--	--	--	--	--	--	--	5.3	--	--	--	--	--	--	--	--
RB13	0.5	10/9/2014	--	--	--	--	--	--	--	--	2	--	--	--	--	--	--	--	--
	1	10/9/2014	--	--	--	--	--	--	--	--	7.6	--	--	--	--	--	--	--	--
	1.5	10/9/2014	--	--	--	--	--	--	--	--	5.4	--	--	--	--	--	--	--	--
	2	10/9/2014	--	--	--	--	--	--	--	--	4.9	--	--	--	--	--	--	--	--
	2.5	10/9/2014	--	--	--	--	--	--	--	--	3.5	--	--	--	--	--	--	--	--
	3	10/9/2014	--	--	--	--	--	--	--	--	2.7	--	--	--	--	--	--	--	--
RB14	0.5	10/9/2014	--	--	--	--	--	--	--	--	8.4	--	--	--	--	--	--	--	--
	1	10/9/2014	--	--	--	--	--	--	--	--	7.8	--	--	--	--	--	--	--	--
	1.5	10/9/2014	--	--	--	--	--	--	--	--	7.9	--	--	--	--	--	--	--	--
	2	10/9/2014	--	--	--	--	--	--	--	--	7.4	--	--	--	--	--	--	--	--
	2.5	10/9/2014	--	--	--	--	--	--	--	--	4.2	--	--	--	--	--	--	--	--
	3	10/9/2014	--	--	--	--	--	--	--	--	3.2	--	--	--	--	--	--	--	--
RB15	0.5	10/9/2014	--	--	--	--	--	--	--	--	22	--	--	--	--	--	--	--	--
	1	10/9/2014	--	--	--	--	--	--	--	--	15	--	--	--	--	--	--	--	--
	1.5	10/9/2014	--	--	--	--	--	--	--	--	27	--	--	--	--	--	--	--	--
	2	10/9/2014	--	--	--	--	--	--	--	--	4.4	--	--	--	--	--	--	--	--
	2.5	10/9/2014	--	--	--	--	--	--	--	--	4.3	--	--	--	--	--	--	--	--
	3	10/9/2014	--	--	--	--	--	--	--	--	2.1	--	--	--	--	--	--	--	--
RB16	0.5	10/9/2014	--	--	--	--	--	--	--	--	22	--	--	--	--	--	--	--	--
	1	10/9/2014	--	--	--	--	--	--	--	--	5.7	--	--	--	--	--	--	--	--
	1.5	10/9/2014	--	--	--	--	--	--	--	--	4.1	--	--	--	--	--	--	--	--
	2	10/9/2014	--	--	--	--	--	--	--	--	4	--	--	--	--	--	--	--	--
	2.5	10/9/2014	--	--	--	--	--	--	--	--	3.9	--	--	--	--	--	--	--	--
	3	10/9/2014	--	--	--	--	--	--	--	--	2.8	--	--	--	--	--	--	--	--
Background Concentration			*0.15- 1.95*	*0.6- 11*	*133- 1,400*	*0.25-2.70*	*0.05-1.70*	*23-1,579*	*2.7-46.9*	*9.1-96.4*	*12.4-97.1*	*0.05-0.90*	*0.1-9.6*	*9.0-509*	*0.015-0.430*	*0.10- 8.3*	*0.17-1.1*	*39- 288*	*88-236*
CHHSL- (R)			*30*	*0.07*	*5,200*	*150*	*1.7*	*100,000*	*660*	*3,000*	*80*	*18*	*380*	*1,600*	*380*	*380*	*5*	*530*	*23,000*
CHHSL- (C/I)			*380*	*0.24*	*63,000*	*1,700*	*7.5*	*100,000*	*3,200*	*38,000*	*320*	*180*	*4,800*	*16,000*	*4,800*	*4,800*	*63*	*6,700*	*100,000*
USEPA RSL- Soil (R)			*3.1*	*0.67*	*1,500*	*16*	*7.0*	*12,000*	*2.3*	*310*	*400*	*0.94*	*39*	*NE*	*39*	*39*	*NE*	*66*	*2,300*
USEPA RSL- Soil (C/I)			*47*	*3.0*	*22,000*	*230*	*98*	*150,000*	*35*	*4,700*	*800*	*4.0*	*580*	*NE*	*580*	*580*	*NE*	*840*	*35,000*
TTLC			*500*	*500*	*10,000*	*75*	*100*	*2,500*	*8,000*	*2,500*	*1,000*	*20*	*3,500*	*2,000*	*100*	*500*	*700*	*2,400*	*5,000*
STLC (mg/L)			*15*	*5*	*100*	*0.75*	*1*	*5*	*80*	*25*	*5*	*0.2*	*350*	*20*	*1*	*5*	*7*	*24*	*250*

ND = not detected at or above the laboratory detection limit
"--" = Not analyzed
NE = Not established. RSLs have not been established for total thallium and total nickel
J -Flag indicates detection is below the practical quantitation limit and above the method detection limit.
Lead concentrations detected above the residential CHHSL for lead in soil is **bold,** below STLC is italicized, above STLC is **bold** and ***italicized,*** TCLP result is red and *italicized*
* = STLC concentrations in milligrams per liter
Background Concentration = Kearney, *Background Concentrations of Trace and Major Elements in California Soils,* University of California, 1996
CHHSL = California Human Health Screening Levels (Cal/EPA - *Use of California Human Health Screening Levels in Evaluation of Contaminated Properties, January* 2005)
RSLs = USEPA Regional Screening Levels for Chemical Contaminants at Superfund Sites, May 2014
(R) = Residential
(C/I) = Commercial/Industrial
TTLC = Total Threshold Limit Concentration
STLC = Soluble Threshold Limit Concentration (in milligrams per liter [mg/L])
Soil samples analyzed by BC Laboratories, Inc.
Metals analyzed by Environmental Protection Agency (EPA) Method 6010B/7471A

Table 3 - Soil Analytical Summary- TPH and VOCs
Daly/Dansk Pleasant Valley Road Apartments and Senior Living/Memory Care Project, Oxnard, California

Sample Designation	Depth (Feet)	Sample Date	TPH-g (mg/kg)	TPH-d (mg/kg)	TPH-o (mg/kg)	VOCs (mg/kg)
RS1	10	8/27/2014	ND<0.1	ND<1.2	ND<6.5	ND
	15	8/27/2014	ND<0.1	ND<1.2	ND<6.5	ND
RS2	10	8/27/2014	ND<0.1	ND<1.2	ND<6.5	ND
	15	8/27/2014	ND<0.1	ND<1.2	ND<6.5	ND
RS3	0.5	8/27/2014	ND<0.1	**140**	**450**	--
	3	8/27/2014	ND<0.1	ND<1.2	ND<6.5	--
RS5	0.5	8/27/2014	ND<0.1	31	46	--
RS6	0.5	8/27/2014	ND<0.1	ND<1.2	ND<6.5	--
RS7	0.5	8/27/2014	ND<0.1	20	47	--
RS8	0.5	8/27/2014	ND<0.1	12	27	--
	3	8/27/2014	ND<0.1	8J	9.5J	--
RS9	0.5	8/27/2014	ND<0.1	21	61	--
	3	8/27/2014	ND<0.1	14	16J	--
RS10	0.5	8/27/2014	ND<0.1	42	60	--
	3	8/27/2014	ND<0.1	16	10J	--
RS13	0.5	8/27/2014	ND<0.1	14	14J	--
RS14	0.5	8/27/2014	ND<0.1	8.3J	8.7J	--
RB17	0.5	10/9/2014	--	15	12J	--
	1	10/9/2014	--	ND<1.2	ND<6.5	--
	1.5	10/9/2014	--	ND<1.2	ND<6.5	--
	2	10/9/2014	--	ND<1.2	ND<6.5	--
	2.5	10/9/2014	--	ND<1.2	7.3J	--
	3	10/9/2014	--	ND<1.2	ND<6.5	--
RB18	0.5	10/9/2014	--	35	27	--
	1	10/9/2014	--	8.6J	ND<6.5	--
	1.5	10/9/2014	--	ND<1.2	ND<6.5	--
	2	10/9/2014	--	ND<1.2	ND<6.5	--
	2.5	10/9/2014	--	ND<1.2	ND<6.5	--
	3	10/9/2014	--	7.9J	ND<6.5	--
RB19	0.5	10/9/2014	--	8.7J	7.7J	--
	1	10/9/2014	--	11	7.2J	--
	1.5	10/9/2014	--	13	7.5J	--
	2	10/9/2014	--	ND<1.2	ND<6.5	--
	2.5	10/9/2014	--	ND<1.2	ND<6.5	--
	3	10/9/2014	--	ND<1.2	ND<6.5	--
RB20	0.5	10/9/2014	--	62	33	--
	1	10/9/2014	--	13	14J	--
	1.5	10/9/2014	--	ND<1.2	ND<6.5	--
	2	10/9/2014	--	ND<1.2	ND<6.5	--
	2.5	10/9/2014	--	ND<1.2	ND<6.5	--
	3	10/9/2014	--	ND<1.2	8.6J	--
RB21	0.5	10/9/2014	--	14	14J	--
	1	10/9/2014	--	ND<1.2	ND<6.5	--
	1.5	10/9/2014	--	ND<1.2	ND<6.5	--
	2	10/9/2014	--	ND<1.2	ND<6.5	--
	2.5	10/9/2014	--	ND<1.2	ND<6.5	--
	3	10/9/2014	--	ND<1.2	ND<6.5	--
USEPA RSL- Soil (R)			NE	NE	NE	varies
USEPA RSL- Soil (C/I)			NE	NE	NE	varies
ESL-Soil			100	100	100	varies

mg/kg = milligrams per kilogram
J -Flag indicates detection is below the practical quantitation limit and above the method detection limit.
TPH-g=total petroleum hydrocarbon-gasoline
TPH-d=total petroleum hydrocarbon-diesel
TPH-o=total petroleum hydrocarbon-oil
VOCs = volatile organic compounds
ND = not detected at or above the laboratory reporting limits
"--" = Not analyzed
NE = Not established
RSLs = USEPA Regional Screening Levels for Chemical Contaminants at Superfund Sites, November 2013
SFBRWQCB ESL = San Francisco Bay Regional Water Quality Control Board
Levels (Direct Exposure Soil Screening Levels for Protection of Human Health
Soil samples analyzed by BC Laboratories, Inc.
Analysis: TPH by EPA method 8015M, VOCs by EPA method 8260B

Table 4 - Groundwater Analytical Summary- VOCs
Daly/Dansk Pleasant Valley Road Apartments and Senior Living/Memory Care Project, Oxnard, California

Sample Designation	Depth (Feet)	Styrene (µg/L)	Toluene (µg/L)	Other VOCs (µg/L)
RS1	5	0.14J	0.27J	ND
RS2	10	1.2	0.2J	ND
MCL		100	150	varies

Groundwater samples collected on August 27, 2014.
(µg/L) = micrograms per liter
J -Flag indicates detection is below the practical quantitation limit and above the method detection limit.
VOCs = volatile organic compounds
ND = not detected at or above the laboratory reporting limits
MCL- Maximum Contaminant Levels California Department of Public Health, Drinking Water Standards, Title 22 CCR, November 2008.
Groundwater samples analyzed by BC Laboratories, Inc.
Analysis: VOCs by EPA method 8260B

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Project Boundary

0 1,000 2,000
Feet
1:24,000

N

Vicinity Map

Figure 1

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Site Map

Figure 2

Imagery provided by Google and its licensors © 2014.

Chlordane Concentrations in Surface Samples

Figure 3

Imagery provided by Google and its licensors ©2014

Chlordane Conentrations in Soil Samples 1 Foot Below Grade

Figure 4

Imagery provided by Google and its licensors © 2014.

Lead Concentrations in Surface Soil Samples

Figure 5

Appendix B

Summary of Lead and TPH Excavation Sample Results

ES Engineering, Inc.

environmental
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January 15, 2015

Pleasant Valley Venture, LLC
c/o Vince Daly
6591 Collins Drive, Suite E-11
Moorpark, CA 93021

Summary of Lead and TPH Excavation Sample Results
Pleasant Valley Road Apartments
2250 East Pleasant Valley Road
Oxnard, California 93033

Dear Mr. Daly,

ES Engineering, Inc. (ES – formerly Environ Strategy Consultants, Inc.) is providing this *Summary of Lead and TPH Excavation Sample Results* (Summary) for the site located at 2250 East Pleasant Valley Road in Oxnard (Site, **Figure 1**). The activities described herein were included in the *Workplan For Soil Excavation, Lead and TPH Impacted Soil* (Workplan) by ES dated January 2, 2015. This Summary presents the methodology used on January 6 and 7, 2015 for confirmation soil sampling and the laboratory analytical results.

Based on previous soil sampling results at the Site, three areas were identified as impacted with elevated concentrations of lead (sample locations RS-7, RS-8 and RS-9) and one area (sample location RS-3) with elevated concentrations of oil range total petroleum hydrocarbons (TPHo), and diesel range total petroleum hydrocarbons (TPHd). In the Workplan, ES recommended that the contaminated soil be excavated and disposed of off-site. The impacted areas are shown on **Figure 2**.

Excavation Activities

Lead Impacted Soil

The lead impacted soil was excavated from an approximately 10 foot by 10 foot area to a depth of 2 foot deep at sample locations RS-7, RS-8 and RS-9 (soil excavation areas SE-3, SE-2 and SE-1, respectively). The sidewall and bottom soils at the SE-1, SE-2 and SE-3 excavations were field screened for lead using a handheld Niton XRF instrument. The XRF (x-ray fluorescence) is designed to detect metals in soil, in-situ. A screening threshold of 25 milligrams per kilogram (mg/kg) was set for lead to help ensure that all lead impacted soil was removed.

Confirmation soil samples were collected directly into laboratory supplied 9-oz glass jars fitted with a Teflon coated lid from the sidewalls and the bottom of each excavation area. Sidewall samples were collected from the north, south, east and west walls of each excavation at approximately 1.0 feet bgs. Bottom samples were collected from the approximate center of each excavation at approximately 2.0 feet bgs. The confirmation soil sampling locations are shown on **Figure 2**.

The soil excavated from the SE-1, SE-2 and SE-3 excavation areas was placed in four roll-off bins and stored onsite, pending disposal. Approximately 10, 8.1 and 9 cubic yards of lead impacted soil was removed from excavations SE-1, SE-2 and SE-3, respectively. Waste manifests for soil disposal will be forwarded when available.

<u>TPH Impacted Soil</u>

TPH impacted soil was removed from the former RS-3 sample location by excavating an approximately 10 foot by 10 foot area to a depth of 1 foot (soil excavation area SE-4). The soil at excavation SE-4 was field screened using a photo-ionization detector (PID) and visual observations. Confirmation soil samples were collected directly into laboratory supplied 9-oz glass jars fitted with a Teflon coated lid from the sidewalls and the bottom of each excavation area. Sidewall samples were collected from the north, south, east and west walls of excavation SE-4 at approximately 0.5 foot bgs. Bottom samples were collected from the approximate center of the excavation at 1.0 foot bgs (**Figure 2**).

The soil excavated from the SE-4 was stored onsite in thirteen 55-gallon DOT approved drums, also pending disposal. The bins and drums were properly sealed and labeled. Waste manifests for soil disposal will be forwarded when available.

Laboratory Analysis

<u>Lead Impacted Soil</u>

The soil samples were labeled, stored on ice and then transferred to a State-certified laboratory for analysis. Samples collected from the lead-impacted areas (SE-1, SE-2 and SE-3) were analyzed for organochlorine pesticides by EPA Method 8081A, metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, vanadium and zinc) by EPA Method 6010B/7471A, total lead by EPA method 6010B, TPH by EPA Method 8015, and VOCs by EPA Method 8260B.

<u>TPH Impacted Soil</u>

The soil samples were labeled, stored on ice and then transferred to a State-certified laboratory for analysis. The samples collected from excavation SE-4 were analyzed for TPHo and TPHd.

Laboratory Analytical Results

<u>SE-1, SE-2 and SE-3 Excavation Areas</u>

Based on analytical results no constituents of concern exceeding the California Human Health Screening Levels (CHHSLs) or the regional screening levels (RSLs) for residential settings were identified in the soil samples collected from the SE-1, SE-2 and SE-3 excavation areas.

<u>SE-4 Excavation Area</u>

TPHd and TPHo were not detected in the confirmation samples collected from SE-4.

Analytical data for detected constituents of concern are shown in **Table 1** and a copy of the laboratory analytical report is attached.

If you have questions or require additional information, please contact the undersigned at (714) 919-6526.

Respectfully Submitted,
ES Engineering

CERTIFIED ENGINEERING GEOLOGIST
CHRIS A. GUESNON
No. CEG 2361
Exp. 9-30-15
STATE OF CALIFORNIA

Chris Guesnon, PG, CEG
Project Geologist

Dane Nygaard
Project Manager

FIGURES

Figure 1: Site Location Map
Figure 2: Site Plan Showing TPH and Lead Excavation Areas

TABLE

Table 1: Soil Analytical Results

ATTACHMENT

Laboratory Analytical Report

FIGURES

Map Information:
TOPO! 2001 National Geographic Holdings
Disk 9: Los Angeles
34°09'44"N 119°08'50"W

environmental services
ES Engineering, Inc.
1036 W. Taft Avenue • Orange, CA 92865 • (714) 919-6500

N

0 2000

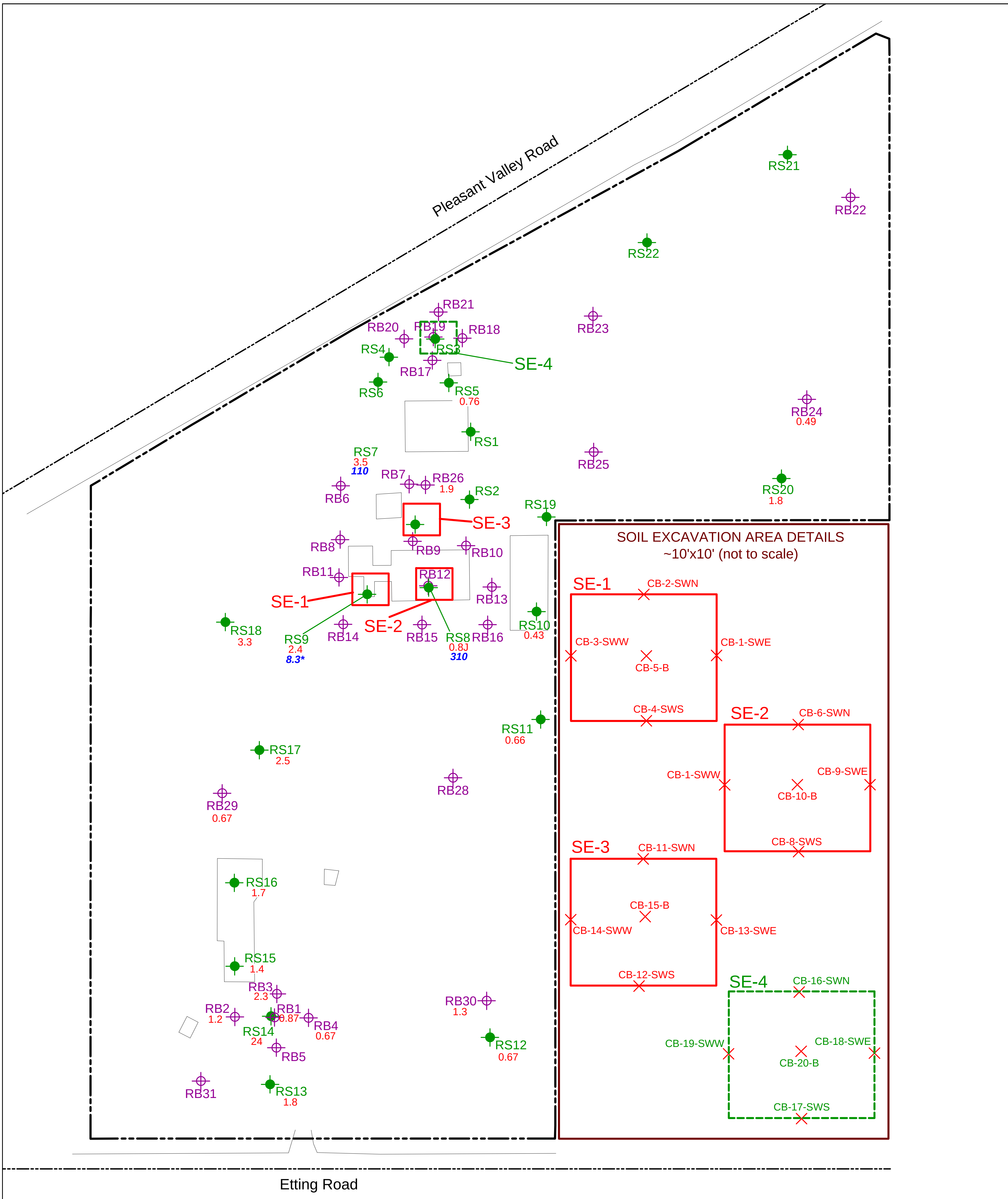
APPROX. SCALE: 1" = 2000'

FIGURE 1

SITE LOCATION MAP

Daly/Dansk Pleasant Valley Road Apartments
2250 E. Pleasant Valley Road
Oxnard, California

DATE	01/08/2015
PROJECT NO.	922
FILE NO.	922F1-SLM



LEGEND

RS12	August 2014 Soil Boring Location
RB30	October 2014 Soil Boring Location
CB-1-SWS	Confirmation Soil Samples Side Wall South
0.87	Chlordane Concentration exceeds CHHSL (mg/kg)
110	Lead Concentration exceeds CHHSL (mg/kg)
J	Trace Value Detected Between Practical Quantation Limit and Above the Method Detection Limit
SE-4	Soil Excavation Area

Approximate Area of Lead Excavation Activities

Approximate Area of TPH Excavation Activities

N

80 0 80

APPROXIMATE SCALE: 1" = 80'

environmental services
ES Engineering, Inc.
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FIGURE 2

SITE PLAN
SHOWING TPH AND LEAD EXCAVATION AREAS

Daly/Dansk Pleasant Valley Road Apartments
2250 E. Pleasant Valley Road
Oxnard, California

DATE
01/14/2015

PROJECT NO.
922

FILE NO.
922F2-SP

W:\03_Site Assessment & Remediation\USA\USA-SoCAl\Daly_Dansk_Pleasant Valley\DWG\922F2-SP (Lead and TPH) test.dwg

TABLE

TABLE 1
Soil Analytical Results
Pleasant Valley Road Apartments
Oxnard, California

Sample ID	Date	Depth (feet)	XRF Readings (ppm)	PID Readings (ppm)	DETECTED CONTAMINANTS											
					Pesticides (μg/kg) - EPA Method 8081A				Metals (mg/kg) - EPA Method 6010B/7471A							
					DDE	DDD	DDT	Chlordane	Barium	Chromium	Cobalt	Copper	Lead	Nickel	Vanadium	Zinc
Soil Excavation Area 1 (SE-1)																
CB-1-SWE	01/06/15	1.0	18+/-7	--	<2.5	<2.5	<2.5	<5	44.9	6.3	3.2	7.4	5.4	7.8	14.6	31
CB-2-SWN	01/06/15	1.0	15+/-8	--	123	7.6	30	<5	48.4	6.1	3.1	6.6	3.6	7.9	14.3	25.8
CB-3-SWW	01/06/15	1.0	10+/-6	--	<2.5	<2.5	<2.5	<5	40.3	6.7	3.5	8.7	7.6	8.5	15.4	36.2
CB-4-SWS	01/06/15	1.0	19+/-7	--	156	18	42.9	18.7	36.9	8.6	3.1	15.5	11.5	8	14.4	79.8
CB-5-B	01/06/15	2.4	11+/-5	--	<2.5	<2.5	<2.5	<10	55.8	7.7	3.9	8.4	3.5	9.6	18.2	31.7
Soil Excavation Area 2 (SE-2)																
CB-6-SWN	01/07/15	1.0	16+/-5	--	<2.5	<2.5	<2.5	<10	46.7	6.4	3.3	6.7	3.7	7.9	14.8	29.2
CB-7-SWW	01/07/15	1.0	13+/-5	--	<2.5	<2.5	<2.5	<10	63.2	8.5	4.1	8.8	4.7	10.3	19.5	40.2
CB-8-SWS	01/07/15	1.0	15+/-6	--	<2.5	<2.5	<2.5	<10	44	6.3	3.1	6.3	3.1	7.7	14.6	25.9
CB-9-SWE	01/07/15	1.0	11+/-6	--	4.5 J	<2.5	<2.5	6.8 J	56.6	7.4	3.8	7.8	4.1	9.2	17.3	32.2
CB-10-B	01/07/15	2.3	19+/-6	--	<2.5	<2.5	<2.5	<5	55.6	6.1	3.2	6.3	3.2	7.5	14.3	25.3
Soil Excavation Area 3 (SE-3)																
CB-11-SWN	01/07/15	1.0	13+/-6	--	380	180	290	384	44.5	7.9	3.5	32.8	18.3	8.6	15.4	95.2
CB-12-SWS	01/07/15	1.0	19+/-6	--	<2.5	<2.5	<2.5	<5	55.3	7	3.6	7.8	3.3	9.1	16.5	28.1
CB-13-SWE	01/07/15	1.0	22+/-6	--	4.1 J	6.6	18.3	7.4 J	60.9	7.7	3.9	9.7	6.7	9.7	17.5	39.8
CB-14-SWW	01/07/15	1.0	18+/-6	--	<2.5	<2.5	<2.5	<5	54.5	7.2	3.6	7.5	3.6	8.9	16.4	29.4
CB-15-B	01/07/15	2.2	25+/-6	--	55.5	24.9	78	53.4	48.2	6.7	3.2	11.8	8.4	8.3	14.5	42.4
Soil Excavation Area 4 (SE-4)																
CB-16-SWN	01/06/15	0.5	--	0.0	--	--	--	--	--	--	--	--	--	--	--	--
CB-17-SWS	01/06/15	0.5	--	0.0	--	--	--	--	--	--	--	--	--	--	--	--
CB-18-SWE	01/06/15	0.5	--	0.0	--	--	--	--	--	--	--	--	--	--	--	--
CB-19-SWW	01/06/15	0.5	--	0.0	--	--	--	--	--	--	--	--	--	--	--	--
CB-20-B	01/06/15	1.0	--	0.0	--	--	--	--	--	--	--	--	--	--	--	--
				CHHSLs - Residential Soil	1,600	2,300	1,600	430	5,200	ne	660	3,000	80	1,600	530	23,000
				RSLs - Residential Soil	1,600	2,200	1,900	1,800	15,000	ne	23	3,100	400	1,500	390	23,000

Notes:

< = analyte was not detected at or above the laboratory detection limit
-- = not applicable
CHHSLs = California Human Health Screening Levels, Table 1
J = estimated value, between method detection limit and practical quantification limit
μg/kg = micrograms per kilogram
mg/kg = milligrams per kilogram

ne = not established
RSLs = Regional Screening Levels,
US EPA Region 9, Summary Table - January 2015
XRF = x-ray fluorescent
PID = photo ionization detector
ppm = parts per million

ATTACHMENT

LABORATORY ANALYTICAL REPORT

A & R Laboratories

Mr. Chris Guesnon 1/8/2015
Environ Strategy Consultants, Inc.
1036 West Taft Ave., Suite 200
Orange, CA 92865

Project:	922
Project Site:	Daly/Dansk Pleasant Valley Rd.
Sample Date:	1/6-7/2015
Lab Job No.:	ES15A006

Dear Mr. Chris Guesnon,

Enclosed please find the analytical report for the samples received by A & R Laboratories on 1/7/2015 and analyzed by the following EPA methods:

EPA 8260B (VOCs & Oxygenates)
EPA 8015M (TPH-Diesel & Oil)
EPA 8081A (Organochlorine Pesticides)
EPA 6010B/7471A (CAM Metals)

All analyses have met the QA/QC criteria of this laboratory.

The sample(s) arrived in good conditions (i.e., chilled, intact) and with a chain of custody record attached.

A & R Laboratories is certified by the CA DHS (Certificate No.2789). Thank you for giving us the opportunity to serve you.

Please feel free to call me at (951)779-0310 if our laboratory can be of further service to you.

Respectfully,

A & R Laboratories

Ken Zheng, M.S.
Laboratory Director

Ken

This cover letter is an integral part of this analytical report.

1650 S. Grove Ave., Suite C
Ontario, CA 91761
Tel: (951)779-0310
Fax: (951)779-0344

A & R Laboratories

Client:	Environ Strategy Consultants, Inc.	Lab Job No.:	ES15A006
Project :	922	Date Sampled:	1/6-7/2015
Project Site:	Daly/Dansk Pleasant Valley Rd.	Date Received:	1/7/2015
Matrix:	Soil	Date Analyzed:	1/7/2015
Batch No.:	0107-VOCS	Date Reported:	1/8/2015

EPA 8260B (VOCs & Oxy.) by GC/MS, Page 1 of 2

Reporting Unit: mg/kg (PPM)

Date Analyzed			1/7/15	1/7/15	1/7/15	1/7/15
Dilution Factor			1	1	1	1
Lab Sample I.D.			ES15A006-1	ES15A006-2	ES15A006-3	ES15A006-4
Client Sample I.D.			CB-1-SWE	CB-2-SWN	CB-3-SWW	CB-4-SWS
Compound	MDL	RL				
Dichlorodifluoromethane	0.0018	0.005	ND	ND	ND	ND
Chloromethane	0.0018	0.005	ND	ND	ND	ND
Vinyl Chloride	0.0018	0.005	ND	ND	ND	ND
Bromomethane	0.0018	0.005	ND	ND	ND	ND
Chloroethane	0.0018	0.005	ND	ND	ND	ND
Trichlorofluoromethane	0.0018	0.005	ND	ND	ND	ND
1,1-Dichloroethene	0.0018	0.005	ND	ND	ND	ND
Carbon disulfide	0.0018	0.005	ND	ND	ND	ND
Methylene chloride	0.0018	0.005	ND	ND	ND	ND
Trans-1,2-Dichloroethene	0.0018	0.005	ND	ND	ND	ND
1,1-Dichloroethane	0.0018	0.005	ND	ND	ND	ND
2,2-Dichloropropane	0.0018	0.005	ND	ND	ND	ND
Cis-1,2-Dichloroethene	0.0018	0.005	ND	ND	ND	ND
Bromochloromethane	0.0018	0.005	ND	ND	ND	ND
Chloroform	0.0018	0.005	ND	ND	ND	ND
1,1,1-Trichloroethane	0.0018	0.005	ND	ND	ND	ND
Vinyl acetate	0.0018	0.005	ND	ND	ND	ND
Carbontetrachloride	0.0018	0.005	ND	ND	ND	ND
1,1-Dichloropropene	0.0018	0.005	ND	ND	ND	ND
1,2-Dichloroethane	0.0018	0.005	ND	ND	ND	ND
Benzene	0.001	0.002	ND	ND	ND	ND
Trichloroethene	0.0018	0.005	ND	ND	ND	ND
1,2-Dichlorpropane	0.0018	0.005	ND	ND	ND	ND
Methyl methacrylate	0.0018	0.005	ND	ND	ND	ND
Dibromomethane	0.0018	0.005	ND	ND	ND	ND
Bromodichloromethane	0.0018	0.005	ND	ND	ND	ND
2-Chloroethyl Vinyl Ether	0.0018	0.005	ND	ND	ND	ND
Cis-1,3-Dichloropropene	0.0018	0.005	ND	ND	ND	ND
Toluene	0.001	0.002	ND	ND	ND	ND
Trans-1,3-Dichloropropene	0.0018	0.005	ND	ND	ND	ND
Ethylmethacrylate	0.0018	0.005	ND	ND	ND	ND
1,1,2-Trichloroethane	0.0018	0.005	ND	ND	ND	ND
Dibromochloromethane	0.0018	0.005	ND	ND	ND	ND
1,2-Dibromoethane (EDB)	0.0018	0.005	ND	ND	ND	ND
Tetrachloroethene	0.0018	0.005	ND	ND	ND	ND
1,3-Dichloropropane	0.0018	0.005	ND	ND	ND	ND
Chlorobenzene	0.0018	0.005	ND	ND	ND	ND

RL=Reporting Limit; ND=Not Detected (Below MDL); MDL= Method Detection Limit.

1650 S. Grove Ave., Suite C
Ontario, CA 91761
Tel: (951)779-0310
Fax: (951)779-0344

A & R Laboratories

Client:	Environ Strategy Consultants, Inc.	Lab Job No.:	ES15A006
Project :	922	Date Sampled:	1/6-7/2015
Project Site:	Daly/Dansk Pleasant Valley Rd.	Date Received:	1/7/2015
Matrix:	Soil	Date Analyzed:	1/7/2015
Batch No.:	0107-VOCS	Date Reported:	1/8/2015

EPA 8260B (VOCs & Oxy.) by GC/MS, Page 2 of 2

Reporting Unit: mg/kg (PPM)

Date Analyzed			1/7/15	1/7/15	1/7/15	1/7/15
Dilution Factor			1	1	1	1
Lab Sample I.D.			ES15A006-1	ES15A006-2	ES15A006-3	ES15A006-4
Client Sample I.D.			CB-1-SWE	CB-2-SWN	CB-3-SWW	CB-4-SWS
Compound	MDL	RL				
1,1,1,2-Tetrachloroethane	0.0018	0.005	ND	ND	ND	ND
Ethylbenzene	0.001	0.002	ND	ND	ND	ND
Total Xylene	0.002	0.004	ND	ND	ND	ND
Styrene	0.0018	0.005	ND	ND	ND	ND
Bromoform	0.0018	0.005	ND	ND	ND	ND
Isopropyl benzene	0.0018	0.005	ND	ND	ND	ND
Bromobenzene	0.0018	0.005	ND	ND	ND	ND
1,2,3-Trichloropropane	0.0018	0.005	ND	ND	ND	ND
1,1,2,2,-Tetrachloroethane	0.0018	0.005	ND	ND	ND	ND
Trans-1,4-dichloro-2-butene	0.0018	0.005	ND	ND	ND	ND
2-Chlorotoluene	0.0018	0.005	ND	ND	ND	ND
n-Propyl benzene	0.0018	0.005	ND	ND	ND	ND
4-Chlorotoluene	0.0018	0.005	ND	ND	ND	ND
1,3,5-Trimethyl benzene	0.0018	0.005	ND	ND	ND	ND
tert-Butylbenzene	0.0018	0.005	ND	ND	ND	ND
p-Isopropyl toluene	0.0018	0.005	ND	ND	ND	ND
1,2,4-Trimethyl benzene	0.0018	0.005	ND	ND	ND	ND
sec-Butylbenzene	0.0018	0.005	ND	ND	ND	ND
1,3-Dichlorobenzene	0.0018	0.005	ND	ND	ND	ND
1,4-Dichlorobenzene	0.0018	0.005	ND	ND	ND	ND
1,2-Dichlorobenzene	0.0018	0.005	ND	ND	ND	ND
n-Butylbenzene	0.0018	0.005	ND	ND	ND	ND
1,2-Dibromo-3-chloropropan	0.0018	0.005	ND	ND	ND	ND
1,2,4-Trichlorobenzene	0.0018	0.005	ND	ND	ND	ND
Hexachlorobutadiene	0.0018	0.005	ND	ND	ND	ND
Naphthalene	0.0018	0.005	ND	ND	ND	ND
1,2,3-Trichlorobenzene	0.0018	0.005	ND	ND	ND	ND
Aceton	0.025	0.050	ND	ND	ND	ND
2-Butanone(MEK)	0.01	0.025	ND	ND	ND	ND
4-Methyl-2-Pentanone (MIBK)	0.01	0.025	ND	ND	ND	ND
MTBE	0.0018	0.005	ND	ND	ND	ND
Ethyl-t-butyl Ether(ETBE)	0.0018	0.005	ND	ND	ND	ND
Diisopropyl ether (DIPE)	0.0018	0.005	ND	ND	ND	ND
TAME	0.0018	0.005	ND	ND	ND	ND
t-Butanol	0.010	0.020	ND	ND	ND	ND
Ethanol	0.25	0.5	ND	ND	ND	ND

RL=Reporting Limit; ND=Not Detected (Below MDL); MDL= Method Detection Limit.

1650 S. Grove Ave., Suite C
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A & R Laboratories

Client:	Environ Strategy Consultants, Inc.	Lab Job No.:	ES15A006
Project :	922	Date Sampled:	1/6-7/2015
Project Site:	Daly/Dansk Pleasant Valley Rd.	Date Received:	1/7/2015
Matrix:	Soil	Date Analyzed:	1/7/2015
Batch No.:	0107-VOCS	Date Reported:	1/8/2015

EPA 8260B (VOCs & Oxy.) by GC/MS, Page 1 of 2

Reporting Unit: mg/kg (PPM)

Date Analyzed			1/7/15	1/7/15	1/7/15	1/7/15
Dilution Factor			1	1	1	1
Lab Sample I.D.			ES15A006-5	ES15A006-6	ES15A006-7	ES15A006-8
Client Sample I.D.			CB-5-B	CB-6-SWN	CB-7-SWW	CB-8-SWS
Compound	MDL	RL				
Dichlorodifluoromethane	0.0018	0.005	ND	ND	ND	ND
Chloromethane	0.0018	0.005	ND	ND	ND	ND
Vinyl Chloride	0.0018	0.005	ND	ND	ND	ND
Bromomethane	0.0018	0.005	ND	ND	ND	ND
Chloroethane	0.0018	0.005	ND	ND	ND	ND
Trichlorofluoromethane	0.0018	0.005	ND	ND	ND	ND
1,1-Dichloroethene	0.0018	0.005	ND	ND	ND	ND
Carbon disulfide	0.0018	0.005	ND	ND	ND	ND
Methylene chloride	0.0018	0.005	ND	ND	ND	ND
Trans-1,2-Dichloroethene	0.0018	0.005	ND	ND	ND	ND
1,1-Dichloroethane	0.0018	0.005	ND	ND	ND	ND
2,2-Dichloropropane	0.0018	0.005	ND	ND	ND	ND
Cis-1,2-Dichloroethene	0.0018	0.005	ND	ND	ND	ND
Bromochloromethane	0.0018	0.005	ND	ND	ND	ND
Chloroform	0.0018	0.005	ND	ND	ND	ND
1,1,1-Trichloroethane	0.0018	0.005	ND	ND	ND	ND
Vinyl acetate	0.0018	0.005	ND	ND	ND	ND
Carbontetrachloride	0.0018	0.005	ND	ND	ND	ND
1,1-Dichloropropene	0.0018	0.005	ND	ND	ND	ND
1,2-Dichloroethane	0.0018	0.005	ND	ND	ND	ND
Benzene	0.001	0.002	ND	ND	ND	ND
Trichloroethene	0.0018	0.005	ND	ND	ND	ND
1,2-Dichlorpropane	0.0018	0.005	ND	ND	ND	ND
Methyl methacrylate	0.0018	0.005	ND	ND	ND	ND
Dibromomethane	0.0018	0.005	ND	ND	ND	ND
Bromodichloromethane	0.0018	0.005	ND	ND	ND	ND
2-Chloroethyl Vinyl Ether	0.0018	0.005	ND	ND	ND	ND
Cis-1,3-Dichloropropene	0.0018	0.005	ND	ND	ND	ND
Toluene	0.001	0.002	ND	ND	ND	ND
Trans-1,3-Dichloropropene	0.0018	0.005	ND	ND	ND	ND
Ethylmethacrylate	0.0018	0.005	ND	ND	ND	ND
1,1,2-Trichloroethane	0.0018	0.005	ND	ND	ND	ND
Dibromochloromethane	0.0018	0.005	ND	ND	ND	ND
1,2-Dibromoethane (EDB)	0.0018	0.005	ND	ND	ND	ND
Tetrachloroethene	0.0018	0.005	ND	ND	ND	ND
1,3-Dichloropropane	0.0018	0.005	ND	ND	ND	ND
Chlorobenzene	0.0018	0.005	ND	ND	ND	ND

RL=Reporting Limit; ND=Not Detected (Below MDL); MDL= Method Detection Limit.

A & R Laboratories

Client:	Environ Strategy Consultants, Inc.	Lab Job No.:	ES15A006
Project :	922	Date Sampled:	1/6-7/2015
Project Site:	Daly/Dansk Pleasant Valley Rd.	Date Received:	1/7/2015
Matrix:	Soil	Date Analyzed:	1/7/2015
Batch No.:	0107-VOCS	Date Reported:	1/8/2015

EPA 8260B (VOCs & Oxy.) by GC/MS, Page 2 of 2

Reporting Unit: mg/kg (PPM)

Date Analyzed			1/7/15	1/7/15	1/7/15	1/7/15
Dilution Factor			1	1	1	1
Lab Sample I.D.			ES15A006-5	ES15A006-6	ES15A006-7	ES15A006-8
Client Sample I.D.			CB-5-B	CB-6-SWN	CB-7-SWW	CB-8-SWS
Compound	MDL	RL				
1,1,1,2-Tetrachloroethane	0.0018	0.005	ND	ND	ND	ND
Ethylbenzene	0.001	0.002	ND	ND	ND	ND
Total Xylene	0.002	0.004	ND	ND	ND	ND
Styrene	0.0018	0.005	ND	ND	ND	ND
Bromoform	0.0018	0.005	ND	ND	ND	ND
Isopropyl benzene	0.0018	0.005	ND	ND	ND	ND
Bromobenzene	0.0018	0.005	ND	ND	ND	ND
1,2,3-Trichloropropane	0.0018	0.005	ND	ND	ND	ND
1,1,2,2,-Tetrachloroethane	0.0018	0.005	ND	ND	ND	ND
Trans-1,4-dichloro-2-butene	0.0018	0.005	ND	ND	ND	ND
2-Chlorotoluene	0.0018	0.005	ND	ND	ND	ND
n-Propyl benzene	0.0018	0.005	ND	ND	ND	ND
4-Chlorotoluene	0.0018	0.005	ND	ND	ND	ND
1,3,5-Trimethyl benzene	0.0018	0.005	ND	ND	ND	ND
tert-Butylbenzene	0.0018	0.005	ND	ND	ND	ND
p-Isopropyl toluene	0.0018	0.005	ND	ND	ND	ND
1,2,4-Trimethyl benzene	0.0018	0.005	ND	ND	ND	ND
sec-Butylbenzene	0.0018	0.005	ND	ND	ND	ND
1,3-Dichlorobenzene	0.0018	0.005	ND	ND	ND	ND
1,4-Dichlorobenzene	0.0018	0.005	ND	ND	ND	ND
1,2-Dichlorobenzene	0.0018	0.005	ND	ND	ND	ND
n-Butylbenzene	0.0018	0.005	ND	ND	ND	ND
1,2-Dibromo-3-chloropropan	0.0018	0.005	ND	ND	ND	ND
1,2,4-Trichlorobenzene	0.0018	0.005	ND	ND	ND	ND
Hexachlorobutadiene	0.0018	0.005	ND	ND	ND	ND
Naphthalene	0.0018	0.005	ND	ND	ND	ND
1,2,3-Trichlorobenzene	0.0018	0.005	ND	ND	ND	ND
Aceton	0.025	0.050	ND	ND	ND	ND
2-Butanone(MEK)	0.01	0.025	ND	ND	ND	ND
4-Methyl-2-Pentanone (MIBK)	0.01	0.025	ND	ND	ND	ND
MTBE	0.0018	0.005	ND	ND	ND	ND
Ethyl-t-butyl Ether(ETBE)	0.0018	0.005	ND	ND	ND	ND
Diisopropyl ether (DIPE)	0.0018	0.005	ND	ND	ND	ND
TAME	0.0018	0.005	ND	ND	ND	ND
t-Butanol	0.010	0.020	ND	ND	ND	ND
Ethanol	0.25	0.5	ND	ND	ND	ND

RL=Reporting Limit; ND=Not Detected (Below MDL); MDL= Method Detection Limit.

1650 S. Grove Ave., Suite C
Ontario, CA 91761
Tel: (951)779-0310
Fax: (951)779-0344

A & R Laboratories

Client:	Environ Strategy Consultants, Inc.	Lab Job No.:	ES15A006
Project :	922	Date Sampled:	1/6-7/2015
Project Site:	Daly/Dansk Pleasant Valley Rd.	Date Received:	1/7/2015
Matrix:	Soil	Date Analyzed:	1/7/2015
Batch No.:	0107-VOCS	Date Reported:	1/8/2015

EPA 8260B (VOCs & Oxy.) by GC/MS, Page 1 of 2

Reporting Unit: mg/kg (PPM)

Date Analyzed			1/7/15	1/7/15	1/7/15	1/7/15
Dilution Factor			1	1	1	1
Lab Sample I.D.			ES15A006-9	ES15A006-10	ES15A006-11	ES15A006-12
Client Sample I.D.			CB-9-SWE	CB-10-B	CB-11-SWN	CB-12-SWS
Compound	MDL	RL				
Dichlorodifluoromethane	0.0018	0.005	ND	ND	ND	ND
Chloromethane	0.0018	0.005	ND	ND	ND	ND
Vinyl Chloride	0.0018	0.005	ND	ND	ND	ND
Bromomethane	0.0018	0.005	ND	ND	ND	ND
Chloroethane	0.0018	0.005	ND	ND	ND	ND
Trichlorofluoromethane	0.0018	0.005	ND	ND	ND	ND
1,1-Dichloroethene	0.0018	0.005	ND	ND	ND	ND
Carbon disulfide	0.0018	0.005	ND	ND	ND	ND
Methylene chloride	0.0018	0.005	ND	ND	ND	ND
Trans-1,2-Dichloroethene	0.0018	0.005	ND	ND	ND	ND
1,1-Dichloroethane	0.0018	0.005	ND	ND	ND	ND
2,2-Dichloropropane	0.0018	0.005	ND	ND	ND	ND
Cis-1,2-Dichloroethene	0.0018	0.005	ND	ND	ND	ND
Bromochloromethane	0.0018	0.005	ND	ND	ND	ND
Chloroform	0.0018	0.005	ND	ND	ND	ND
1,1,1-Trichloroethane	0.0018	0.005	ND	ND	ND	ND
Vinyl acetate	0.0018	0.005	ND	ND	ND	ND
Carbontetrachloride	0.0018	0.005	ND	ND	ND	ND
1,1-Dichloropropene	0.0018	0.005	ND	ND	ND	ND
1,2-Dichloroethane	0.0018	0.005	ND	ND	ND	ND
Benzene	0.001	0.002	ND	ND	ND	ND
Trichloroethene	0.0018	0.005	ND	ND	ND	ND
1,2-Dichlorpropane	0.0018	0.005	ND	ND	ND	ND
Methyl methacrylate	0.0018	0.005	ND	ND	ND	ND
Dibromomethane	0.0018	0.005	ND	ND	ND	ND
Bromodichloromethane	0.0018	0.005	ND	ND	ND	ND
2-Chloroethyl Vinyl Ether	0.0018	0.005	ND	ND	ND	ND
Cis-1,3-Dichloropropene	0.0018	0.005	ND	ND	ND	ND
Toluene	0.001	0.002	ND	ND	ND	ND
Trans-1,3-Dichloropropene	0.0018	0.005	ND	ND	ND	ND
Ethylmethacrylate	0.0018	0.005	ND	ND	ND	ND
1,1,2-Trichloroethane	0.0018	0.005	ND	ND	ND	ND
Dibromochloromethane	0.0018	0.005	ND	ND	ND	ND
1,2-Dibromoethane (EDB)	0.0018	0.005	ND	ND	ND	ND
Tetrachloroethene	0.0018	0.005	ND	ND	ND	ND
1,3-Dichloropropane	0.0018	0.005	ND	ND	ND	ND
Chlorobenzene	0.0018	0.005	ND	ND	ND	ND

RL=Reporting Limit; ND=Not Detected (Below MDL); MDL= Method Detection Limit.

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A & R Laboratories

Client:	Environ Strategy Consultants, Inc.	Lab Job No.:	ES15A006
Project :	922	Date Sampled:	1/6-7/2015
Project Site:	Daly/Dansk Pleasant Valley Rd.	Date Received:	1/7/2015
Matrix:	Soil	Date Analyzed:	1/7/2015
Batch No.:	0107-VOCS	Date Reported:	1/8/2015

EPA 8260B (VOCs & Oxy.) by GC/MS, Page 2 of 2

Reporting Unit: mg/kg (PPM)

Date Analyzed			1/7/15	1/7/15	1/7/15	1/7/15
Dilution Factor			1	1	1	1
Lab Sample I.D.			ES15A006-9	ES15A006-10	ES15A006-11	ES15A006-12
Client Sample I.D.			CB-9-SWE	CB-10-B	CB-11-SWN	CB-12-SWS
Compound	MDL	RL				
1,1,1,2-Tetrachloroethane	0.0018	0.005	ND	ND	ND	ND
Ethylbenzene	0.001	0.002	ND	ND	ND	ND
Total Xylene	0.002	0.004	ND	ND	ND	ND
Styrene	0.0018	0.005	ND	ND	ND	ND
Bromoform	0.0018	0.005	ND	ND	ND	ND
Isopropyl benzene	0.0018	0.005	ND	ND	ND	ND
Bromobenzene	0.0018	0.005	ND	ND	ND	ND
1,2,3-Trichloropropane	0.0018	0.005	ND	ND	ND	ND
1,1,2,2,-Tetrachloroethane	0.0018	0.005	ND	ND	ND	ND
Trans-1,4-dichloro-2-butene	0.0018	0.005	ND	ND	ND	ND
2-Chlorotoluene	0.0018	0.005	ND	ND	ND	ND
n-Propyl benzene	0.0018	0.005	ND	ND	ND	ND
4-Chlorotoluene	0.0018	0.005	ND	ND	ND	ND
1,3,5-Trimethyl benzene	0.0018	0.005	ND	ND	ND	ND
tert-Butylbenzene	0.0018	0.005	ND	ND	ND	ND
p-Isopropyl toluene	0.0018	0.005	ND	ND	ND	ND
1,2,4-Trimethyl benzene	0.0018	0.005	ND	ND	ND	ND
sec-Butylbenzene	0.0018	0.005	ND	ND	ND	ND
1,3-Dichlorobenzene	0.0018	0.005	ND	ND	ND	ND
1,4-Dichlorobenzene	0.0018	0.005	ND	ND	ND	ND
1,2-Dichlorobenzene	0.0018	0.005	ND	ND	ND	ND
n-Butylbenzene	0.0018	0.005	ND	ND	ND	ND
1,2-Dibromo-3-chloropropan	0.0018	0.005	ND	ND	ND	ND
1,2,4-Trichlorobenzene	0.0018	0.005	ND	ND	ND	ND
Hexachlorobutadiene	0.0018	0.005	ND	ND	ND	ND
Naphthalene	0.0018	0.005	ND	ND	ND	ND
1,2,3-Trichlorobenzene	0.0018	0.005	ND	ND	ND	ND
Aceton	0.025	0.050	ND	ND	ND	ND
2-Butanone(MEK)	0.01	0.025	ND	ND	ND	ND
4-Methyl-2-Pentanone (MIBK)	0.01	0.025	ND	ND	ND	ND
MTBE	0.0018	0.005	ND	ND	ND	ND
Ethyl-t-butyl Ether(ETBE)	0.0018	0.005	ND	ND	ND	ND
Diisopropyl ether (DIPE)	0.0018	0.005	ND	ND	ND	ND
TAME	0.0018	0.005	ND	ND	ND	ND
t-Butanol	0.010	0.020	ND	ND	ND	ND
Ethanol	0.25	0.5	ND	ND	ND	ND

RL=Reporting Limit; ND=Not Detected (Below MDL); MDL= Method Detection Limit.

A & R Laboratories

Client:	Environ Strategy Consultants, Inc.	Lab Job No.:	ES15A006
Project :	922	Date Sampled:	1/6-7/2015
Project Site:	Daly/Dansk Pleasant Valley Rd.	Date Received:	1/7/2015
Matrix:	Soil	Date Analyzed:	1/7/2015
Batch No.:	0107-VOCS	Date Reported:	1/8/2015

EPA 8260B (VOCs & Oxy.) by GC/MS, Page 1 of 2

Reporting Unit: mg/kg (PPM)

Date Analyzed			1/7/15	1/7/15	1/7/15	
Dilution Factor			1	1	1	
Lab Sample I.D.			ES15A006-13	ES15A006-14	ES15A006-15	
Client Sample I.D.			CB-13-SWE	CB-14-SWW	CB-15-B	
Compound	MDL	RL				
Dichlorodifluoromethane	0.0018	0.005	ND	ND	ND	
Chloromethane	0.0018	0.005	ND	ND	ND	
Vinyl Chloride	0.0018	0.005	ND	ND	ND	
Bromomethane	0.0018	0.005	ND	ND	ND	
Chloroethane	0.0018	0.005	ND	ND	ND	
Trichlorofluoromethane	0.0018	0.005	ND	ND	ND	
1,1-Dichloroethene	0.0018	0.005	ND	ND	ND	
Carbon disulfide	0.0018	0.005	ND	ND	ND	
Methylene chloride	0.0018	0.005	ND	ND	ND	
Trans-1,2-Dichloroethene	0.0018	0.005	ND	ND	ND	
1,1-Dichloroethane	0.0018	0.005	ND	ND	ND	
2,2-Dichloropropane	0.0018	0.005	ND	ND	ND	
Cis-1,2-Dichloroethene	0.0018	0.005	ND	ND	ND	
Bromochloromethane	0.0018	0.005	ND	ND	ND	
Chloroform	0.0018	0.005	ND	ND	ND	
1,1,1-Trichloroethane	0.0018	0.005	ND	ND	ND	
Vinyl acetate	0.0018	0.005	ND	ND	ND	
Carbontetrachloride	0.0018	0.005	ND	ND	ND	
1,1-Dichloropropene	0.0018	0.005	ND	ND	ND	
1,2-Dichloroethane	0.0018	0.005	ND	ND	ND	
Benzene	0.001	0.002	ND	ND	ND	
Trichloroethene	0.0018	0.005	ND	ND	ND	
1,2-Dichlorpropane	0.0018	0.005	ND	ND	ND	
Methyl methacrylate	0.0018	0.005	ND	ND	ND	
Dibromomethane	0.0018	0.005	ND	ND	ND	
Bromodichloromethane	0.0018	0.005	ND	ND	ND	
2-Chloroethyl Vinyl Ether	0.0018	0.005	ND	ND	ND	
Cis-1,3-Dichloropropene	0.0018	0.005	ND	ND	ND	
Toluene	0.001	0.002	ND	ND	ND	
Trans-1,3-Dichloropropene	0.0018	0.005	ND	ND	ND	
Ethylmethacrylate	0.0018	0.005	ND	ND	ND	
1,1,2-Trichloroethane	0.0018	0.005	ND	ND	ND	
Dibromochloromethane	0.0018	0.005	ND	ND	ND	
1,2-Dibromoethane (EDB)	0.0018	0.005	ND	ND	ND	
Tetrachloroethene	0.0018	0.005	ND	ND	ND	
1,3-Dichloropropane	0.0018	0.005	ND	ND	ND	
Chlorobenzene	0.0018	0.005	ND	ND	ND	

RL=Reporting Limit; ND=Not Detected (Below MDL); MDL= Method Detection Limit.

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A & R Laboratories

Client:	Environ Strategy Consultants, Inc.	Lab Job No.:	ES15A006
Project :	922	Date Sampled:	1/6-7/2015
Project Site:	Daly/Dansk Pleasant Valley Rd.	Date Received:	1/7/2015
Matrix:	Soil	Date Analyzed:	1/7/2015
Batch No.:	0107-VOCS	Date Reported:	1/8/2015

EPA 8260B (VOCs & Oxy.) by GC/MS, Page 2 of 2

Reporting Unit: mg/kg (PPM)

Date Analyzed			1/7/15	1/7/15	1/7/15	
Dilution Factor			1	1	1	
Lab Sample I.D.			ES15A006-13	ES15A006-14	ES15A006-15	
Client Sample I.D.			CB-13-SWE	CB-14-SWW	CB-15-B	
Compound	MDL	RL				
1,1,1,2-Tetrachloroethane	0.0018	0.005	ND	ND	ND	
Ethylbenzene	0.001	0.002	ND	ND	ND	
Total Xylene	0.002	0.004	ND	ND	ND	
Styrene	0.0018	0.005	ND	ND	ND	
Bromoform	0.0018	0.005	ND	ND	ND	
Isopropyl benzene	0.0018	0.005	ND	ND	ND	
Bromobenzene	0.0018	0.005	ND	ND	ND	
1,2,3-Trichloropropane	0.0018	0.005	ND	ND	ND	
1,1,2,2,-Tetrachloroethane	0.0018	0.005	ND	ND	ND	
Trans-1,4-dichloro-2-butene	0.0018	0.005	ND	ND	ND	
2-Chlorotoluene	0.0018	0.005	ND	ND	ND	
n-Propyl benzene	0.0018	0.005	ND	ND	ND	
4-Chlorotoluene	0.0018	0.005	ND	ND	ND	
1,3,5-Trimethyl benzene	0.0018	0.005	ND	ND	ND	
tert-Butylbenzene	0.0018	0.005	ND	ND	ND	
p-Isopropyl toluene	0.0018	0.005	ND	ND	ND	
1,2,4-Trimethyl benzene	0.0018	0.005	ND	ND	ND	
sec-Butylbenzene	0.0018	0.005	ND	ND	ND	
1,3-Dichlorobenzene	0.0018	0.005	ND	ND	ND	
1,4-Dichlorobenzene	0.0018	0.005	ND	ND	ND	
1,2-Dichlorobenzene	0.0018	0.005	ND	ND	ND	
n-Butylbenzene	0.0018	0.005	ND	ND	ND	
1,2-Dibromo-3-chloropropan	0.0018	0.005	ND	ND	ND	
1,2,4-Trichlorobenzene	0.0018	0.005	ND	ND	ND	
Hexachlorobutadiene	0.0018	0.005	ND	ND	ND	
Naphthalene	0.0018	0.005	ND	ND	ND	
1,2,3-Trichlorobenzene	0.0018	0.005	ND	ND	ND	
Aceton	0.025	0.050	ND	ND	ND	
2-Butanone(MEK)	0.01	0.025	ND	ND	ND	
4-Methyl-2-Pentanone (MIBK)	0.01	0.025	ND	ND	ND	
MTBE	0.0018	0.005	ND	ND	ND	
Ethyl-t-butyl Ether(ETBE)	0.0018	0.005	ND	ND	ND	
Diisopropyl ether (DIPE)	0.0018	0.005	ND	ND	ND	
TAME	0.0018	0.005	ND	ND	ND	
t-Butanol	0.010	0.020	ND	ND	ND	
Ethanol	0.25	0.5	ND	ND	ND	

RL=Reporting Limit; ND=Not Detected (Below MDL); MDL= Method Detection Limit.

A & R Laboratories

Client:	Environ Strategy Consultants, Inc.	Lab Job No.:	ES15A006
Project:	922	Date Sampled:	1/6-7/2015
Project Site:	Daly/Dansk Pleasant Valley Rd.	Date Received:	1/7/2015
Matrix:	Soil	Date Analyzed:	1/7/2015
Batch No.:	BA07-DS	Date Reported:	1/8/2015

EPA 8015M (TPH-Diesel & Oil)

Reporting Unit: mg/kg (PPM)

Client Sample ID	Lab ID	Dilution	Diesel	Oil	
		Factor	C_{12}-C_{24}	C_{24}-C_{40}	
	RL		10	25	
	MDL		5	10	
CB-1-SWE	ES15A006-1	1	ND	ND	
CB-2-SWN	ES15A006-2	1	ND	ND	
CB-3-SWW	ES15A006-3	1	ND	ND	
CB-4-SWS	ES15A006-4	1	ND	ND	
CB-5-B	ES15A006-5	1	ND	ND	
CB-6-SWN	ES15A006-6	1	ND	ND	
CB-7-SWW	ES15A006-7	1	ND	ND	
CB-8-SWS	ES15A006-8	1	ND	ND	
CB-9-SWE	ES15A006-9	1	ND	ND	
CB-10-B	ES15A006-10	1	ND	ND	
B-11-SWN	ES15A006-11	1	ND	ND	
CB-12-SWS	ES15A006-12	1	ND	ND	
CB-13-SWE	ES15A006-13	1	ND	ND	
CB-14-SWW	ES15A006-14	1	ND	ND	
CB-15-B	ES15A006-15	1	ND	ND	
CB-16-SWN	ES15A006-16	1	ND	ND	
CB-17-SWS	ES15A006-17	1	ND	ND	
CB-18-SWE	ES15A006-18	1	ND	ND	
CB-19-SWW	ES15A006-19	1	ND	ND	
CB-20-B	ES15A006-20	1	ND	ND	

RL=Reporting Limit; ND=Not Detected (Below MDL); MDL= Method Detection Limit.

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Client:	Environ Strategy Consultants, Inc.	Lab Job No.:	ES15A006
Project:	922	Date Sampled:	1/6-7/2015
Project Site:	Daly/Dansk Pleasant Valley Rd.	Date Received:	1/7/2015
Matrix:	Soil	Date Extracted:	1/7/2015
Extraction Method:	EPA 3550B	Date Analyzed:	1/7/2015
Batch No.:	0107-PES-S	Date Reported:	1/8/2015

EPA 8081A (Organochlorine Pesticides)

Reporting Unit: μg/kg (PPB)

DILUTION FACTOR			1	1	1	1
LAB SAMPLE I.D.			ES15A006-1	ES15A006-2	ES15A006-3	ES15A006-4
CLIENT SAMPLE I.D.			CB-1-SWE	CB-2-SWN	CB-3-SWW	CB-4-SWS
COMPOUND	MDL	RL				
α-BHC	2.5	5	ND	ND	ND	ND
γ-BHC	2.5	5	ND	ND	ND	ND
Heptachlor	2.5	5	ND	ND	ND	ND
Aldrin	2.5	5	ND	ND	ND	ND
β-BHC	2.5	5	ND	ND	ND	ND
δ-BHC	2.5	5	ND	ND	ND	ND
Heptachlor Epoxide	2.5	5	ND	ND	ND	ND
Endosulfan I	2.5	5	ND	ND	ND	ND
4,4'-DDE	2.5	5	ND	123	ND	156
Dieldrin	2.5	5	ND	ND	ND	ND
Endrin	2.5	5	ND	ND	ND	ND
Endosulfan II	2.5	5	ND	ND	ND	ND
4,4'-DDD	2.5	5	ND	7.6	ND	18
4,4'-DDT	2.5	5	ND	30	ND	42.9
Endrin Aldehyde	2.5	5	ND	ND	ND	ND
Endosulfan Sulfate	2.5	5	ND	ND	ND	ND
Methoxychlor	10	20	ND	ND	ND	ND
Endrin Ketone	5	10	ND	ND	ND	ND
Total Chlordane	5	10	ND	ND	ND	18.7
Toxaphene	50	100	ND	ND	ND	ND

RL=Reporting Limit; ND=Not Detected (Below MDL); MDL= Method Detection Limit.

J= Trace Value Detected Bewteen MDL and RL.

A & R Laboratories

Client:	Environ Strategy Consultants, Inc.	Lab Job No.:	ES15A006
Project:	922	Date Sampled:	1/6-7/2015
Project Site:	Daly/Dansk Pleasant Valley Rd.	Date Received:	1/7/2015
Matrix:	Soil	Date Extracted:	1/7/2015
Extraction Method:	EPA 3550B	Date Analyzed:	1/7/2015
Batch No.:	0107-PES-S	Date Reported:	1/8/2015

EPA 8081A (Organochlorine Pesticides)

Reporting Unit: μg/kg (PPB)

DILUTION FACTOR			1	1	1	1
LAB SAMPLE I.D.			ES15A006-5	ES15A006-6	ES15A006-7	ES15A006-8
CLIENT SAMPLE I.D.			CB-5-B	CB-6-SWN	CB-7-SWW	CB-8-SWS
COMPOUND	MDL	RL				
α-BHC	2.5	5	ND	ND	ND	ND
γ-BHC	2.5	5	ND	ND	ND	ND
Heptachlor	2.5	5	ND	ND	ND	ND
Aldrin	2.5	5	ND	ND	ND	ND
β-BHC	2.5	5	ND	ND	ND	ND
δ-BHC	2.5	5	ND	ND	ND	ND
Heptachlor Epoxide	2.5	5	ND	ND	ND	ND
Endosulfan I	2.5	5	ND	ND	ND	ND
4,4'-DDE	2.5	5	ND	ND	ND	ND
Dieldrin	2.5	5	ND	ND	ND	ND
Endrin	2.5	5	ND	ND	ND	ND
Endosulfan II	2.5	5	ND	ND	ND	ND
4,4'-DDD	2.5	5	ND	ND	ND	ND
4,4'-DDT	2.5	5	ND	ND	ND	ND
Endrin Aldehyde	2.5	5	ND	ND	ND	ND
Endosulfan Sulfate	2.5	5	ND	ND	ND	ND
Methoxychlor	10	20	ND	ND	ND	ND
Endrin Ketone	5	10	ND	ND	ND	ND
Total Chlordane	10	25	ND	ND	ND	ND
Toxaphene	50	100	ND	ND	ND	ND

RL=Reporting Limit; ND=Not Detected (Below MDL); MDL= Method Detection Limit.

J= Trace Value Detected Bewteen MDL and RL.

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Client:	Environ Strategy Consultants, Inc.	Lab Job No.:	ES15A006
Project:	922	Date Sampled:	1/6-7/2015
Project Site:	Daly/Dansk Pleasant Valley Rd.	Date Received:	1/7/2015
Matrix:	Soil	Date Extracted:	1/7/2015
Extraction Method:	EPA 3550B	Date Analyzed:	1/7/2015
Batch No.:	0107-PES-S	Date Reported:	1/8/2015

EPA 8081A (Organochlorine Pesticides)

Reporting Unit: μg/kg (PPB)

DILUTION FACTOR			1	1	1	1
LAB SAMPLE I.D.			ES15A006-9	ES15A006-10	ES15A006-11	ES15A006-12
CLIENT SAMPLE I.D.			CB-9-SWE	CB-10-B	CB-11-SWN	CB-12-SWS
COMPOUND	MDL	RL				
α-BHC	2.5	5	ND	ND	ND	ND
γ-BHC	2.5	5	ND	ND	ND	ND
Heptachlor	2.5	5	ND	ND	ND	ND
Aldrin	2.5	5	ND	ND	ND	ND
β-BHC	2.5	5	ND	ND	ND	ND
δ-BHC	2.5	5	ND	ND	ND	ND
Heptachlor Epoxide	2.5	5	ND	ND	ND	ND
Endosulfan I	2.5	5	ND	ND	ND	ND
4,4'-DDE	2.5	5	4.5J	ND	380	ND
Dieldrin	2.5	5	ND	ND	ND	ND
Endrin	2.5	5	ND	ND	ND	ND
Endosulfan II	2.5	5	ND	ND	ND	ND
4,4'-DDD	2.5	5	ND	ND	180	ND
4,4'-DDT	2.5	5	ND	ND	290	ND
Endrin Aldehyde	2.5	5	ND	ND	ND	ND
Endosulfan Sulfate	2.5	5	ND	ND	ND	ND
Methoxychlor	10	20	ND	ND	ND	ND
Endrin Ketone	5	10	ND	ND	ND	ND
Total Chlordane	5	10	6.8J	ND	384	ND
Toxaphene	50	100	ND	ND	ND	ND

RL=Reporting Limit; ND=Not Detected (Below MDL); MDL= Method Detection Limit.

J= Trace Value Detected Bewteen MDL and RL.

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A & R Laboratories

Client:	Environ Strategy Consultants, Inc.	Lab Job No.:	ES15A006
Project:	922	Date Sampled:	1/6-7/2015
Project Site:	Daly/Dansk Pleasant Valley Rd.	Date Received:	1/7/2015
Matrix:	Soil	Date Extracted:	1/7/2015
Extraction Method:	EPA 3550B	Date Analyzed:	1/7/2015
Batch No.:	0107-PES-S	Date Reported:	1/8/2015

EPA 8081A (Organochlorine Pesticides)

Reporting Unit: μg/kg (PPB)

DILUTION FACTOR			1	1	1	
LAB SAMPLE I.D.			ES15A006-13	ES15A006-14	ES15A006-15	
CLIENT SAMPLE I.D.			CB-13-SWE	CB-14-SWW	CB-15-B	
COMPOUND	MDL	RL				
α-BHC	2.5	5	ND	ND	ND	
γ-BHC	2.5	5	ND	ND	ND	
Heptachlor	2.5	5	ND	ND	ND	
Aldrin	2.5	5	ND	ND	ND	
β-BHC	2.5	5	ND	ND	ND	
δ-BHC	2.5	5	ND	ND	ND	
Heptachlor Epoxide	2.5	5	ND	ND	ND	
Endosulfan I	2.5	5	ND	ND	ND	
4,4'-DDE	2.5	5	4.1J	ND	55.5	
Dieldrin	2.5	5	ND	ND	ND	
Endrin	2.5	5	ND	ND	ND	
Endosulfan II	2.5	5	ND	ND	ND	
4,4'-DDD	2.5	5	6.6	ND	24.9	
4,4'-DDT	2.5	5	18.3	ND	78	
Endrin Aldehyde	2.5	5	ND	ND	ND	
Endosulfan Sulfate	2.5	5	ND	ND	ND	
Methoxychlor	10	20	ND	ND	ND	
Endrin Ketone	5	10	ND	ND	ND	
Total Chlordane	5	10	7.4J	ND	53.4	
Toxaphene	50	100	ND	ND	ND	

RL=Reporting Limit; ND=Not Detected (Below MDL); MDL= Method Detection Limit.

J= Trace Value Detected Bewteen MDL and RL.

A & R Laboratories

Client:	Environ Strategy Consultants, Inc.	Lab Job No.:	ES15A006
Project:	922	Date Sampled:	1/6-7/2015
Project Site:	Daly/Dansk Pleasant Valley Rd.	Date Received:	1/7/2015
Matrix:	Soil	Date Digested:	1/7/2015
Digestion Method:	3050B	Date Analyzed:	1/8/2015
Batch No.:	0108-MTS	Date Reported:	1/8/2015

EPA 6010B/7471A (TTLC-Metals)

Report Units: mg/kg (PPM)

Element	EPA Method	ES15A006-1 CB-1-SWE	ES15A006-2 CB-2-SWN	ES15A006-3 CB-3-SWW	MDL	RL
Antimony (Sb)	6010B	ND	ND	ND	5	10
Arsenic (As)	6010B	ND	ND	ND	0.5	1
Barium (Ba)	6010B	44.9	48.4	40.3	2	5
Beryllium (Be)	6010B	ND	ND	ND	1	2
Cadmium (Cd)	6010B	ND	ND	ND	1	2
Chromium (Cr)	6010B	6.3	6.1	6.7	1	2
Cobalt (Co)	6010B	3.2	3.1	3.5	1	2
Copper (Cu)	6010B	7.4	6.6	8.7	1	2
Lead (Pb)	6010B	5.4	3.6	7.6	1	2
Mercury (Hg)	7471A	ND	ND	ND	0.1	0.2
Molybdenum (Mo)	6010B	ND	ND	ND	2	5
Nickel (Ni)	6010B	7.8	7.9	8.5	1	2
Selenium (Se)	6010B	ND	ND	ND	1	2
Silver (Ag)	6010B	ND	ND	ND	1	2
Thallium (Tl)	6010B	ND	ND	ND	1	2
Vanadium (V)	6010B	14.6	14.3	15.4	2	5
Zinc (Zn)	6010B	31	25.8	36.2	1	2

RL=Reporting Limit; ND=Not Detected (Below MDL); MDL= Method Detection Limit.

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Fax: (951)779-0344

A & R Laboratories

Client:	Environ Strategy Consultants, Inc.	Lab Job No.:	ES15A006
Project:	922	Date Sampled:	1/6-7/2015
Project Site:	Daly/Dansk Pleasant Valley Rd.	Date Received:	1/7/2015
Matrix:	Soil	Date Digested:	1/7/2015
Digestion Method:	3050B	Date Analyzed:	1/8/2015
Batch No.:	0108-MTS	Date Reported:	1/8/2015

EPA 6010B/7471A (TTLC Metals)

Report Units: mg/kg (PPM)

Element	EPA Method	ES15A006-4 CB-4-SWS	ES15A006-5 CB-5-B	ES15A006-6 CB-6-SWN	MDL	RL
Antimony (Sb)	6010B	ND	ND	ND	5	10
Arsenic (As)	6010B	ND	ND	ND	0.5	1
Barium (Ba)	6010B	36.9	55.8	46.7	2	5
Beryllium (Be)	6010B	ND	ND	ND	1	2
Cadmium (Cd)	6010B	ND	ND	ND	1	2
Chromium (Cr)	6010B	8.6	7.7	6.4	1	2
Cobalt (Co)	6010B	3.1	3.9	3.3	1	2
Copper (Cu)	6010B	15.5	8.4	6.7	1	2
Lead (Pb)	6010B	11.5	3.5	3.7	1	2
Mercury (Hg)	7471A	ND	ND	ND	0.1	0.2
Molybdenum (Mo)	6010B	ND	ND	ND	2	5
Nickel (Ni)	6010B	8	9.6	7.9	1	2
Selenium (Se)	6010B	ND	ND	ND	1	2
Silver (Ag)	6010B	ND	ND	ND	1	2
Thallium (Tl)	6010B	ND	ND	ND	1	2
Vanadium (V)	6010B	14.4	18.2	14.8	2	5
Zinc (Zn)	6010B	79.8	31.7	29.2	1	2

RL=Reporting Limit; ND=Not Detected (Below MDL); MDL= Method Detection Limit.

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A & R Laboratories

Client:	Environ Strategy Consultants, Inc.	Lab Job No.:	ES15A006
Project:	922	Date Sampled:	1/6-7/2015
Project Site:	Daly/Dansk Pleasant Valley Rd.	Date Received:	1/7/2015
Matrix:	Soil	Date Digested:	1/7/2015
Digestion Method:	3050B	Date Analyzed:	1/8/2015
Batch No.:	0108-MTS	Date Reported:	1/8/2015

EPA 6010B/7471A (TTLC Metals)

Report Units: mg/kg (PPM)

Element	EPA Method	ES15A006-7 CB-7-SWW	ES15A006-8 CB-8-SWS	ES15A006-9 CB-9-SWE	MDL	RL
Antimony (Sb)	6010B	ND	ND	ND	5	10
Arsenic (As)	6010B	ND	ND	ND	0.5	1
Barium (Ba)	6010B	63.2	44	56.6	2	5
Beryllium (Be)	6010B	ND	ND	ND	1	2
Cadmium (Cd)	6010B	ND	ND	ND	1	2
Chromium (Cr)	6010B	8.5	6.3	7.4	1	2
Cobalt (Co)	6010B	4.1	3.1	3.8	1	2
Copper (Cu)	6010B	8.8	6.3	7.8	1	2
Lead (Pb)	6010B	4.7	3.1	4.1	1	2
Mercury (Hg)	7471A	ND	ND	ND	0.1	0.2
Molybdenum (Mo)	6010B	ND	ND	ND	2	5
Nickel (Ni)	6010B	10.3	7.7	9.2	1	2
Selenium (Se)	6010B	ND	ND	ND	1	2
Silver (Ag)	6010B	ND	ND	ND	1	2
Thallium (Tl)	6010B	ND	ND	ND	1	2
Vanadium (V)	6010B	19.5	14.6	17.3	2	5
Zinc (Zn)	6010B	40.2	25.9	32.2	1	2

RL=Reporting Limit; ND=Not Detected (Below MDL); MDL= Method Detection Limit.

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A & R Laboratories

Client:	Environ Strategy Consultants, Inc.	Lab Job No.:	ES15A006
Project:	922	Date Sampled:	1/6-7/2015
Project Site:	Daly/Dansk Pleasant Valley Rd.	Date Received:	1/7/2015
Matrix:	Soil	Date Digested:	1/7/2015
Digestion Method:	3050B	Date Analyzed:	1/8/2015
Batch No.:	0108-MTS	Date Reported:	1/8/2015

EPA 6010B/7471A (TTLC Metals)

Report Units: mg/kg (PPM)

Element	EPA Method	ES15A006-10 CB-10-B	ES15A006-11 CB-11-SWN	ES15A006-12 CB-12-SWS	MDL	RL
Antimony (Sb)	6010B	ND	ND	ND	5	10
Arsenic (As)	6010B	ND	ND	ND	0.5	1
Barium (Ba)	6010B	55.6	44.5	55.3	2	5
Beryllium (Be)	6010B	ND	ND	ND	1	2
Cadmium (Cd)	6010B	ND	ND	ND	1	2
Chromium (Cr)	6010B	6.1	7.9	7	1	2
Cobalt (Co)	6010B	3.2	3.5	3.6	1	2
Copper (Cu)	6010B	6.3	32.8	7.8	1	2
Lead (Pb)	6010B	3.2	18.3	3.3	1	2
Mercury (Hg)	7471A	ND	ND	ND	0.1	0.2
Molybdenum (Mo)	6010B	ND	ND	ND	2	5
Nickel (Ni)	6010B	7.5	8.6	9.1	1	2
Selenium (Se)	6010B	ND	ND	ND	1	2
Silver (Ag)	6010B	ND	ND	ND	1	2
Thallium (Tl)	6010B	ND	ND	ND	1	2
Vanadium (V)	6010B	14.3	15.4	16.5	2	5
Zinc (Zn)	6010B	25.3	95.2	28.1	1	2

RL=Reporting Limit; ND=Not Detected (Below MDL); MDL= Method Detection Limit.

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A & R Laboratories

Client:	Environ Strategy Consultants, Inc.	Lab Job No.:	ES15A006
Project:	922	Date Sampled:	1/6-7/2015
Project Site:	Daly/Dansk Pleasant Valley Rd.	Date Received:	1/7/2015
Matrix:	Soil	Date Digested:	1/7/2015
Digestion Method:	3050B	Date Analyzed:	1/8/2015
Batch No.:	0108-MTS	Date Reported:	1/8/2015

EPA 6010B/7471A (TTLC Metals)

Report Units: mg/kg (PPM)

Element	EPA Method	ES15A006-13 CB-13-SWE	ES15A006-14 CB-14-SWW	ES15A006-15 CB-15-B	MDL	RL
Antimony (Sb)	6010B	ND	ND	ND	5	10
Arsenic (As)	6010B	ND	ND	ND	0.5	1
Barium (Ba)	6010B	60.9	54.5	48.2	2	5
Beryllium (Be)	6010B	ND	ND	ND	1	2
Cadmium (Cd)	6010B	ND	ND	ND	1	2
Chromium (Cr)	6010B	7.7	7.2	6.7	1	2
Cobalt (Co)	6010B	3.9	3.6	3.2	1	2
Copper (Cu)	6010B	9.7	7.5	11.8	1	2
Lead (Pb)	6010B	6.7	3.6	8.4	1	2
Mercury (Hg)	7471A	ND	ND	ND	0.1	0.2
Molybdenum (Mo)	6010B	ND	ND	ND	2	5
Nickel (Ni)	6010B	9.7	8.9	8.3	1	2
Selenium (Se)	6010B	ND	ND	ND	1	2
Silver (Ag)	6010B	ND	ND	ND	1	2
Thallium (Tl)	6010B	ND	ND	ND	1	2
Vanadium (V)	6010B	17.5	16.4	14.5	2	5
Zinc (Zn)	6010B	39.8	29.4	42.4	1	2

RL=Reporting Limit; ND=Not Detected (Below MDL); MDL= Method Detection Limit.

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A & R Laboratories

EPA 8260B (VOCs & Oxy.)
Batch QA/QC Report

Client:	Environ Strategy Consultants, Inc.	Lab Job No.:	ES15A006
Project:	922	Lab Sample ID:	ES15A006-1
Matrix:	Soil	Date Analyzed:	1/7/2015
Batch No.:	0107-VOCS	Date Reported:	1/8/2015

I. MS/MSD Report

Unit: mg/kg (PPM)

Compound	Sample Conc.	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	%RPD	%RPD Accept Limit	%Rec. Accept Limit
1,1-Dichloroethene	ND	0.020	0.018	0.019	90	95	5	≤30	70-130
Benzene	ND	0.020	0.017	0.018	85	90	6	≤30	70-130
Trichloroethene	ND	0.020	0.018	0.019	90	95	5	≤30	70-130
Toluene	ND	0.020	0.019	0.020	95	100	5	≤30	70-130
Chlorobenzene	ND	0.020	0.020	0.019	100	95	5	≤30	70-130

II. MB/LCS Report

Unit: mg/kg (PPM)

Compound	MB	Report Value	True Value	Rec. %	Accept Limit
1,1-Dichloroethene	ND	0.019	0.020	95	80 -120
Benzene	ND	0.018	0.020	90	80 -120
Trichloroethene	ND	0.020	0.020	100	80 -120
Toluene	ND	0.020	0.020	100	80 -120
Chlorobenzene	ND	0.018	0.020	90	80 -120

MB: Method Blank.

ND: Not Detected (Below MDL)

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A & R Laboratories

EPA 8015M (TPH-Diesel)
Batch QA/QC Report

Client:	Environ Strategy Consultants, Inc.	Lab Job No.:	ES15A006
Project:	922	Lab Sample ID:	ES15A006-3
Matrix:	Soil	Date Analyzed:	1/7/2015
Batch No.:	BA07-DS	Date Reported:	1/8/2015

I. MB/LCS Report

Unit: mg/kg (PPM)

Analyte	Method Blank	Report Value	True Value	Rec.%	Accept Limit
TPH-D	ND	550	500	110	80-120

II. MS/MSD Report

Unit: mg/kg (PPM)

Analyte	Sample Conc.	Spike Conc.	MS	MSD	MS %Rec.	MSD %rec.	%RPD	%RPD Accept Limit	%Rec Accept Limit
TPH-D	ND	500	475	485	95	97	2	≤30	70-130

ND: Not Detected (Below MDL).

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A & R Laboratories

EPA Method 8081A
Batch QA/QC Report

Client:	Environ Strategy Consultants, Inc.	Lab Job No.:	ES15A006
Project:	922	Lab Sample ID:	ES15A006-1
Matrix:	Soil	Date Analyzed:	1/7/2015
Batch No.:	0107-PES-S	Date Reported	1/8/2015

I. MS/MSD Report

Unit: ug/kg

Compound	Sample Conc.	Spike Conc.	MS	MSD	LCS %Rec.	LCSD %Rec.	%RPD	%RPD Accept Limit	%Rec. Accept Limit
γ-BHC	ND	20	16.5	17.1	83	86	4	≤30	50-150
Heptachlor	ND	20	17.2	18.2	86	91	6	≤30	50-150
Aldrin	ND	20	18.5	16.5	93	83	11	≤30	50-140
Dieldrin	ND	40	33.2	30.2	83	76	9	≤30	70-130
Endrin	ND	40	35.1	34.5	88	86	2	≤30	70-150
4,4'-DDT	ND	40	34.2	33.2	86	83	3	≤30	50-130

II. MB/LCS Report

Unit: mg/kg

Analyte	Method Blank	Report Value	True Value	Rec.%	Accept Limit
γ-BHC	ND	17.5	20	88	50-150
Heptachlor	ND	16.2	20	81	50-150
Aldrin	ND	18.2	20	91	50-140
Dieldrin	ND	36.5	40	91	70-130
Endrin	ND	35.5	40	89	70-150
4,4'-DDT	ND	34.2	40	86	30-130

ND: Not Detected (Below RL).

A & R Laboratories

EPA 6010B/7471A (TTLC-Metals)
Batch QA/QC Report

Client:	Environ Strategy Consultants, Inc.	Lab Job No.:	ES15A006
Project:	922	Lab Sample ID:	LCS
Matrix:	Soil	Date Analyzed:	1/8/2015
Batch No.:	0108-MTS	Date Reported:	1/8/2015

MB/LCS/LCSD Report

Unit: mg/kg (PPM)

Element	Method Blank	Spike Conc.	LCS	LCSD	LCS %Rec.	LCSD %Rec.	%RPD	%RPD Accept Limit	%Rec. Accept Limit
Antimony (Sb)	ND	50	53	53	106	107	1	≤20	80-120
Arsenic (As)	ND	50	55	55	110	110	0	≤20	80-120
Barium (Ba)	ND	50	51	52	102	104	2	≤20	80-120
Beryllium (Be)	ND	50	54	53	108	106	2	≤20	80-120
Cadmium (Cd)	ND	50	54	55	108	110	2	≤20	80-120
Chromium (Cr)	ND	50	54	54	108	108	0	≤20	80-120
Cobalt (Co)	ND	50	54	55	108	110	2	≤20	80-120
Copper (Cu)	ND	50	54	54	108	108	0	≤20	80-120
Lead (Pb)	ND	50	54	54	108	108	0	≤20	80-120
Mercury (Hg)	ND	2	1.8	1.8	90	90	0	≤20	80-120
Molybdenum (Mo)	ND	50	53	54	106	108	2	≤20	80-120
Nickel (Ni)	ND	50	55	55	110	110	0	≤20	80-120
Selenium (Se)	ND	50	55	55	110	110	0	≤20	80-120
Silver (Ag)	ND	50	46	45	92	90	2	≤20	80-120
Thallium (Tl)	ND	50	53	53	106	106	0	≤20	80-120
Vanadium (V)	ND	50	54	55	108	110	2	≤20	80-120
Zinc (Zn)	ND	50	55	55	110	110	0	≤20	80-120

ND: Not Detected (Below MDL).

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ARL

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E-mail: office@arlaboratories.com

CHAIN OF CUSTODY

A & R Work Order #: ES15A006

Client Name: ES Engineering, Inc.
E-mail: cguesnon@es-online.com
Address: 1036 W. Taft Ave
Report Attention: Chris G.
Phone #: 714-919-6524
Fax #:
Sampled By: BLH
Project No./Name: PO#1000071 922
Project Site: Pleasant Valley Road Daly/Dansk

☒ Chilled
☒ Intact
☐ Sample Seal

Turn Around Time Requested: ☒ Rush 8 12 (24) 48 Hours ☐ Normal

Analyses Requested

Lab # (Lab use)	Client Sample ID	Sample Collection Date	Time	Matrix Type	Sample Preserve	No., type* & size of container	EPA8260B (VOCs & Oxygenates)	EPA8260B(BTEX & Oxygenates)	LUFT / 8015 (Gasoline)	LUFT / 8015 (Diesel)	EPA8081A (Organochlorine Pesticides)	EPA 8082 (PCBs)	EPA 8015M (Carbon Chain C4-C40)	EPA 6010B/7000 (CAM 17 Metals)	Micro: Plate Cnt., Coliform, E-Coli							Remarks
1	CB-1-SWE	1/6/15	1005	Soil	—	9oz jars	X			X	X			X								
2	CB-2-SWN	1/6/15	1010				X			X	X			X								
3	CB-3-SWW	1/6/15	1015				X			X	X			X								
4	CB-4-SWS	1/6/15	1020				X			X	X			X								
5	CB-5-B	1/6/15	1030				X			X	X			X								
6	CB-6-SWN	1/7/15	1021				X			X	X			X								
7	CB-7-SWW	1/7/15	1025				X			X	X			X								
8	CB-8-SWS	1/7/15	1030				X			X	X			X								
9	CB-9-SWE	1/7/15	1035				X			X	X			X								
10	CB-10-B	1/7/15	1040				X			X	X			X								
11	CB-11-SWN	1/7/15	1040				X			X	X			X								
12	CB-12-SWS	1/7/15	1045				X			X	X			X								
13	CB-13-SWE	1/7/15	1050				X			X	X			X								
14	CB-14-SWW	1/7/15	1055				X			X	X			X								
15	CB-15-B	1/7/15	1100				X			X	X			X								

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Barbara Nauta	ES	1/7/15	1445	[signature]	AR	1/7/15	14:45
				[signature]	AR	1/7/15	15:45

Note: Samples are discarded 30 days after results are reported unless other arrangements are made.

Matrix Code: DW=Drinking Water, GW=Ground Water, WW=Waste Water, SD=Solid Waste, SL=Sludge, SS=Soil/Sediment, AR=Air, PP=Pure Product

Preservative Code: IC=Ice, HC=HCl, HN=HNO_3, SH=NaOH, ST=$Na_2S_2O_3$, HS=H_2SO_4

* Sample Container Types: T=Tedlar Air Bag, G=Glass Container, ST= Steel Tube, B= Brass Tube, P=Plastic Bottle, V=VOA Vial, E= EnCore

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E-mail: office@arlaboratories.com

CHAIN OF CUSTODY

A & R Work Order #: ES15A006

Client Name: ES Engineering, Inc
E-mail: cguesne@es-online.com
Address: 1036 W. Taft Ave
Report Attention: Chris G.
Phone #: 714-919-6524
Fax: #
Sampled By: BLH
Project No./ Name:
Project Site:

☒ Chilled
☒ Intact
☐ Sample Seal

Turn Around Time Requested: ☒ Rush 8 12 24 48 Hours ☐ Normal

Analyses Requested

Lab # (Lab use)	Client Sample ID	Sample Collection Date	Sample Collection Time	Matrix Type	Sample Preserve	No., type* & size of container	EPA8260B (VOCs & Oxygenates)	EPA8260B(BTEX & Oxygenates)	LUFT / 8015 (Gasoline)	LUFT / 8015 (Diesel)	EPA8081A (Organochlorine Pesticides)	EPA 8082 (PCBs)	EPA 8015M (Carbon Chain C4-C40)	EPA 6010B/7000 (CAM 17 Metals)	Micro: Plate Cnt., Coliform, E-Coli							Remarks
16	CB-16-SWN	1/6/15	1510	Soil	—	4oz jar				X												
17	CB-17-SWS	↓	1515	↓	—	↓				X												
18	CB-18-SWE	↓	1520	↓	—	↓				X												
19	CB-19-SWW	↓	1525	↓	—	↓				X												
20	CB-20-B	↓	1530	↓	—	↓				X												

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Bradley S. Hartin	ES	1/7/15	1445	[signature]	AR	1/7/15	14:45

Note: Samples are discarded 30 days after results are reported unless other arrangements are made.

Matrix Code: DW=Drinking Water, GW=Ground Water, WW=Waste Water, SD=Solid Waste, SL=Sludge, SS=Soil/Sediment, AR=Air, PP=Pure Product

Preservative Code: IC=Ice, HC=HCl, HN=HNO_3, SH=NaOH, ST=$Na_2S_2O_3$, HS=H_2SO_4

* Sample Container Types: T=Tedlar Air Bag, G=Glass Container, ST= Steel Tube, B= Brass Tube, P=Plastic Bottle, V=VOA Vial, E= EnCore

environmental services
ES Engineering, Inc.
1036 W. Taft Avenue
Orange, CA 92865
t 714.919.6500
f 714.919.6501

January 28, 2015

Pleasant Valley Venture, LLC
c/o Vince Daly
6591 Collins Drive, Suite E-11
Moorpark, CA 93021

Summary of Lead and TPH Excavation Sample Results
Pleasant Valley Road Apartments
2250 East Pleasant Valley Road
Oxnard, California 93033

Dear Mr. Daly,

ES Engineering, Inc. (ES – formerly Environ Strategy Consultants, Inc.) is providing this *Summary of Lead and TPH Excavation Sample Results* (Summary) for the site located at 2250 East Pleasant Valley Road in Oxnard (Site, **Figure 1**). The activities described herein were included in the *Workplan For Soil Excavation, Lead and TPH Impacted Soil* (Workplan) by ES dated January 2, 2015. This Summary presents the methodology used on January 6 and 7, 2015 for confirmation soil sampling and the laboratory analytical results.

Based on previous soil sampling results at the Site, three areas were identified as impacted with elevated concentrations of lead (sample locations RS-7, RS-8 and RS-9) and one area (sample location RS-3) with elevated concentrations of oil range total petroleum hydrocarbons (TPHo), and diesel range total petroleum hydrocarbons (TPHd). In the Workplan, ES recommended that the contaminated soil be excavated and disposed of off-site. The impacted areas are shown on **Figure 2**.

Excavation Activities

Lead Impacted Soil

The lead impacted soil was excavated from an approximately 10 foot by 10 foot area to a depth of 2 foot deep at sample locations RS-7, RS-8 and RS-9 (soil excavation areas SE-3, SE-2 and SE-1, respectively). The sidewall and bottom soils at the SE-1, SE-2 and SE-3 excavations were field screened for lead using a handheld Niton XRF instrument. The XRF (x-ray fluorescence) is designed to detect metals in soil, in-situ. A screening threshold of 25 milligrams per kilogram (mg/kg) was set for lead to help ensure that all lead impacted soil was removed.

Confirmation soil samples were collected directly into laboratory supplied 9-oz glass jars fitted with a Teflon coated lid from the sidewalls and the bottom of each excavation area. Sidewall samples were collected from the north, south, east and west walls of each excavation at approximately 1.0 feet bgs. Bottom samples were collected from the approximate center of each excavation at approximately 2.0 feet bgs. The confirmation soil sampling locations are shown on **Figure 2**.

The soil excavated from the SE-1, SE-2 and SE-3 excavation areas was placed in four roll-off bins and stored onsite, pending disposal. Approximately 10, 8.1 and 9 cubic yards of lead impacted soil was removed from excavations SE-1, SE-2 and SE-3, respectively. Waste manifests for soil disposal will be forwarded when available.

On January 27, 2015, ES returned to the Site to collect surface soil samples from the north, south, east and west sides of previous excavation areas SE-1, SE-2 and SE-3 for lead analysis. The collected samples were placed directly into soil jars and labeled correspond to the excavation and sidewall area from which they originate. Thus samples collected from the north, west, east and south sidewall of excavation area SE-1 were labelled SE-1-N, SE-1-W, SE-1-E and SE-1-S, respectively. The additional soil sampling locations are shown on **Figure 2**.

<u>TPH Impacted Soil</u>

TPH impacted soil was removed from the former RS-3 sample location by excavating an approximately 10 foot by 10 foot area to a depth of 1 foot (soil excavation area SE-4). The soil at excavation SE-4 was field screened using a photo-ionization detector (PID) and visual observations. Confirmation soil samples were collected directly into laboratory supplied 9-oz glass jars fitted with a Teflon coated lid from the sidewalls and the bottom of each excavation area. Sidewall samples were collected from the north, south, east and west walls of excavation SE-4 at approximately 0.5 foot bgs. Bottom samples were collected from the approximate center of the excavation at 1.0 foot bgs (**Figure 2**).

The soil excavated from the SE-4 was stored onsite in thirteen 55-gallon DOT approved drums, also pending disposal. The bins and drums were properly sealed and labeled. Waste manifests for soil disposal will be forwarded when available.

Laboratory Analysis

<u>Lead Impacted Soil</u>

The soil samples were labeled, stored on ice and then transferred to a State-certified laboratory for analysis. Samples collected from the lead-impacted areas (SE-1, SE-2 and SE-3) were analyzed for organochlorine pesticides by EPA Method 8081A, metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, vanadium and zinc) by EPA Method 6010B/7471A, total lead by EPA method 6010B, TPH by EPA Method 8015, and VOCs by EPA Method 8260B. The samples collected on January 27, 2015 were analyzed only for total lead by EPA method 6010B.

<u>TPH Impacted Soil</u>

The soil samples were labeled, stored on ice and then transferred to a State-certified laboratory for analysis. The samples collected from excavation SE-4 were analyzed for TPHo and TPHd.

Summary of Lead and TPH Excavation Sample Results

Laboratory Analytical Results

SE-1, SE-2 and SE-3 Excavation Areas

Based on analytical results no constituents of concern exceeding the California Human Health Screening Levels (CHHSLs) or the regional screening levels (RSLs) for residential settings were identified in any of the soil samples collected from the SE-1, SE-2 and SE-3 excavation areas.

SE-4 Excavation Area

TPHd and TPHo were not detected in the confirmation samples collected from SE-4.

Analytical data for detected constituents of concern are shown in **Table 1** and a copy of the laboratory analytical reports are attached.

If you have questions or require additional information, please contact the undersigned at (714) 919-6526.

Respectfully Submitted,
ES Engineering

CERTIFIED ENGINEERING GEOLOGIST
CHRIS A. GUESNON
No. CEG 2361
Exp. 9-30-15
STATE OF CALIFORNIA

Chris Guesnon, PG, CEG
Project Geologist

Dane Nygaard
Project Manager

FIGURES

Figure 1: Site Location Map
Figure 2: Site Plan Showing TPH and Lead Excavation Areas

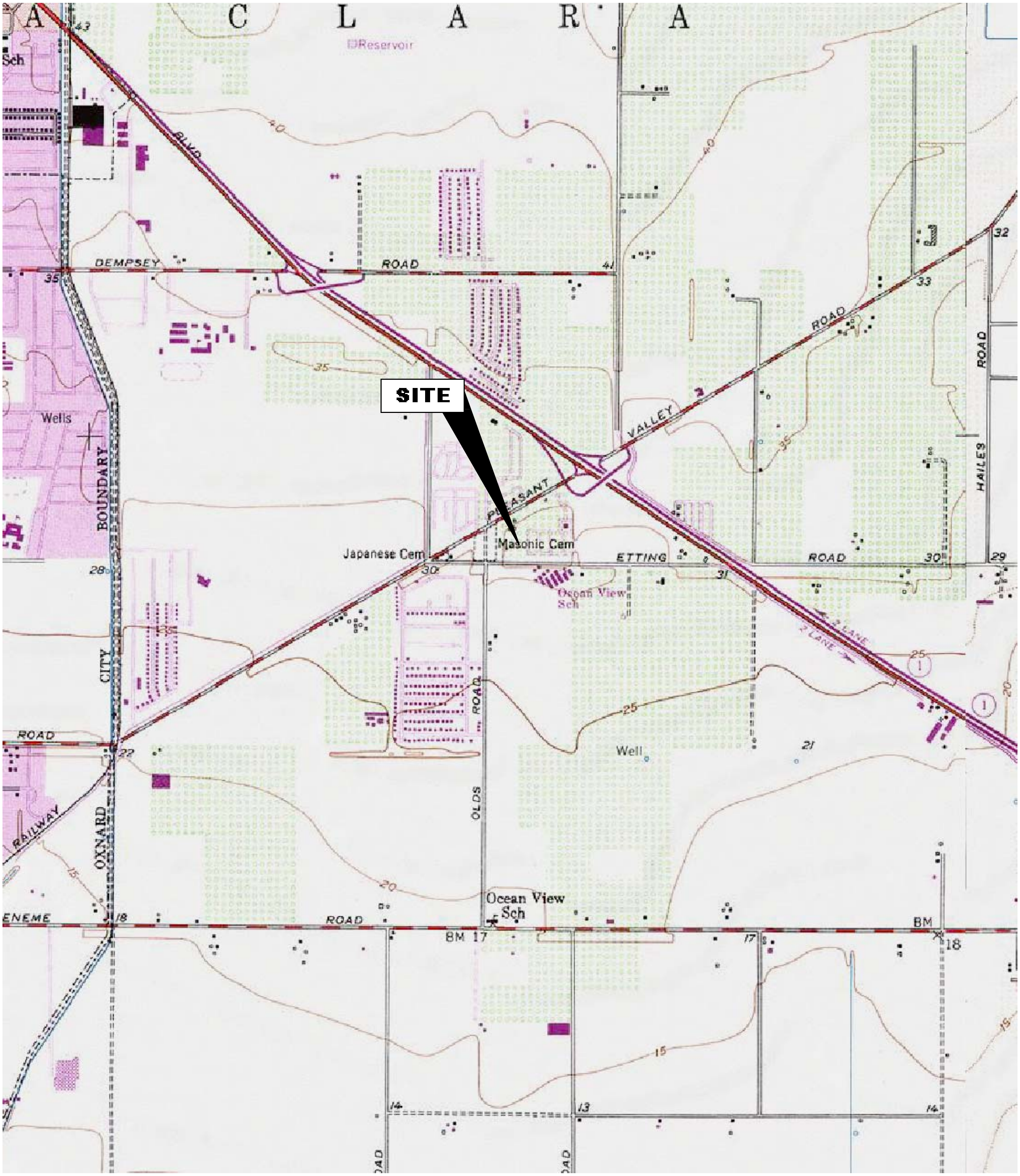
TABLE

Table 1: Soil Analytical Results

ATTACHMENT

Laboratory Analytical Reports

FIGURES



Map Information:
TOPO! 2001 National Geographic Holdings
Disk 9: Los Angeles
34°09'44"N 119°08'50"W

environmental services
ES Engineering, Inc.
1036 W. Taft Avenue • Orange, CA 92865 • (714) 919-6500

N

0 2000

APPROX. SCALE: 1" = 2000'

FIGURE 1

SITE LOCATION MAP

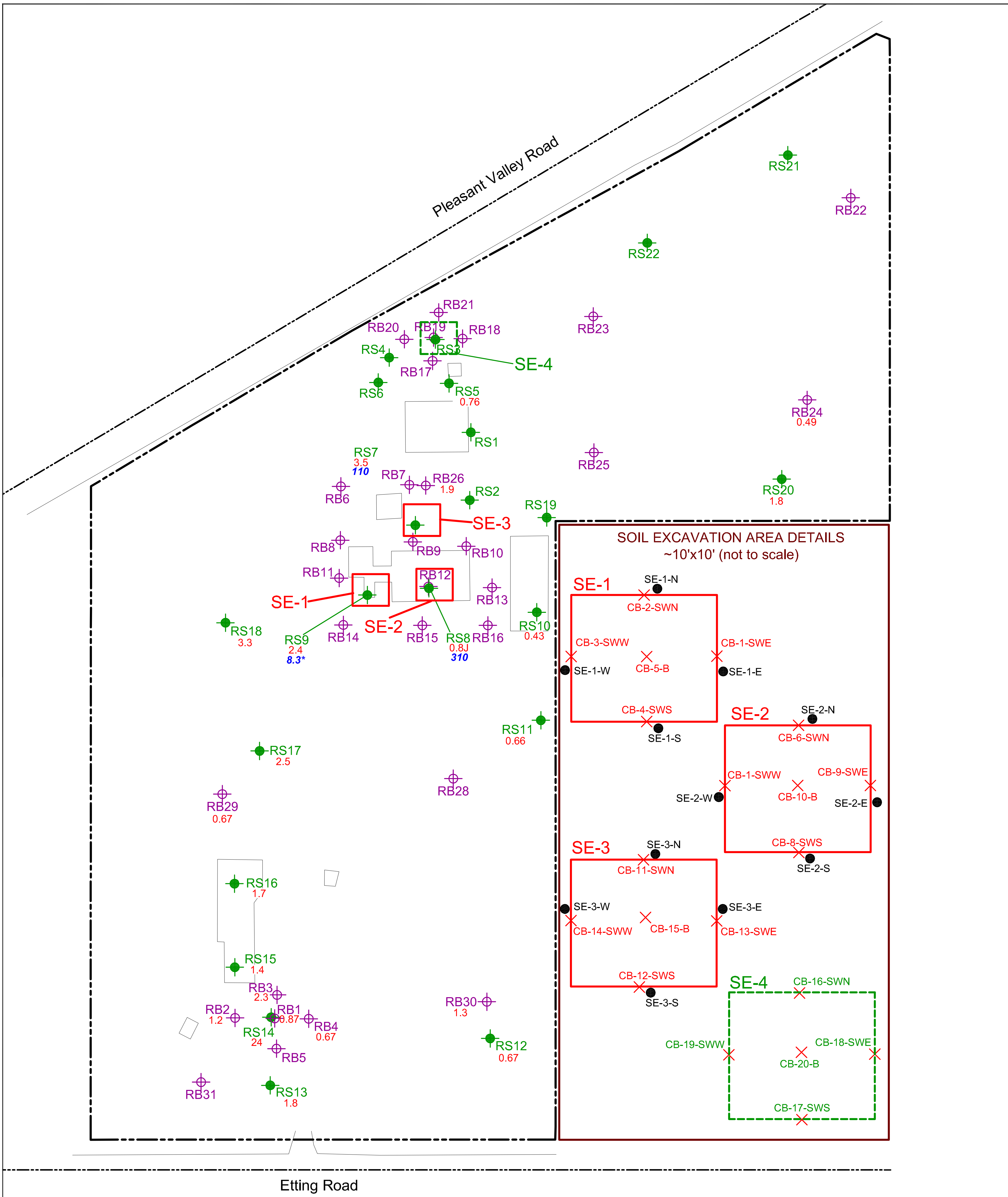
Daly/Dansk Pleasant Valley Road Apartments
2250 E. Pleasant Valley Road
Oxnard, California

DATE 01/08/2015

PROJECT NO. 922

FILE NO. 922F1-SLM

W:\03_Site Assessment & Remediation\USA\USA-SoCAl\Daly_Dansk_Pleasant Valley\DWG\922F1-SLM.dwg



LEGEND

- RS12 — August 2014 Soil Boring Location
- RB30 — October 2014 Soil Boring Location
- CB-1-SWS — Confirmation Soil Samples Side Wall South
- 0.87 — Chlorodane Concentration exceeds CHHSL (mg/kg)
- *110* — Lead Concentration exceeds CHHSL (mg/kg)
- J — Trace Value Detected Between Practical Quantation Limit and Above the Method Detection Limit
- SE-4 — Soil Excavation Area
- SE-3-N — North side of soil excavation area 3. Samples collected at approximately 0.5 feet below ground surface on 01/27/2015

- Approximate Area of Lead Excavation Activities
- Approximate Area of TPH Excavation Activities

N

80 0 80

APPROXIMATE SCALE: 1" = 80'

environmental services
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FIGURE 2

SITE PLAN
SHOWING TPH AND LEAD EXCAVATION AREAS

Daly/Dansk Pleasant Valley Road Apartments
2250 E. Pleasant Valley Road
Oxnard, California

DATE	01/28/2015
PROJECT NO.	922
FILE NO.	922F2-SP

W:\03_Site Assessment & Remediation\USA\USA-SoCAl\Daly_Dansk_Pleasant Valley\DWG\922F2-SP (Lead and TPH).dwg

TABLE

TABLE 1
Soil Analytical Results
Pleasant Valley Road Apartments
Oxnard, California

Sample ID	Date	Depth (feet)	XRF Readings (ppm)	PID Readings (ppm)	DETECTED CONTAMINANTS											
					Pesticides (µg/kg) - EPA Method 8081A				Metals (mg/kg) - EPA Method 6010B/7471A							
					DDE	DDD	DDT	Chlordane	Barium	Cr	Cobalt	Copper	Lead	Nickel	Vanadium	Zinc
Soil Excavation Area 1 (SE-1)																
CB-1-SWE	01/06/15	1.0	18+/-7	--	<2.5	<2.5	<2.5	<5	44.9	6.3	3.2	7.4	5.4	7.8	14.6	31
CB-2-SWN	01/06/15	1.0	15+/-8	--	123	7.6	30	<5	48.4	6.1	3.1	6.6	3.6	7.9	14.3	25.8
CB-3-SWW	01/06/15	1.0	10+/-6	--	<2.5	<2.5	<2.5	<5	40.3	6.7	3.5	8.7	7.6	8.5	15.4	36.2
CB-4-SWS	01/06/15	1.0	19+/-7	--	156	18	42.9	18.7	36.9	8.6	3.1	15.5	11.5	8	14.4	79.8
CB-5-B	01/06/15	2.4	11+/-5	--	<2.5	<2.5	<2.5	<10	55.8	7.7	3.9	8.4	3.5	9.6	18.2	31.7
SE-1-N	01/27/15	0.5	--	--	--	--	--	--	--	--	--	--	9.7	--	--	--
SE-1-W	01/27/15	0.5	--	--	--	--	--	--	--	--	--	--	7.4	--	--	--
SE-1-E	01/27/15	0.5	--	--	--	--	--	--	--	--	--	--	11.4	--	--	--
SE-1-S	01/27/15	0.5	--	--	--	--	--	--	--	--	--	--	6.6	--	--	--
Soil Excavation Area 2 (SE-2)																
CB-6-SWN	01/07/15	1.0	16+/-5	--	<2.5	<2.5	<2.5	<10	46.7	6.4	3.3	6.7	3.7	7.9	14.8	29.2
CB-7-SWW	01/07/15	1.0	13+/-5	--	<2.5	<2.5	<2.5	<10	63.2	8.5	4.1	8.8	4.7	10.3	19.5	40.2
CB-8-SWS	01/07/15	1.0	15+/-6	--	<2.5	<2.5	<2.5	<10	44	6.3	3.1	6.3	3.1	7.7	14.6	25.9
CB-9-SWE	01/07/15	1.0	11+/-6	--	4.5 J	<2.5	<2.5	6.8 J	56.6	7.4	3.8	7.8	4.1	9.2	17.3	32.2
CB-10-B	01/07/15	2.3	19+/-6	--	<2.5	<2.5	<2.5	<5	55.6	6.1	3.2	6.3	3.2	7.5	14.3	25.3
SE-2-N	01/27/15	0.5	--	--	--	--	--	--	--	--	--	--	20.0	--	--	--
SE-2-W	01/27/15	0.5	--	--	--	--	--	--	--	--	--	--	12.9	--	--	--
SE-2-E	01/27/15	0.5	--	--	--	--	--	--	--	--	--	--	15.8	--	--	--
SE-2-S	01/27/15	0.5	--	--	--	--	--	--	--	--	--	--	19.3	--	--	--
Soil Excavation Area 3 (SE-3)																
CB-11-SWN	01/07/15	1.0	13+/-6	--	380	180	290	384	44.5	7.9	3.5	32.8	18.3	8.6	15.4	95.2
CB-12-SWS	01/07/15	1.0	19+/-6	--	<2.5	<2.5	<2.5	<5	55.3	7	3.6	7.8	3.3	9.1	16.5	28.1
CB-13-SWE	01/07/15	1.0	22+/-6	--	4.1 J	6.6	18.3	7.4 J	60.9	7.7	3.9	9.7	6.7	9.7	17.5	39.8
CB-14-SWW	01/07/15	1.0	18+/-6	--	<2.5	<2.5	<2.5	<5	54.5	7.2	3.6	7.5	3.6	8.9	16.4	29.4
CB-15-B	01/07/15	2.2	25+/-6	--	55.5	24.9	78	53.4	48.2	6.7	3.2	11.8	8.4	8.3	14.5	42.4
SE-3-N	01/27/15	0.5	--	--	--	--	--	--	--	--	--	--	8.5	--	--	--
SE-3-W	01/27/15	0.5	--	--	--	--	--	--	--	--	--	--	14.0	--	--	--
SE-3-E	01/27/15	0.5	--	--	--	--	--	--	--	--	--	--	8.9	--	--	--
SE-3-S	01/27/15	0.5	--	--	--	--	--	--	--	--	--	--	8.7	--	--	--
Soil Excavation Area 4 (SE-4)																
CB-16-SWN	01/06/15	0.5	--	0.0	--	--	--	--	--	--	--	--	--	--	--	--
CB-17-SWS	01/06/15	0.5	--	0.0	--	--	--	--	--	--	--	--	--	--	--	--
CB-18-SWE	01/06/15	0.5	--	0.0	--	--	--	--	--	--	--	--	--	--	--	--
CB-19-SWW	01/06/15	0.5	--	0.0	--	--	--	--	--	--	--	--	--	--	--	--
CB-20-B	01/06/15	1.0	--	0.0	--	--	--	--	--	--	--	--	--	--	--	--
CHHSLs - Residential Soil					1,600	2,300	1,600	430	5,200	ne	660	3,000	80	1,600	530	23,000
RSLs - Residential Soil					1,600	2,200	1,900	1,800	15,000	ne	23	3,100	400	1,500	390	23,000

Notes:
< = analyte was not detected at or above the laboratory detection limit
-- = not applicable
CHHSLs = California Human Health Screening Levels, Table 1
Cr = chromium
J = estimated value, between method detection limit and practical quantification limit
µg/kg = micrograms per kilogram
mg/kg = milligrams per kilogram
ne = not established
RSLs = Regional Screening Levels,
US EPA Region 9, Summary Table - January 2015
XRF = x-ray fluorescent
PID = photo ionization detector
ppm = parts per million

ATTACHMENT

LABORATORY ANALYTICAL REPORTS

A & R Laboratories

Mr. Chris Guesnon 1/8/2015
Environ Strategy Consultants, Inc.
1036 West Taft Ave., Suite 200
Orange, CA 92865

Project:	922
Project Site:	Daly/Dansk Pleasant Valley Rd.
Sample Date:	1/6-7/2015
Lab Job No.:	ES15A006

Dear Mr. Chris Guesnon,

Enclosed please find the analytical report for the samples received by A & R Laboratories on 1/7/2015 and analyzed by the following EPA methods:

EPA 8260B (VOCs & Oxygenates)
EPA 8015M (TPH-Diesel & Oil)
EPA 8081A (Organochlorine Pesticides)
EPA 6010B/7471A (CAM Metals)

All analyses have met the QA/QC criteria of this laboratory.

The sample(s) arrived in good conditions (i.e., chilled, intact) and with a chain of custody record attached.

A & R Laboratories is certified by the CA DHS (Certificate No.2789). Thank you for giving us the opportunity to serve you.

Please feel free to call me at (951)779-0310 if our laboratory can be of further service to you.

Respectfully,

A & R Laboratories

Ken Zheng, M.S.
Laboratory Director

Ken

This cover letter is an integral part of this analytical report.

A & R Laboratories

Client:	Environ Strategy Consultants, Inc.	Lab Job No.:	ES15A006
Project :	922	Date Sampled:	1/6-7/2015
Project Site:	Daly/Dansk Pleasant Valley Rd.	Date Received:	1/7/2015
Matrix:	Soil	Date Analyzed:	1/7/2015
Batch No.:	0107-VOCS	Date Reported:	1/8/2015

EPA 8260B (VOCs & Oxy.) by GC/MS, Page 1 of 2

Reporting Unit: mg/kg (PPM)

Date Analyzed			1/7/15	1/7/15	1/7/15	1/7/15
Dilution Factor			1	1	1	1
Lab Sample I.D.			ES15A006-1	ES15A006-2	ES15A006-3	ES15A006-4
Client Sample I.D.			CB-1-SWE	CB-2-SWN	CB-3-SWW	CB-4-SWS
Compound	MDL	RL				
Dichlorodifluoromethane	0.0018	0.005	ND	ND	ND	ND
Chloromethane	0.0018	0.005	ND	ND	ND	ND
Vinyl Chloride	0.0018	0.005	ND	ND	ND	ND
Bromomethane	0.0018	0.005	ND	ND	ND	ND
Chloroethane	0.0018	0.005	ND	ND	ND	ND
Trichlorofluoromethane	0.0018	0.005	ND	ND	ND	ND
1,1-Dichloroethene	0.0018	0.005	ND	ND	ND	ND
Carbon disulfide	0.0018	0.005	ND	ND	ND	ND
Methylene chloride	0.0018	0.005	ND	ND	ND	ND
Trans-1,2-Dichloroethene	0.0018	0.005	ND	ND	ND	ND
1,1-Dichloroethane	0.0018	0.005	ND	ND	ND	ND
2,2-Dichloropropane	0.0018	0.005	ND	ND	ND	ND
Cis-1,2-Dichloroethene	0.0018	0.005	ND	ND	ND	ND
Bromochloromethane	0.0018	0.005	ND	ND	ND	ND
Chloroform	0.0018	0.005	ND	ND	ND	ND
1,1,1-Trichloroethane	0.0018	0.005	ND	ND	ND	ND
Vinyl acetate	0.0018	0.005	ND	ND	ND	ND
Carbontetrachloride	0.0018	0.005	ND	ND	ND	ND
1,1-Dichloropropene	0.0018	0.005	ND	ND	ND	ND
1,2-Dichloroethane	0.0018	0.005	ND	ND	ND	ND
Benzene	0.001	0.002	ND	ND	ND	ND
Trichloroethene	0.0018	0.005	ND	ND	ND	ND
1,2-Dichlorpropane	0.0018	0.005	ND	ND	ND	ND
Methyl methacrylate	0.0018	0.005	ND	ND	ND	ND
Dibromomethane	0.0018	0.005	ND	ND	ND	ND
Bromodichloromethane	0.0018	0.005	ND	ND	ND	ND
2-Chloroethyl Vinyl Ether	0.0018	0.005	ND	ND	ND	ND
Cis-1,3-Dichloropropene	0.0018	0.005	ND	ND	ND	ND
Toluene	0.001	0.002	ND	ND	ND	ND
Trans-1,3-Dichloropropene	0.0018	0.005	ND	ND	ND	ND
Ethylmethacrylate	0.0018	0.005	ND	ND	ND	ND
1,1,2-Trichloroethane	0.0018	0.005	ND	ND	ND	ND
Dibromochloromethane	0.0018	0.005	ND	ND	ND	ND
1,2-Dibromoethane (EDB)	0.0018	0.005	ND	ND	ND	ND
Tetrachloroethene	0.0018	0.005	ND	ND	ND	ND
1,3-Dichloropropane	0.0018	0.005	ND	ND	ND	ND
Chlorobenzene	0.0018	0.005	ND	ND	ND	ND

RL=Reporting Limit; ND=Not Detected (Below MDL); MDL= Method Detection Limit.

1650 S. Grove Ave., Suite C
Ontario, CA 91761
Tel: (951)779-0310
Fax: (951)779-0344

A & R Laboratories

Client:	Environ Strategy Consultants, Inc.	Lab Job No.:	ES15A006
Project :	922	Date Sampled:	1/6-7/2015
Project Site:	Daly/Dansk Pleasant Valley Rd.	Date Received:	1/7/2015
Matrix:	Soil	Date Analyzed:	1/7/2015
Batch No.:	0107-VOCS	Date Reported:	1/8/2015

EPA 8260B (VOCs & Oxy.) by GC/MS, Page 2 of 2

Reporting Unit: mg/kg (PPM)

Date Analyzed			1/7/15	1/7/15	1/7/15	1/7/15
Dilution Factor			1	1	1	1
Lab Sample I.D.			ES15A006-1	ES15A006-2	ES15A006-3	ES15A006-4
Client Sample I.D.			CB-1-SWE	CB-2-SWN	CB-3-SWW	CB-4-SWS
Compound	MDL	RL				
1,1,1,2-Tetrachloroethane	0.0018	0.005	ND	ND	ND	ND
Ethylbenzene	0.001	0.002	ND	ND	ND	ND
Total Xylene	0.002	0.004	ND	ND	ND	ND
Styrene	0.0018	0.005	ND	ND	ND	ND
Bromoform	0.0018	0.005	ND	ND	ND	ND
Isopropyl benzene	0.0018	0.005	ND	ND	ND	ND
Bromobenzene	0.0018	0.005	ND	ND	ND	ND
1,2,3-Trichloropropane	0.0018	0.005	ND	ND	ND	ND
1,1,2,2,-Tetrachloroethane	0.0018	0.005	ND	ND	ND	ND
Trans-1,4-dichloro-2-butene	0.0018	0.005	ND	ND	ND	ND
2-Chlorotoluene	0.0018	0.005	ND	ND	ND	ND
n-Propyl benzene	0.0018	0.005	ND	ND	ND	ND
4-Chlorotoluene	0.0018	0.005	ND	ND	ND	ND
1,3,5-Trimethyl benzene	0.0018	0.005	ND	ND	ND	ND
tert-Butylbenzene	0.0018	0.005	ND	ND	ND	ND
p-Isopropyl toluene	0.0018	0.005	ND	ND	ND	ND
1,2,4-Trimethyl benzene	0.0018	0.005	ND	ND	ND	ND
sec-Butylbenzene	0.0018	0.005	ND	ND	ND	ND
1,3-Dichlorobenzene	0.0018	0.005	ND	ND	ND	ND
1,4-Dichlorobenzene	0.0018	0.005	ND	ND	ND	ND
1,2-Dichlorobenzene	0.0018	0.005	ND	ND	ND	ND
n-Butylbenzene	0.0018	0.005	ND	ND	ND	ND
1,2-Dibromo-3-chloropropan	0.0018	0.005	ND	ND	ND	ND
1,2,4-Trichlorobenzene	0.0018	0.005	ND	ND	ND	ND
Hexachlorobutadiene	0.0018	0.005	ND	ND	ND	ND
Naphthalene	0.0018	0.005	ND	ND	ND	ND
1,2,3-Trichlorobenzene	0.0018	0.005	ND	ND	ND	ND
Aceton	0.025	0.050	ND	ND	ND	ND
2-Butanone(MEK)	0.01	0.025	ND	ND	ND	ND
4-Methyl-2-Pentanone (MIBK)	0.01	0.025	ND	ND	ND	ND
MTBE	0.0018	0.005	ND	ND	ND	ND
Ethyl-t-butyl Ether(ETBE)	0.0018	0.005	ND	ND	ND	ND
Diisopropyl ether (DIPE)	0.0018	0.005	ND	ND	ND	ND
TAME	0.0018	0.005	ND	ND	ND	ND
t-Butanol	0.010	0.020	ND	ND	ND	ND
Ethanol	0.25	0.5	ND	ND	ND	ND

RL=Reporting Limit; ND=Not Detected (Below MDL); MDL= Method Detection Limit.

1650 S. Grove Ave., Suite C
Ontario, CA 91761
Tel: (951)779-0310
Fax: (951)779-0344

A & R Laboratories

Client:	Environ Strategy Consultants, Inc.	Lab Job No.:	ES15A006
Project :	922	Date Sampled:	1/6-7/2015
Project Site:	Daly/Dansk Pleasant Valley Rd.	Date Received:	1/7/2015
Matrix:	Soil	Date Analyzed:	1/7/2015
Batch No.:	0107-VOCS	Date Reported:	1/8/2015

EPA 8260B (VOCs & Oxy.) by GC/MS, Page 1 of 2

Reporting Unit: mg/kg (PPM)

Date Analyzed			1/7/15	1/7/15	1/7/15	1/7/15
Dilution Factor			1	1	1	1
Lab Sample I.D.			ES15A006-5	ES15A006-6	ES15A006-7	ES15A006-8
Client Sample I.D.			CB-5-B	CB-6-SWN	CB-7-SWW	CB-8-SWS
Compound	MDL	RL				
Dichlorodifluoromethane	0.0018	0.005	ND	ND	ND	ND
Chloromethane	0.0018	0.005	ND	ND	ND	ND
Vinyl Chloride	0.0018	0.005	ND	ND	ND	ND
Bromomethane	0.0018	0.005	ND	ND	ND	ND
Chloroethane	0.0018	0.005	ND	ND	ND	ND
Trichlorofluoromethane	0.0018	0.005	ND	ND	ND	ND
1,1-Dichloroethene	0.0018	0.005	ND	ND	ND	ND
Carbon disulfide	0.0018	0.005	ND	ND	ND	ND
Methylene chloride	0.0018	0.005	ND	ND	ND	ND
Trans-1,2-Dichloroethene	0.0018	0.005	ND	ND	ND	ND
1,1-Dichloroethane	0.0018	0.005	ND	ND	ND	ND
2,2-Dichloropropane	0.0018	0.005	ND	ND	ND	ND
Cis-1,2-Dichloroethene	0.0018	0.005	ND	ND	ND	ND
Bromochloromethane	0.0018	0.005	ND	ND	ND	ND
Chloroform	0.0018	0.005	ND	ND	ND	ND
1,1,1-Trichloroethane	0.0018	0.005	ND	ND	ND	ND
Vinyl acetate	0.0018	0.005	ND	ND	ND	ND
Carbontetrachloride	0.0018	0.005	ND	ND	ND	ND
1,1-Dichloropropene	0.0018	0.005	ND	ND	ND	ND
1,2-Dichloroethane	0.0018	0.005	ND	ND	ND	ND
Benzene	0.001	0.002	ND	ND	ND	ND
Trichloroethene	0.0018	0.005	ND	ND	ND	ND
1,2-Dichlorpropane	0.0018	0.005	ND	ND	ND	ND
Methyl methacrylate	0.0018	0.005	ND	ND	ND	ND
Dibromomethane	0.0018	0.005	ND	ND	ND	ND
Bromodichloromethane	0.0018	0.005	ND	ND	ND	ND
2-Chloroethyl Vinyl Ether	0.0018	0.005	ND	ND	ND	ND
Cis-1,3-Dichloropropene	0.0018	0.005	ND	ND	ND	ND
Toluene	0.001	0.002	ND	ND	ND	ND
Trans-1,3-Dichloropropene	0.0018	0.005	ND	ND	ND	ND
Ethylmethacrylate	0.0018	0.005	ND	ND	ND	ND
1,1,2-Trichloroethane	0.0018	0.005	ND	ND	ND	ND
Dibromochloromethane	0.0018	0.005	ND	ND	ND	ND
1,2-Dibromoethane (EDB)	0.0018	0.005	ND	ND	ND	ND
Tetrachloroethene	0.0018	0.005	ND	ND	ND	ND
1,3-Dichloropropane	0.0018	0.005	ND	ND	ND	ND
Chlorobenzene	0.0018	0.005	ND	ND	ND	ND

RL=Reporting Limit; ND=Not Detected (Below MDL); MDL= Method Detection Limit.

A & R Laboratories

Client:	Environ Strategy Consultants, Inc.	Lab Job No.:	ES15A006
Project :	922	Date Sampled:	1/6-7/2015
Project Site:	Daly/Dansk Pleasant Valley Rd.	Date Received:	1/7/2015
Matrix:	Soil	Date Analyzed:	1/7/2015
Batch No.:	0107-VOCS	Date Reported:	1/8/2015

EPA 8260B (VOCs & Oxy.) by GC/MS, Page 2 of 2

Reporting Unit: mg/kg (PPM)

Date Analyzed			1/7/15	1/7/15	1/7/15	1/7/15
Dilution Factor			1	1	1	1
Lab Sample I.D.			ES15A006-5	ES15A006-6	ES15A006-7	ES15A006-8
Client Sample I.D.			CB-5-B	CB-6-SWN	CB-7-SWW	CB-8-SWS
Compound	MDL	RL				
1,1,1,2-Tetrachloroethane	0.0018	0.005	ND	ND	ND	ND
Ethylbenzene	0.001	0.002	ND	ND	ND	ND
Total Xylene	0.002	0.004	ND	ND	ND	ND
Styrene	0.0018	0.005	ND	ND	ND	ND
Bromoform	0.0018	0.005	ND	ND	ND	ND
Isopropyl benzene	0.0018	0.005	ND	ND	ND	ND
Bromobenzene	0.0018	0.005	ND	ND	ND	ND
1,2,3-Trichloropropane	0.0018	0.005	ND	ND	ND	ND
1,1,2,2,-Tetrachloroethane	0.0018	0.005	ND	ND	ND	ND
Trans-1,4-dichloro-2-butene	0.0018	0.005	ND	ND	ND	ND
2-Chlorotoluene	0.0018	0.005	ND	ND	ND	ND
n-Propyl benzene	0.0018	0.005	ND	ND	ND	ND
4-Chlorotoluene	0.0018	0.005	ND	ND	ND	ND
1,3,5-Trimethyl benzene	0.0018	0.005	ND	ND	ND	ND
tert-Butylbenzene	0.0018	0.005	ND	ND	ND	ND
p-Isopropyl toluene	0.0018	0.005	ND	ND	ND	ND
1,2,4-Trimethyl benzene	0.0018	0.005	ND	ND	ND	ND
sec-Butylbenzene	0.0018	0.005	ND	ND	ND	ND
1,3-Dichlorobenzene	0.0018	0.005	ND	ND	ND	ND
1,4-Dichlorobenzene	0.0018	0.005	ND	ND	ND	ND
1,2-Dichlorobenzene	0.0018	0.005	ND	ND	ND	ND
n-Butylbenzene	0.0018	0.005	ND	ND	ND	ND
1,2-Dibromo-3-chloropropan	0.0018	0.005	ND	ND	ND	ND
1,2,4-Trichlorobenzene	0.0018	0.005	ND	ND	ND	ND
Hexachlorobutadiene	0.0018	0.005	ND	ND	ND	ND
Naphthalene	0.0018	0.005	ND	ND	ND	ND
1,2,3-Trichlorobenzene	0.0018	0.005	ND	ND	ND	ND
Aceton	0.025	0.050	ND	ND	ND	ND
2-Butanone(MEK)	0.01	0.025	ND	ND	ND	ND
4-Methyl-2-Pentanone (MIBK)	0.01	0.025	ND	ND	ND	ND
MTBE	0.0018	0.005	ND	ND	ND	ND
Ethyl-t-butyl Ether(ETBE)	0.0018	0.005	ND	ND	ND	ND
Diisopropyl ether (DIPE)	0.0018	0.005	ND	ND	ND	ND
TAME	0.0018	0.005	ND	ND	ND	ND
t-Butanol	0.010	0.020	ND	ND	ND	ND
Ethanol	0.25	0.5	ND	ND	ND	ND

RL=Reporting Limit; ND=Not Detected (Below MDL); MDL= Method Detection Limit.

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A & R Laboratories

Client:	Environ Strategy Consultants, Inc.	Lab Job No.:	ES15A006
Project :	922	Date Sampled:	1/6-7/2015
Project Site:	Daly/Dansk Pleasant Valley Rd.	Date Received:	1/7/2015
Matrix:	Soil	Date Analyzed:	1/7/2015
Batch No.:	0107-VOCS	Date Reported:	1/8/2015

EPA 8260B (VOCs & Oxy.) by GC/MS, Page 1 of 2

Reporting Unit: mg/kg (PPM)

Date Analyzed			1/7/15	1/7/15	1/7/15	1/7/15
Dilution Factor			1	1	1	1
Lab Sample I.D.			ES15A006-9	ES15A006-10	ES15A006-11	ES15A006-12
Client Sample I.D.			CB-9-SWE	CB-10-B	CB-11-SWN	CB-12-SWS
Compound	MDL	RL				
Dichlorodifluoromethane	0.0018	0.005	ND	ND	ND	ND
Chloromethane	0.0018	0.005	ND	ND	ND	ND
Vinyl Chloride	0.0018	0.005	ND	ND	ND	ND
Bromomethane	0.0018	0.005	ND	ND	ND	ND
Chloroethane	0.0018	0.005	ND	ND	ND	ND
Trichlorofluoromethane	0.0018	0.005	ND	ND	ND	ND
1,1-Dichloroethene	0.0018	0.005	ND	ND	ND	ND
Carbon disulfide	0.0018	0.005	ND	ND	ND	ND
Methylene chloride	0.0018	0.005	ND	ND	ND	ND
Trans-1,2-Dichloroethene	0.0018	0.005	ND	ND	ND	ND
1,1-Dichloroethane	0.0018	0.005	ND	ND	ND	ND
2,2-Dichloropropane	0.0018	0.005	ND	ND	ND	ND
Cis-1,2-Dichloroethene	0.0018	0.005	ND	ND	ND	ND
Bromochloromethane	0.0018	0.005	ND	ND	ND	ND
Chloroform	0.0018	0.005	ND	ND	ND	ND
1,1,1-Trichloroethane	0.0018	0.005	ND	ND	ND	ND
Vinyl acetate	0.0018	0.005	ND	ND	ND	ND
Carbontetrachloride	0.0018	0.005	ND	ND	ND	ND
1,1-Dichloropropene	0.0018	0.005	ND	ND	ND	ND
1,2-Dichloroethane	0.0018	0.005	ND	ND	ND	ND
Benzene	0.001	0.002	ND	ND	ND	ND
Trichloroethene	0.0018	0.005	ND	ND	ND	ND
1,2-Dichlorpropane	0.0018	0.005	ND	ND	ND	ND
Methyl methacrylate	0.0018	0.005	ND	ND	ND	ND
Dibromomethane	0.0018	0.005	ND	ND	ND	ND
Bromodichloromethane	0.0018	0.005	ND	ND	ND	ND
2-Chloroethyl Vinyl Ether	0.0018	0.005	ND	ND	ND	ND
Cis-1,3-Dichloropropene	0.0018	0.005	ND	ND	ND	ND
Toluene	0.001	0.002	ND	ND	ND	ND
Trans-1,3-Dichloropropene	0.0018	0.005	ND	ND	ND	ND
Ethylmethacrylate	0.0018	0.005	ND	ND	ND	ND
1,1,2-Trichloroethane	0.0018	0.005	ND	ND	ND	ND
Dibromochloromethane	0.0018	0.005	ND	ND	ND	ND
1,2-Dibromoethane (EDB)	0.0018	0.005	ND	ND	ND	ND
Tetrachloroethene	0.0018	0.005	ND	ND	ND	ND
1,3-Dichloropropane	0.0018	0.005	ND	ND	ND	ND
Chlorobenzene	0.0018	0.005	ND	ND	ND	ND

RL=Reporting Limit; ND=Not Detected (Below MDL); MDL= Method Detection Limit.

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A & R Laboratories

Client:	Environ Strategy Consultants, Inc.	Lab Job No.:	ES15A006
Project :	922	Date Sampled:	1/6-7/2015
Project Site:	Daly/Dansk Pleasant Valley Rd.	Date Received:	1/7/2015
Matrix:	Soil	Date Analyzed:	1/7/2015
Batch No.:	0107-VOCS	Date Reported:	1/8/2015

EPA 8260B (VOCs & Oxy.) by GC/MS, Page 2 of 2

Reporting Unit: mg/kg (PPM)

Date Analyzed			1/7/15	1/7/15	1/7/15	1/7/15
Dilution Factor			1	1	1	1
Lab Sample I.D.			ES15A006-9	ES15A006-10	ES15A006-11	ES15A006-12
Client Sample I.D.			CB-9-SWE	CB-10-B	CB-11-SWN	CB-12-SWS
Compound	MDL	RL				
1,1,1,2-Tetrachloroethane	0.0018	0.005	ND	ND	ND	ND
Ethylbenzene	0.001	0.002	ND	ND	ND	ND
Total Xylene	0.002	0.004	ND	ND	ND	ND
Styrene	0.0018	0.005	ND	ND	ND	ND
Bromoform	0.0018	0.005	ND	ND	ND	ND
Isopropyl benzene	0.0018	0.005	ND	ND	ND	ND
Bromobenzene	0.0018	0.005	ND	ND	ND	ND
1,2,3-Trichloropropane	0.0018	0.005	ND	ND	ND	ND
1,1,2,2,-Tetrachloroethane	0.0018	0.005	ND	ND	ND	ND
Trans-1,4-dichloro-2-butene	0.0018	0.005	ND	ND	ND	ND
2-Chlorotoluene	0.0018	0.005	ND	ND	ND	ND
n-Propyl benzene	0.0018	0.005	ND	ND	ND	ND
4-Chlorotoluene	0.0018	0.005	ND	ND	ND	ND
1,3,5-Trimethyl benzene	0.0018	0.005	ND	ND	ND	ND
tert-Butylbenzene	0.0018	0.005	ND	ND	ND	ND
p-Isopropyl toluene	0.0018	0.005	ND	ND	ND	ND
1,2,4-Trimethyl benzene	0.0018	0.005	ND	ND	ND	ND
sec-Butylbenzene	0.0018	0.005	ND	ND	ND	ND
1,3-Dichlorobenzene	0.0018	0.005	ND	ND	ND	ND
1,4-Dichlorobenzene	0.0018	0.005	ND	ND	ND	ND
1,2-Dichlorobenzene	0.0018	0.005	ND	ND	ND	ND
n-Butylbenzene	0.0018	0.005	ND	ND	ND	ND
1,2-Dibromo-3-chloropropan	0.0018	0.005	ND	ND	ND	ND
1,2,4-Trichlorobenzene	0.0018	0.005	ND	ND	ND	ND
Hexachlorobutadiene	0.0018	0.005	ND	ND	ND	ND
Naphthalene	0.0018	0.005	ND	ND	ND	ND
1,2,3-Trichlorobenzene	0.0018	0.005	ND	ND	ND	ND
Aceton	0.025	0.050	ND	ND	ND	ND
2-Butanone(MEK)	0.01	0.025	ND	ND	ND	ND
4-Methyl-2-Pentanone (MIBK)	0.01	0.025	ND	ND	ND	ND
MTBE	0.0018	0.005	ND	ND	ND	ND
Ethyl-t-butyl Ether(ETBE)	0.0018	0.005	ND	ND	ND	ND
Diisopropyl ether (DIPE)	0.0018	0.005	ND	ND	ND	ND
TAME	0.0018	0.005	ND	ND	ND	ND
t-Butanol	0.010	0.020	ND	ND	ND	ND
Ethanol	0.25	0.5	ND	ND	ND	ND

RL=Reporting Limit; ND=Not Detected (Below MDL); MDL= Method Detection Limit.

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A & R Laboratories

Client:	Environ Strategy Consultants, Inc.	Lab Job No.:	ES15A006
Project :	922	Date Sampled:	1/6-7/2015
Project Site:	Daly/Dansk Pleasant Valley Rd.	Date Received:	1/7/2015
Matrix:	Soil	Date Analyzed:	1/7/2015
Batch No.:	0107-VOCS	Date Reported:	1/8/2015

EPA 8260B (VOCs & Oxy.) by GC/MS, Page 1 of 2

Reporting Unit: mg/kg (PPM)

Date Analyzed			1/7/15	1/7/15	1/7/15	
Dilution Factor			1	1	1	
Lab Sample I.D.			ES15A006-13	ES15A006-14	ES15A006-15	
Client Sample I.D.			CB-13-SWE	CB-14-SWW	CB-15-B	
Compound	MDL	RL				
Dichlorodifluoromethane	0.0018	0.005	ND	ND	ND	
Chloromethane	0.0018	0.005	ND	ND	ND	
Vinyl Chloride	0.0018	0.005	ND	ND	ND	
Bromomethane	0.0018	0.005	ND	ND	ND	
Chloroethane	0.0018	0.005	ND	ND	ND	
Trichlorofluoromethane	0.0018	0.005	ND	ND	ND	
1,1-Dichloroethene	0.0018	0.005	ND	ND	ND	
Carbon disulfide	0.0018	0.005	ND	ND	ND	
Methylene chloride	0.0018	0.005	ND	ND	ND	
Trans-1,2-Dichloroethene	0.0018	0.005	ND	ND	ND	
1,1-Dichloroethane	0.0018	0.005	ND	ND	ND	
2,2-Dichloropropane	0.0018	0.005	ND	ND	ND	
Cis-1,2-Dichloroethene	0.0018	0.005	ND	ND	ND	
Bromochloromethane	0.0018	0.005	ND	ND	ND	
Chloroform	0.0018	0.005	ND	ND	ND	
1,1,1-Trichloroethane	0.0018	0.005	ND	ND	ND	
Vinyl acetate	0.0018	0.005	ND	ND	ND	
Carbontetrachloride	0.0018	0.005	ND	ND	ND	
1,1-Dichloropropene	0.0018	0.005	ND	ND	ND	
1,2-Dichloroethane	0.0018	0.005	ND	ND	ND	
Benzene	0.001	0.002	ND	ND	ND	
Trichloroethene	0.0018	0.005	ND	ND	ND	
1,2-Dichlorpropane	0.0018	0.005	ND	ND	ND	
Methyl methacrylate	0.0018	0.005	ND	ND	ND	
Dibromomethane	0.0018	0.005	ND	ND	ND	
Bromodichloromethane	0.0018	0.005	ND	ND	ND	
2-Chloroethyl Vinyl Ether	0.0018	0.005	ND	ND	ND	
Cis-1,3-Dichloropropene	0.0018	0.005	ND	ND	ND	
Toluene	0.001	0.002	ND	ND	ND	
Trans-1,3-Dichloropropene	0.0018	0.005	ND	ND	ND	
Ethylmethacrylate	0.0018	0.005	ND	ND	ND	
1,1,2-Trichloroethane	0.0018	0.005	ND	ND	ND	
Dibromochloromethane	0.0018	0.005	ND	ND	ND	
1,2-Dibromoethane (EDB)	0.0018	0.005	ND	ND	ND	
Tetrachloroethene	0.0018	0.005	ND	ND	ND	
1,3-Dichloropropane	0.0018	0.005	ND	ND	ND	
Chlorobenzene	0.0018	0.005	ND	ND	ND	

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A & R Laboratories

Client:	Environ Strategy Consultants, Inc.	Lab Job No.:	ES15A006
Project :	922	Date Sampled:	1/6-7/2015
Project Site:	Daly/Dansk Pleasant Valley Rd.	Date Received:	1/7/2015
Matrix:	Soil	Date Analyzed:	1/7/2015
Batch No.:	0107-VOCS	Date Reported:	1/8/2015

EPA 8260B (VOCs & Oxy.) by GC/MS, Page 2 of 2

Reporting Unit: mg/kg (PPM)

Date Analyzed			1/7/15	1/7/15	1/7/15	
Dilution Factor			1	1	1	
Lab Sample I.D.			ES15A006-13	ES15A006-14	ES15A006-15	
Client Sample I.D.			CB-13-SWE	CB-14-SWW	CB-15-B	
Compound	MDL	RL				
1,1,1,2-Tetrachloroethane	0.0018	0.005	ND	ND	ND	
Ethylbenzene	0.001	0.002	ND	ND	ND	
Total Xylene	0.002	0.004	ND	ND	ND	
Styrene	0.0018	0.005	ND	ND	ND	
Bromoform	0.0018	0.005	ND	ND	ND	
Isopropyl benzene	0.0018	0.005	ND	ND	ND	
Bromobenzene	0.0018	0.005	ND	ND	ND	
1,2,3-Trichloropropane	0.0018	0.005	ND	ND	ND	
1,1,2,2,-Tetrachloroethane	0.0018	0.005	ND	ND	ND	
Trans-1,4-dichloro-2-butene	0.0018	0.005	ND	ND	ND	
2-Chlorotoluene	0.0018	0.005	ND	ND	ND	
n-Propyl benzene	0.0018	0.005	ND	ND	ND	
4-Chlorotoluene	0.0018	0.005	ND	ND	ND	
1,3,5-Trimethyl benzene	0.0018	0.005	ND	ND	ND	
tert-Butylbenzene	0.0018	0.005	ND	ND	ND	
p-Isopropyl toluene	0.0018	0.005	ND	ND	ND	
1,2,4-Trimethyl benzene	0.0018	0.005	ND	ND	ND	
sec-Butylbenzene	0.0018	0.005	ND	ND	ND	
1,3-Dichlorobenzene	0.0018	0.005	ND	ND	ND	
1,4-Dichlorobenzene	0.0018	0.005	ND	ND	ND	
1,2-Dichlorobenzene	0.0018	0.005	ND	ND	ND	
n-Butylbenzene	0.0018	0.005	ND	ND	ND	
1,2-Dibromo-3-chloropropan	0.0018	0.005	ND	ND	ND	
1,2,4-Trichlorobenzene	0.0018	0.005	ND	ND	ND	
Hexachlorobutadiene	0.0018	0.005	ND	ND	ND	
Naphthalene	0.0018	0.005	ND	ND	ND	
1,2,3-Trichlorobenzene	0.0018	0.005	ND	ND	ND	
Aceton	0.025	0.050	ND	ND	ND	
2-Butanone(MEK)	0.01	0.025	ND	ND	ND	
4-Methyl-2-Pentanone (MIBK)	0.01	0.025	ND	ND	ND	
MTBE	0.0018	0.005	ND	ND	ND	
Ethyl-t-butyl Ether(ETBE)	0.0018	0.005	ND	ND	ND	
Diisopropyl ether (DIPE)	0.0018	0.005	ND	ND	ND	
TAME	0.0018	0.005	ND	ND	ND	
t-Butanol	0.010	0.020	ND	ND	ND	
Ethanol	0.25	0.5	ND	ND	ND	

RL=Reporting Limit; ND=Not Detected (Below MDL); MDL= Method Detection Limit.

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Client:	Environ Strategy Consultants, Inc.	Lab Job No.:	ES15A006
Project:	922	Date Sampled:	1/6-7/2015
Project Site:	Daly/Dansk Pleasant Valley Rd.	Date Received:	1/7/2015
Matrix:	Soil	Date Analyzed:	1/7/2015
Batch No.:	BA07-DS	Date Reported:	1/8/2015

EPA 8015M (TPH-Diesel & Oil)

Reporting Unit: mg/kg (PPM)

Client Sample ID	Lab ID	Dilution	Diesel	Oil	
		Factor	C_{12}-C_{24}	C_{24}-C_{40}	
	RL		10	25	
	MDL		5	10	
CB-1-SWE	ES15A006-1	1	ND	ND	
CB-2-SWN	ES15A006-2	1	ND	ND	
CB-3-SWW	ES15A006-3	1	ND	ND	
CB-4-SWS	ES15A006-4	1	ND	ND	
CB-5-B	ES15A006-5	1	ND	ND	
CB-6-SWN	ES15A006-6	1	ND	ND	
CB-7-SWW	ES15A006-7	1	ND	ND	
CB-8-SWS	ES15A006-8	1	ND	ND	
CB-9-SWE	ES15A006-9	1	ND	ND	
CB-10-B	ES15A006-10	1	ND	ND	
B-11-SWN	ES15A006-11	1	ND	ND	
CB-12-SWS	ES15A006-12	1	ND	ND	
CB-13-SWE	ES15A006-13	1	ND	ND	
CB-14-SWW	ES15A006-14	1	ND	ND	
CB-15-B	ES15A006-15	1	ND	ND	
CB-16-SWN	ES15A006-16	1	ND	ND	
CB-17-SWS	ES15A006-17	1	ND	ND	
CB-18-SWE	ES15A006-18	1	ND	ND	
CB-19-SWW	ES15A006-19	1	ND	ND	
CB-20-B	ES15A006-20	1	ND	ND	

RL=Reporting Limit; ND=Not Detected (Below MDL); MDL= Method Detection Limit.

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A & R Laboratories

Client:	Environ Strategy Consultants, Inc.	Lab Job No.:	ES15A006
Project:	922	Date Sampled:	1/6-7/2015
Project Site:	Daly/Dansk Pleasant Valley Rd.	Date Received:	1/7/2015
Matrix:	Soil	Date Extracted:	1/7/2015
Extraction Method:	EPA 3550B	Date Analyzed:	1/7/2015
Batch No.:	0107-PES-S	Date Reported:	1/8/2015

EPA 8081A (Organochlorine Pesticides)

Reporting Unit: µg/kg (PPB)

DILUTION FACTOR			1	1	1	1
LAB SAMPLE I.D.			ES15A006-1	ES15A006-2	ES15A006-3	ES15A006-4
CLIENT SAMPLE I.D.			CB-1-SWE	CB-2-SWN	CB-3-SWW	CB-4-SWS
COMPOUND	MDL	RL				
α-BHC	2.5	5	ND	ND	ND	ND
γ-BHC	2.5	5	ND	ND	ND	ND
Heptachlor	2.5	5	ND	ND	ND	ND
Aldrin	2.5	5	ND	ND	ND	ND
β-BHC	2.5	5	ND	ND	ND	ND
δ-BHC	2.5	5	ND	ND	ND	ND
Heptachlor Epoxide	2.5	5	ND	ND	ND	ND
Endosulfan I	2.5	5	ND	ND	ND	ND
4,4'-DDE	2.5	5	ND	123	ND	156
Dieldrin	2.5	5	ND	ND	ND	ND
Endrin	2.5	5	ND	ND	ND	ND
Endosulfan II	2.5	5	ND	ND	ND	ND
4,4'-DDD	2.5	5	ND	7.6	ND	18
4,4'-DDT	2.5	5	ND	30	ND	42.9
Endrin Aldehyde	2.5	5	ND	ND	ND	ND
Endosulfan Sulfate	2.5	5	ND	ND	ND	ND
Methoxychlor	10	20	ND	ND	ND	ND
Endrin Ketone	5	10	ND	ND	ND	ND
Total Chlordane	5	10	ND	ND	ND	18.7
Toxaphene	50	100	ND	ND	ND	ND

RL=Reporting Limit; ND=Not Detected (Below MDL); MDL= Method Detection Limit.

J= Trace Value Detected Bewteen MDL and RL.

A & R Laboratories

Client:	Environ Strategy Consultants, Inc.	Lab Job No.:	ES15A006
Project:	922	Date Sampled:	1/6-7/2015
Project Site:	Daly/Dansk Pleasant Valley Rd.	Date Received:	1/7/2015
Matrix:	Soil	Date Extracted:	1/7/2015
Extraction Method:	EPA 3550B	Date Analyzed:	1/7/2015
Batch No.:	0107-PES-S	Date Reported:	1/8/2015

EPA 8081A (Organochlorine Pesticides)

Reporting Unit: μg/kg (PPB)

DILUTION FACTOR			1	1	1	1
LAB SAMPLE I.D.			ES15A006-5	ES15A006-6	ES15A006-7	ES15A006-8
CLIENT SAMPLE I.D.			CB-5-B	CB-6-SWN	CB-7-SWW	CB-8-SWS
COMPOUND	MDL	RL				
α-BHC	2.5	5	ND	ND	ND	ND
γ-BHC	2.5	5	ND	ND	ND	ND
Heptachlor	2.5	5	ND	ND	ND	ND
Aldrin	2.5	5	ND	ND	ND	ND
β-BHC	2.5	5	ND	ND	ND	ND
δ-BHC	2.5	5	ND	ND	ND	ND
Heptachlor Epoxide	2.5	5	ND	ND	ND	ND
Endosulfan I	2.5	5	ND	ND	ND	ND
4,4'-DDE	2.5	5	ND	ND	ND	ND
Dieldrin	2.5	5	ND	ND	ND	ND
Endrin	2.5	5	ND	ND	ND	ND
Endosulfan II	2.5	5	ND	ND	ND	ND
4,4'-DDD	2.5	5	ND	ND	ND	ND
4,4'-DDT	2.5	5	ND	ND	ND	ND
Endrin Aldehyde	2.5	5	ND	ND	ND	ND
Endosulfan Sulfate	2.5	5	ND	ND	ND	ND
Methoxychlor	10	20	ND	ND	ND	ND
Endrin Ketone	5	10	ND	ND	ND	ND
Total Chlordane	10	25	ND	ND	ND	ND
Toxaphene	50	100	ND	ND	ND	ND

RL=Reporting Limit; ND=Not Detected (Below MDL); MDL= Method Detection Limit.

J= Trace Value Detected Bewteen MDL and RL.

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A & R Laboratories

Client:	Environ Strategy Consultants, Inc.	Lab Job No.:	ES15A006
Project:	922	Date Sampled:	1/6-7/2015
Project Site:	Daly/Dansk Pleasant Valley Rd.	Date Received:	1/7/2015
Matrix:	Soil	Date Extracted:	1/7/2015
Extraction Method:	EPA 3550B	Date Analyzed:	1/7/2015
Batch No.:	0107-PES-S	Date Reported:	1/8/2015

EPA 8081A (Organochlorine Pesticides)

Reporting Unit: µg/kg (PPB)

DILUTION FACTOR			1	1	1	1
LAB SAMPLE I.D.			ES15A006-9	ES15A006-10	ES15A006-11	ES15A006-12
CLIENT SAMPLE I.D.			CB-9-SWE	CB-10-B	CB-11-SWN	CB-12-SWS
COMPOUND	MDL	RL				
α-BHC	2.5	5	ND	ND	ND	ND
γ-BHC	2.5	5	ND	ND	ND	ND
Heptachlor	2.5	5	ND	ND	ND	ND
Aldrin	2.5	5	ND	ND	ND	ND
β-BHC	2.5	5	ND	ND	ND	ND
δ-BHC	2.5	5	ND	ND	ND	ND
Heptachlor Epoxide	2.5	5	ND	ND	ND	ND
Endosulfan I	2.5	5	ND	ND	ND	ND
4,4'-DDE	2.5	5	4.5J	ND	380	ND
Dieldrin	2.5	5	ND	ND	ND	ND
Endrin	2.5	5	ND	ND	ND	ND
Endosulfan II	2.5	5	ND	ND	ND	ND
4,4'-DDD	2.5	5	ND	ND	180	ND
4,4'-DDT	2.5	5	ND	ND	290	ND
Endrin Aldehyde	2.5	5	ND	ND	ND	ND
Endosulfan Sulfate	2.5	5	ND	ND	ND	ND
Methoxychlor	10	20	ND	ND	ND	ND
Endrin Ketone	5	10	ND	ND	ND	ND
Total Chlordane	5	10	6.8J	ND	384	ND
Toxaphene	50	100	ND	ND	ND	ND

RL=Reporting Limit; ND=Not Detected (Below MDL); MDL= Method Detection Limit.

J= Trace Value Detected Bewteen MDL and RL.

A & R Laboratories

Client:	Environ Strategy Consultants, Inc.	Lab Job No.:	ES15A006
Project:	922	Date Sampled:	1/6-7/2015
Project Site:	Daly/Dansk Pleasant Valley Rd.	Date Received:	1/7/2015
Matrix:	Soil	Date Extracted:	1/7/2015
Extraction Method:	EPA 3550B	Date Analyzed:	1/7/2015
Batch No.:	0107-PES-S	Date Reported:	1/8/2015

EPA 8081A (Organochlorine Pesticides)

Reporting Unit: μg/kg (PPB)

DILUTION FACTOR			1	1	1	
LAB SAMPLE I.D.			ES15A006-13	ES15A006-14	ES15A006-15	
CLIENT SAMPLE I.D.			CB-13-SWE	CB-14-SWW	CB-15-B	
COMPOUND	MDL	RL				
α-BHC	2.5	5	ND	ND	ND	
γ-BHC	2.5	5	ND	ND	ND	
Heptachlor	2.5	5	ND	ND	ND	
Aldrin	2.5	5	ND	ND	ND	
β-BHC	2.5	5	ND	ND	ND	
δ-BHC	2.5	5	ND	ND	ND	
Heptachlor Epoxide	2.5	5	ND	ND	ND	
Endosulfan I	2.5	5	ND	ND	ND	
4,4'-DDE	2.5	5	4.1J	ND	55.5	
Dieldrin	2.5	5	ND	ND	ND	
Endrin	2.5	5	ND	ND	ND	
Endosulfan II	2.5	5	ND	ND	ND	
4,4'-DDD	2.5	5	6.6	ND	24.9	
4,4'-DDT	2.5	5	18.3	ND	78	
Endrin Aldehyde	2.5	5	ND	ND	ND	
Endosulfan Sulfate	2.5	5	ND	ND	ND	
Methoxychlor	10	20	ND	ND	ND	
Endrin Ketone	5	10	ND	ND	ND	
Total Chlordane	5	10	7.4J	ND	53.4	
Toxaphene	50	100	ND	ND	ND	

RL=Reporting Limit; ND=Not Detected (Below MDL); MDL= Method Detection Limit.

J= Trace Value Detected Bewteen MDL and RL.

A & R Laboratories

Client:	Environ Strategy Consultants, Inc.	Lab Job No.:	ES15A006
Project:	922	Date Sampled:	1/6-7/2015
Project Site:	Daly/Dansk Pleasant Valley Rd.	Date Received:	1/7/2015
Matrix:	Soil	Date Digested:	1/7/2015
Digestion Method:	3050B	Date Analyzed:	1/8/2015
Batch No.:	0108-MTS	Date Reported:	1/8/2015

EPA 6010B/7471A (TTLC-Metals)

Report Units: mg/kg (PPM)

Element	EPA Method	ES15A006-1 CB-1-SWE	ES15A006-2 CB-2-SWN	ES15A006-3 CB-3-SWW	MDL	RL
Antimony (Sb)	6010B	ND	ND	ND	5	10
Arsenic (As)	6010B	ND	ND	ND	0.5	1
Barium (Ba)	6010B	44.9	48.4	40.3	2	5
Beryllium (Be)	6010B	ND	ND	ND	1	2
Cadmium (Cd)	6010B	ND	ND	ND	1	2
Chromium (Cr)	6010B	6.3	6.1	6.7	1	2
Cobalt (Co)	6010B	3.2	3.1	3.5	1	2
Copper (Cu)	6010B	7.4	6.6	8.7	1	2
Lead (Pb)	6010B	5.4	3.6	7.6	1	2
Mercury (Hg)	7471A	ND	ND	ND	0.1	0.2
Molybdenum (Mo)	6010B	ND	ND	ND	2	5
Nickel (Ni)	6010B	7.8	7.9	8.5	1	2
Selenium (Se)	6010B	ND	ND	ND	1	2
Silver (Ag)	6010B	ND	ND	ND	1	2
Thallium (Tl)	6010B	ND	ND	ND	1	2
Vanadium (V)	6010B	14.6	14.3	15.4	2	5
Zinc (Zn)	6010B	31	25.8	36.2	1	2

RL=Reporting Limit; ND=Not Detected (Below MDL); MDL= Method Detection Limit.

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A & R Laboratories

Client:	Environ Strategy Consultants, Inc.	Lab Job No.:	ES15A006
Project:	922	Date Sampled:	1/6-7/2015
Project Site:	Daly/Dansk Pleasant Valley Rd.	Date Received:	1/7/2015
Matrix:	Soil	Date Digested:	1/7/2015
Digestion Method:	3050B	Date Analyzed:	1/8/2015
Batch No.:	0108-MTS	Date Reported:	1/8/2015

EPA 6010B/7471A (TTLC Metals)

Report Units: mg/kg (PPM)

Element	EPA Method	ES15A006-4 CB-4-SWS	ES15A006-5 CB-5-B	ES15A006-6 CB-6-SWN	MDL	RL
Antimony (Sb)	6010B	ND	ND	ND	5	10
Arsenic (As)	6010B	ND	ND	ND	0.5	1
Barium (Ba)	6010B	36.9	55.8	46.7	2	5
Beryllium (Be)	6010B	ND	ND	ND	1	2
Cadmium (Cd)	6010B	ND	ND	ND	1	2
Chromium (Cr)	6010B	8.6	7.7	6.4	1	2
Cobalt (Co)	6010B	3.1	3.9	3.3	1	2
Copper (Cu)	6010B	15.5	8.4	6.7	1	2
Lead (Pb)	6010B	11.5	3.5	3.7	1	2
Mercury (Hg)	7471A	ND	ND	ND	0.1	0.2
Molybdenum (Mo)	6010B	ND	ND	ND	2	5
Nickel (Ni)	6010B	8	9.6	7.9	1	2
Selenium (Se)	6010B	ND	ND	ND	1	2
Silver (Ag)	6010B	ND	ND	ND	1	2
Thallium (Tl)	6010B	ND	ND	ND	1	2
Vanadium (V)	6010B	14.4	18.2	14.8	2	5
Zinc (Zn)	6010B	79.8	31.7	29.2	1	2

RL=Reporting Limit; ND=Not Detected (Below MDL); MDL= Method Detection Limit.

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A & R Laboratories

Client:	Environ Strategy Consultants, Inc.	Lab Job No.:	ES15A006
Project:	922	Date Sampled:	1/6-7/2015
Project Site:	Daly/Dansk Pleasant Valley Rd.	Date Received:	1/7/2015
Matrix:	Soil	Date Digested:	1/7/2015
Digestion Method:	3050B	Date Analyzed:	1/8/2015
Batch No.:	0108-MTS	Date Reported:	1/8/2015

EPA 6010B/7471A (TTLC Metals)

Report Units: mg/kg (PPM)

Element	EPA Method	ES15A006-7 CB-7-SWW	ES15A006-8 CB-8-SWS	ES15A006-9 CB-9-SWE	MDL	RL
Antimony (Sb)	6010B	ND	ND	ND	5	10
Arsenic (As)	6010B	ND	ND	ND	0.5	1
Barium (Ba)	6010B	63.2	44	56.6	2	5
Beryllium (Be)	6010B	ND	ND	ND	1	2
Cadmium (Cd)	6010B	ND	ND	ND	1	2
Chromium (Cr)	6010B	8.5	6.3	7.4	1	2
Cobalt (Co)	6010B	4.1	3.1	3.8	1	2
Copper (Cu)	6010B	8.8	6.3	7.8	1	2
Lead (Pb)	6010B	4.7	3.1	4.1	1	2
Mercury (Hg)	7471A	ND	ND	ND	0.1	0.2
Molybdenum (Mo)	6010B	ND	ND	ND	2	5
Nickel (Ni)	6010B	10.3	7.7	9.2	1	2
Selenium (Se)	6010B	ND	ND	ND	1	2
Silver (Ag)	6010B	ND	ND	ND	1	2
Thallium (Tl)	6010B	ND	ND	ND	1	2
Vanadium (V)	6010B	19.5	14.6	17.3	2	5
Zinc (Zn)	6010B	40.2	25.9	32.2	1	2

RL=Reporting Limit; ND=Not Detected (Below MDL); MDL= Method Detection Limit.

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A & R Laboratories

Client:	Environ Strategy Consultants, Inc.	Lab Job No.:	ES15A006
Project:	922	Date Sampled:	1/6-7/2015
Project Site:	Daly/Dansk Pleasant Valley Rd.	Date Received:	1/7/2015
Matrix:	Soil	Date Digested:	1/7/2015
Digestion Method:	3050B	Date Analyzed:	1/8/2015
Batch No.:	0108-MTS	Date Reported:	1/8/2015

EPA 6010B/7471A (TTLC Metals)

Report Units: mg/kg (PPM)

Element	EPA Method	ES15A006-10 CB-10-B	ES15A006-11 CB-11-SWN	ES15A006-12 CB-12-SWS	MDL	RL
Antimony (Sb)	6010B	ND	ND	ND	5	10
Arsenic (As)	6010B	ND	ND	ND	0.5	1
Barium (Ba)	6010B	55.6	44.5	55.3	2	5
Beryllium (Be)	6010B	ND	ND	ND	1	2
Cadmium (Cd)	6010B	ND	ND	ND	1	2
Chromium (Cr)	6010B	6.1	7.9	7	1	2
Cobalt (Co)	6010B	3.2	3.5	3.6	1	2
Copper (Cu)	6010B	6.3	32.8	7.8	1	2
Lead (Pb)	6010B	3.2	18.3	3.3	1	2
Mercury (Hg)	7471A	ND	ND	ND	0.1	0.2
Molybdenum (Mo)	6010B	ND	ND	ND	2	5
Nickel (Ni)	6010B	7.5	8.6	9.1	1	2
Selenium (Se)	6010B	ND	ND	ND	1	2
Silver (Ag)	6010B	ND	ND	ND	1	2
Thallium (Tl)	6010B	ND	ND	ND	1	2
Vanadium (V)	6010B	14.3	15.4	16.5	2	5
Zinc (Zn)	6010B	25.3	95.2	28.1	1	2

RL=Reporting Limit; ND=Not Detected (Below MDL); MDL= Method Detection Limit.

A & R Laboratories

Client:	Environ Strategy Consultants, Inc.	Lab Job No.:	ES15A006
Project:	922	Date Sampled:	1/6-7/2015
Project Site:	Daly/Dansk Pleasant Valley Rd.	Date Received:	1/7/2015
Matrix:	Soil	Date Digested:	1/7/2015
Digestion Method:	3050B	Date Analyzed:	1/8/2015
Batch No.:	0108-MTS	Date Reported:	1/8/2015

EPA 6010B/7471A (TTLC Metals)

Report Units: mg/kg (PPM)

Element	EPA Method	ES15A006-13 CB-13-SWE	ES15A006-14 CB-14-SWW	ES15A006-15 CB-15-B	MDL	RL
Antimony (Sb)	6010B	ND	ND	ND	5	10
Arsenic (As)	6010B	ND	ND	ND	0.5	1
Barium (Ba)	6010B	60.9	54.5	48.2	2	5
Beryllium (Be)	6010B	ND	ND	ND	1	2
Cadmium (Cd)	6010B	ND	ND	ND	1	2
Chromium (Cr)	6010B	7.7	7.2	6.7	1	2
Cobalt (Co)	6010B	3.9	3.6	3.2	1	2
Copper (Cu)	6010B	9.7	7.5	11.8	1	2
Lead (Pb)	6010B	6.7	3.6	8.4	1	2
Mercury (Hg)	7471A	ND	ND	ND	0.1	0.2
Molybdenum (Mo)	6010B	ND	ND	ND	2	5
Nickel (Ni)	6010B	9.7	8.9	8.3	1	2
Selenium (Se)	6010B	ND	ND	ND	1	2
Silver (Ag)	6010B	ND	ND	ND	1	2
Thallium (Tl)	6010B	ND	ND	ND	1	2
Vanadium (V)	6010B	17.5	16.4	14.5	2	5
Zinc (Zn)	6010B	39.8	29.4	42.4	1	2

RL=Reporting Limit; ND=Not Detected (Below MDL); MDL= Method Detection Limit.

A & R Laboratories

EPA 8260B (VOCs & Oxy.)
Batch QA/QC Report

Client:	Environ Strategy Consultants, Inc.	Lab Job No.:	ES15A006
Project:	922	Lab Sample ID:	ES15A006-1
Matrix:	Soil	Date Analyzed:	1/7/2015
Batch No.:	0107-VOCS	Date Reported:	1/8/2015

I. MS/MSD Report

Unit: mg/kg (PPM)

Compound	Sample Conc.	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	%RPD	%RPD Accept Limit	%Rec. Accept Limit
1,1-Dichloroethene	ND	0.020	0.018	0.019	90	95	5	≤30	70-130
Benzene	ND	0.020	0.017	0.018	85	90	6	≤30	70-130
Trichloroethene	ND	0.020	0.018	0.019	90	95	5	≤30	70-130
Toluene	ND	0.020	0.019	0.020	95	100	5	≤30	70-130
Chlorobenzene	ND	0.020	0.020	0.019	100	95	5	≤30	70-130

II. MB/LCS Report

Unit: mg/kg (PPM)

Compound	MB	Report Value	True Value	Rec. %	Accept Limit
1,1-Dichloroethene	ND	0.019	0.020	95	80 -120
Benzene	ND	0.018	0.020	90	80 -120
Trichloroethene	ND	0.020	0.020	100	80 -120
Toluene	ND	0.020	0.020	100	80 -120
Chlorobenzene	ND	0.018	0.020	90	80 -120

MB: Method Blank.

ND: Not Detected (Below MDL)

A & R Laboratories

EPA 8015M (TPH-Diesel)
Batch QA/QC Report

Client:	Environ Strategy Consultants, Inc.	Lab Job No.:	ES15A006
Project:	922	Lab Sample ID:	ES15A006-3
Matrix:	Soil	Date Analyzed:	1/7/2015
Batch No.:	BA07-DS	Date Reported:	1/8/2015

I. MB/LCS Report

Unit: mg/kg (PPM)

Analyte	Method Blank	Report Value	True Value	Rec.%	Accept Limit
TPH-D	ND	550	500	110	80-120

II. MS/MSD Report

Unit: mg/kg (PPM)

Analyte	Sample Conc.	Spike Conc.	MS	MSD	MS %Rec.	MSD %rec.	%RPD	%RPD Accept Limit	%Rec Accept Limit
TPH-D	ND	500	475	485	95	97	2	≤30	70-130

ND: Not Detected (Below MDL).

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EPA Method 8081A
Batch QA/QC Report

Client:	Environ Strategy Consultants, Inc.	Lab Job No.:	ES15A006
Project:	922	Lab Sample ID:	ES15A006-1
Matrix:	Soil	Date Analyzed:	1/7/2015
Batch No.:	0107-PES-S	Date Reported	1/8/2015

I. MS/MSD Report

Unit: ug/kg

Compound	Sample Conc.	Spike Conc.	MS	MSD	LCS %Rec.	LCSD %Rec.	%RPD	%RPD Accept Limit	%Rec. Accept Limit
γ-BHC	ND	20	16.5	17.1	83	86	4	≤30	50-150
Heptachlor	ND	20	17.2	18.2	86	91	6	≤30	50-150
Aldrin	ND	20	18.5	16.5	93	83	11	≤30	50-140
Dieldrin	ND	40	33.2	30.2	83	76	9	≤30	70-130
Endrin	ND	40	35.1	34.5	88	86	2	≤30	70-150
4,4'-DDT	ND	40	34.2	33.2	86	83	3	≤30	50-130

II. MB/LCS Report

Unit: mg/kg

Analyte	Method Blank	Report Value	True Value	Rec.%	Accept Limit
γ-BHC	ND	17.5	20	88	50-150
Heptachlor	ND	16.2	20	81	50-150
Aldrin	ND	18.2	20	91	50-140
Dieldrin	ND	36.5	40	91	70-130
Endrin	ND	35.5	40	89	70-150
4,4'-DDT	ND	34.2	40	86	30-130

ND: Not Detected (Below RL).

A & R Laboratories

EPA 6010B/7471A (TTLC-Metals)
Batch QA/QC Report

Client:	Environ Strategy Consultants, Inc.	Lab Job No.:	ES15A006
Project:	922	Lab Sample ID:	LCS
Matrix:	Soil	Date Analyzed:	1/8/2015
Batch No.:	0108-MTS	Date Reported:	1/8/2015

MB/LCS/LCSD Report

Unit: mg/kg (PPM)

Element	Method Blank	Spike Conc.	LCS	LCSD	LCS %Rec.	LCSD %Rec.	%RPD	%RPD Accept Limit	%Rec. Accept Limit
Antimony (Sb)	ND	50	53	53	106	107	1	≤20	80-120
Arsenic (As)	ND	50	55	55	110	110	0	≤20	80-120
Barium (Ba)	ND	50	51	52	102	104	2	≤20	80-120
Beryllium (Be)	ND	50	54	53	108	106	2	≤20	80-120
Cadmium (Cd)	ND	50	54	55	108	110	2	≤20	80-120
Chromium (Cr)	ND	50	54	54	108	108	0	≤20	80-120
Cobalt (Co)	ND	50	54	55	108	110	2	≤20	80-120
Copper (Cu)	ND	50	54	54	108	108	0	≤20	80-120
Lead (Pb)	ND	50	54	54	108	108	0	≤20	80-120
Mercury (Hg)	ND	2	1.8	1.8	90	90	0	≤20	80-120
Molybdenum (Mo)	ND	50	53	54	106	108	2	≤20	80-120
Nickel (Ni)	ND	50	55	55	110	110	0	≤20	80-120
Selenium (Se)	ND	50	55	55	110	110	0	≤20	80-120
Silver (Ag)	ND	50	46	45	92	90	2	≤20	80-120
Thallium (Tl)	ND	50	53	53	106	106	0	≤20	80-120
Vanadium (V)	ND	50	54	55	108	110	2	≤20	80-120
Zinc (Zn)	ND	50	55	55	110	110	0	≤20	80-120

ND: Not Detected (Below MDL).

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ARL

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E-mail: office@arlaboratories.com

CHAIN OF CUSTODY

A & R Work Order #: ES15A006

Client Name	ES Engineering, Inc.
E-mail	cguesnon@es-online.com
Address	1036 W. Taft Ave
Report Attention	Chris G.
Phone #	714-919-6524
Fax: #	
Sampled By	BLH
Project No./ Name	PO#1000071 922
Project Site	Pleasant Valley Road Daly/Dansk

☒ Chilled
☒ Intact
☐ Sample Seal

Turn Around Time Requested: ☒ Rush 8 12 24 48 Hours ☐ Normal

Analyses Requested

Lab # (Lab use)	Client Sample ID	Sample Collection Date	Sample Collection Time	Matrix Type	Sample Preserve	No., type* & size of container	EPA8260B (VOCs & Oxygenates)	EPA8260B(BTEX & Oxygenates)	LUFT / 8015 (Gasoline)	LUFT / 8015 (Diesel)	EPA8081A (Organochlorine Pesticides)	EPA 8082 (PCBs)	EPA 8015M (Carbon Chain C4-C40)	EPA 6010B/7000 (CAM 17 Metals)	Micro: Plate Cnt., Coliform, E-Coli							Remarks
1	CB-1-SWE	1/6/15	1005	Soil	—	9oz jars	X			X	X			X								
2	CB-2-SWN	1/6/15	1010				X			X	X			X								
3	CB-3-SWW	1/6/15	1015				X			X	X			X								
4	CB-4-SWS	1/6/15	1020				X			X	X			X								
5	CB-5-B	1/6/15	1030				X			X	X			X								
6	CB-6-SWN	1/7/15	1021				X			X	X			X								
7	CB-7-SWW	1/7/15	1025				X			X	X			X								
8	CB-8-SWS	1/7/15	1030				X			X	X			X								
9	CB-9-SWE	1/7/15	1035				X			X	X			X								
10	CB-10-B	1/7/15	1040				X			X	X			X								
11	CB-11-SWN	1/7/15	1040				X			X	X			X								
12	CB-12-SWS	1/7/15	1045				X			X	X			X								
13	CB-13-SWE	1/7/15	1050				X			X	X			X								
14	CB-14-SWW	1/7/15	1055				X			X	X			X								
15	CB-15-B	1/7/15	1100				X			X	X			X								

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	ES	1/7/15	1445	[signature]	AR	1/7/15	14:45
				[signature]	AR	1/7/15	15:45

Note: Samples are discarded 30 days after results are reported unless other arrangements are made.

Matrix Code: DW=Drinking Water, GW=Ground Water, WW=Waste Water, SD=Solid Waste, SL=Sludge, SS=Soil/Sediment, AR=Air, PP=Pure Product

Preservative Code: IC=Ice, HC=HCl, HN=HNO_3, SH=NaOH, ST=$Na_2S_2O_3$, HS=H_2SO_4

* Sample Container Types: T=Tedlar Air Bag, G=Glass Container, ST= Steel Tube, B= Brass Tube, P=Plastic Bottle, V=VOA Vial, E= EnCore

ARL

A & R Laboratories
1650 S. Grove Ave., Ste C, Ontario, CA 91761
Tel: 909-781-6335 / 951-779-0310 Fax: 951-779-0344
E-mail: office@arlaboratories.com

CHAIN OF CUSTODY

A & R Work Order #: ES15A006

Client Name: ES Engineering, Inc
E-mail: cguesnon@es-online.com
Address: 1036 W. Taft Ave
Report Attention: Chris G.
Phone #: 714-919-6524
Fax: #
Sampled By: BLH
Project No./ Name:
Project Site:

☒ Chilled
☒ Intact
☐ Sample Seal

Turn Around Time Requested: ☒ Rush 8 12 24 48 Hours ☐ Normal

Analyses Requested

Lab # (Lab use)	Client Sample ID	Sample Collection Date	Sample Collection Time	Matrix Type	Sample Preserve	No., type* & size of container	EPA8260B (VOCs & Oxygenates)	EPA8260B(BTEX & Oxygenates)	LUFT / 8015 (Gasoline)	LUFT / 8015 (Diesel)	EPA8081A (Organochlorine Pesticides)	EPA 8082 (PCBs)	EPA 8015M (Carbon Chain C4-C40)	EPA 6010B/7000 (CAM 17 Metals)	Micro: Plate Cnt., Coliform, E-Coli						Remarks
16	CB-16-SWN	1/6/15	1510	Soil	—	4oz jar				X											
17	CB-17-SWS	↓	1515	↓	—	↓				X											
18	CB-18-SWE	↓	1520	↓	—	↓				X											
19	CB-19-SWW	↓	1525	↓	—	↓				X											
20	CB-20-B	↓	1530	↓	—	↓				X											

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Becky S. Hartin	ES	1/7/15	1445	[signature]	AR	1/7/15	14:45
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Note: Samples are discarded 30 days after results are reported unless other arrangements are made.

Matrix Code: DW=Drinking Water, GW=Ground Water, WW=Waste Water, SD=Solid Waste, SL=Sludge, SS=Soil/Sediment, AR=Air, PP=Pure Product

Preservative Code: IC=Ice, HC=HCl, HN=HNO_3, SH=NaOH, ST=$Na_2S_2O_3$, HS=H_2SO_4

* Sample Container Types: T=Tedlar Air Bag, G=Glass Container, ST= Steel Tube, B= Brass Tube, P=Plastic Bottle, V=VOA Vial, E= EnCore

A & R Laboratories

Mr. Chris Guesnon 1/28/2015

ES Engineering

1036 West Taft Ave., Suite 200

Orange, CA 92865

Project:	922
Project Site:	2250 E. Pleasant Valley, Oxnard, CA
Sample Date:	1/27/2015
Lab Job No.:	ES15A018

Dear Mr. Chris Guesnon,

Enclosed please find the analytical report for the samples received by A & R Laboratories on 1/27/2015 and analyzed by the following EPA methods:

EPA 6010B (Total Lead)

All analyses have met the QA/QC criteria of this laboratory.

The sample(s) arrived in good conditions (i.e., chilled, intact) and with a chain of custody record attached.

A & R Laboratories is certified by the CA DHS (Certificate No.2789). Thank you for giving us the opportunity to serve you.

Please feel free to call me at (951)779-0310 if our laboratory can be of further service to you.

Respectfully,

A & R Laboratories

Ken Zheng, M.S.
Laboratory Director

Ken

This cover letter is an integral part of this analytical report.

A & R Laboratories

Client:	ES Engineering	Lab Job No.:	ES15A018
Project:	922	Date Sampled:	1/27/2015
Project Site:	2250 E. Pleasant Valley, Oxnard, CA	Date Received:	1/27/2015
Matrix:	Soil	Date Digested:	1/28/2015
Digestion Method:	3050B	Date Analyzed:	1/28/2015
Batch No.:	0128-MTS	Date Reported:	1/28/2015

EPA 6010B (Total Lead)

Report Units: mg/kg (PPM)

Client Sample ID	Lab ID	Dilution Factor	Total Lead		
	RL		0.5		
	MDL		0.25		
SE-1-N	ES15A006-1	1	9.7		
SE-1-W	ES15A006-2	1	7.4		
SE-1-E	ES15A006-3	1	11.4		
SE-1-S	ES15A006-4	1	6.6		
SE-2-N	ES15A006-5	1	20.0		
SE-2-W	ES15A006-6	1	12.9		
SE-2-E	ES15A006-7	1	15.8		
SE-2-S	ES15A006-8	1	19.3		
SE-3-N	ES15A006-9	1	8.5		
SE-3-W	ES15A006-10	1	14.0		
SE-3-E	ES15A006-11	1	8.9		
SE-3-S	ES15A006-12	1	8.7		

RL=Reporting Limit; ND=Not Detected (Below MDL); MDL= Method Detection Limit.

A & R Laboratories

EPA 6010B (Total Lead)
Batch QA/QC Report

Client:	ES Engineering	Lab Job No.:	ES15A018
Project:	922	Lab Sample ID:	LCS
Matrix:	Soil	Date Analyzed:	1/28/2015
Batch No.:	0128-MTS	Date Reported:	1/28/2015

MB/LCS/LCSD Report

Unit: mg/kg (PPM)

Element	Method Blank	Spike Conc.	LCS	LCSD	LCS %Rec.	LCSD %Rec.	%RPD	%RPD Accept Limit	%Rec. Accept Limit
Lead (Pb)	ND	50	44	43	89	86	3	≤20	80-120

ND: Not Detected (Below MDL).

ARL

A & R Laboratories
1650 S. Grove Ave., Ste C, Ontario, CA 91761
Tel: 909-781-6335 / 951-779-0310 Fax: 951-779-0344
E-mail: office@arlaboratories.com

CHAIN OF CUSTODY

A & R Work Order #: ES15A018

Page 1 of 1

Client Name / E-mail: ES ENGINEERING

Address: 1036 W. Taft Ave, Orange, Ca

Report Attention: Chris Grassman

Phone # / Fax #: (714) 919-6500

Sampled By: E. Kuan

Project No./ Name: 922

Project Site: 2250 E. Pleasant Valley, Oxnard, Ca

☒ Chilled
☒ Intact
☐ Sample Seal

Turn Around Time Requested: ☒ Rush 8 12 24 48 Hours ☐ Normal

Analyses Requested

Lab # (Lab use)	Client Sample ID	Sample Collection Date	Sample Collection Time	Matrix Type	Sample Preserve	No., type* & size of container	EPA8260B (VOCs & Oxygenates)	EPA8260B(BTEX & Oxygenates)	LUFT / 8015 (Gasoline)	LUFT / 8015 (Diesel)	EPA8081A (Organochlorine Pesticides)	EPA 8082 (PCBs)	EPA 8015M (Carbon Chain C4-C40)	EPA 6010B/7000 (CAM-17 Metals)	Micro: Plate Cnt., Coliform, E-Coli	Remarks
-1	SE-1-N	1/27/15	1140	SS	NONE	1G								X		* LEAD ONLY
-2	SE-1-W		1150													
-3	SE-1-E		1155													
-4	SE-1-S		1145													
-5	SE-2-N		1200													
-6	SE-2W		1205													
-7	SE-2-E		1209													
-8	SE-2 S		1214													
-9	SE-3-N		1220													
-10	SE-3-W		1235													
-11	SE-3-E		1230													
-12	SE-3-S		1224											X		

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	ES	1/27/15	1540				
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
				[signature]	A+R	1-27-15	1540

Note: Samples are discarded 30 days after results are reported unless other arrangements are made.

Matrix Code: DW=Drinking Water, GW=Ground Water, WW=Waste Water, SD=Solid Waste, SL=Sludge, SS=Soil/Sediment, AR=Air, PP=Pure Product

Preservative Code: IC=Ice, HC=HCl, HN=HNO_3, SH=NaOH, ST=$Na_2S_2O_3$, HS=H_2SO_4

* Sample Container Types: T=Tedlar Air Bag, G=Glass Container, ST= Steel Tube, B= Brass Tube, P=Plastic Bottle, V=VOA Vial, E= EnCore

environmental
services
ES Engineering, Inc.
1036 W. Taft Avenue
Orange, CA 92865
t 714.919.6500
f 714.919.6501

March 18, 2015

County of Ventura
Environmental Health Division
Attn: Gina Teresa, PG
800 S. Victoria Ave. #1730
Ventura, CA 93009-1730

Excavation Summary
Pesticide Impacted Soil
Pleasant Valley Road Apartments
2250 East Pleasant Valley Road
Oxnard, California 93033

Dear Mr. Daly,

ES Engineering, Inc. (ES) is providing this *Excavation Summary* (Summary) for the pesticide impacted soil located at 2250 East Pleasant Valley Road in Oxnard, California (Site, **Figure 1**). ES forwarded the *Workplan For Soil Excavation and Sequestration of Pesticide-Impacted Soil* (Workplan) dated January 15, 2015 to the Ventura County Environmental Health Department (VCEHD) for review. Based on telephone conversations with the VCEHD, impacted soil below the RSLs was not required to be removed from the site or sequestered (**Appendix A**). This Summary discusses the March 12, 2015 soil excavation and confirmation sampling, and presents the laboratory analytical results of the sampling activities.

Excavation Activities

During a previous assessment at the site, one soil sample location (sample location RS-14) was identified with impacts exceeding the USEPA recommended regional screening levels (RSLs) for 4,4 DDE (DDE) of 1.6 milligrams per kilogram (mg/kg), 4,4 DDT (DDT – 1.9 mg/kg), dieldrin (0.033 mg/kg) and chlordane (1.8 mg/kg); three soil sample locations (RS 17, RS-18, and RB-26) were identified with impacts exceeding the RSLs for chlordane. ES conducted one excavation (SE-5) to mitigate the DDE, DDT, dieldrin and chlordane impacted soil at the site, and three excavations (SE-6, SE-7 and SE-8) to mitigate chlordane impacted soil at the site. The excavation areas are shown on the attached **Figure 2**.

Excavation SE-5

Excavation SE-5 excavated an approximately 20 foot by 20 foot area to a depth of approximately 1.5 feet bgs to remove soil impacted with DDE, DDT, dieldrin and chlordane, detected in soil sample RS-14. Soil samples were collected from the excavation sidewalls and bottom when the excavation was completed.

Confirmation soil samples were collected directly into laboratory supplied 9-oz glass jars fitted with a Teflon coated lid. Sidewall samples were collected from the north, south, east and west walls of each excavation at approximately 1 to 3 inches bgs, and bottom samples were collected from the approximate center of each excavation at approximately 1.5 feet bgs. The confirmation soil sampling locations are shown on **Figure 2**.

Excavations SE-6, SE-7 and SE-8

Excavations SE-6, SE-7, and SE-8 were excavated at previous sample locations RS-17, RS-18, and RB-26, respectively, where chlordane impacted soil was detected above the RSLs. Excavations SE-6, SE-7, and SE-8 were extended to approximate 10 foot by 10 foot areas, and to a depth of 1.5 feet bgs. were sampled.

Confirmation soil samples from the sidewalls and bottom of each excavation were collected directly into 9-oz glass jars fitted with a Teflon coated lid. Sidewall samples were collected from the north, south, east and west walls of each excavation at approximately 1 to 3 inches bgs, and bottom samples were collected from the approximate center of each excavation at approximately 1.5 feet bgs. The confirmation soil sampling locations are shown on **Figure 2**.

Waste Management

Approximately 22 cubic yards of DDT, DDE, chlordane and dieldrin impacted soil was removed from excavation SE-5. The soil removed from the SE-5 excavation was placed in two additional roll-off bins and stored onsite, pending disposal.

Approximately 17 cubic yards of chlordane impacted soil was removed from excavations SE-6, SE-7, and SE-8. Waste manifests for soil disposal will be forwarded when available. The soil removed from excavations SE-6, SE-7 and SE-8 was placed in two roll-off bins and stored onsite, pending disposal.

Laboratory Analysis

The soil samples were labeled, stored in a cooler and then transferred to a State-certified laboratory for analysis. The soil samples collected from the pesticide impacted areas (SE-5, SE-6, SE-7 and SE-8) were delivered to the laboratory for organochlorine pesticides including DDE, DDT, dieldrin and chlordane analyses by EPA Method 8081A.

Laboratory Analytical Results

Based on the soil laboratory analytical results, none of the constituents of concern exceed the RSL for DDE, DDT, dieldrin and chlordane in a residential setting. DDE was detected at a maximum concentration of 0.540 mg/kg, below the residential RSL (1.6 mg/kg). The maximum concentration DDT detected (0.354 mg/kg), was below the residential RSL for that constituent (1.9 mg/kg). Chlordane was detected at a maximum concentration of 0.076 mg/kg, below the residential RSL for that constituent. Dieldrin was not detected above the laboratory MDL in any of the samples collected. A summary table of the soil analytical results is included as **Table 1.** The laboratory analytical report is attached as **Appendix B**.

Summary of Pesticide Impacted Soil Excavations

ES appreciates the opportunity to be of service to Pleasant Valley Ventures, LLC. If there are questions regarding the information contained in this report or if additional information is required, please contact the undersigned at (714) 919-6526.

Respectfully Submitted,
ES Engineering

CERTIFIED ENGINEERING GEOLOGIST
CHRIS A. GUESNON
No. CEG 2361
Exp. 9-30-15
STATE OF CALIFORNIA

Chris Guesnon, PG, CEG
Project Geologist

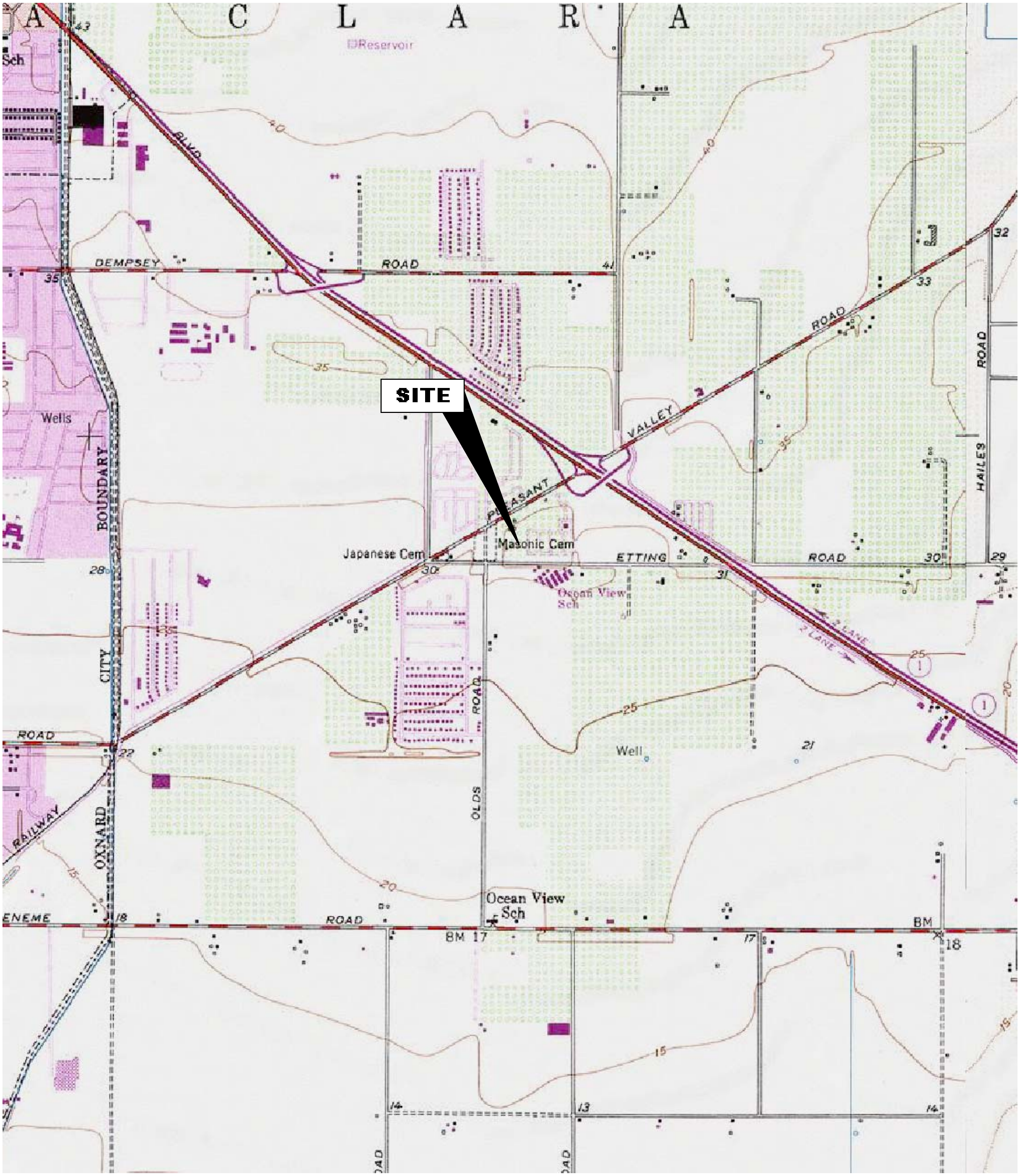
Dane Nygaard
Project Manager

FIGURES

TABLE

APPENDIX

FIGURES



Map Information:
TOPO! 2001 National Geographic Holdings
Disk 9: Los Angeles
34°09'44"N 119°08'50"W

environmental services
ES Engineering, Inc.
1036 W. Taft Avenue • Orange, CA 92865 • (714) 919-6500

N

0 2000

APPROX. SCALE: 1" = 2000'

FIGURE 1

SITE LOCATION MAP

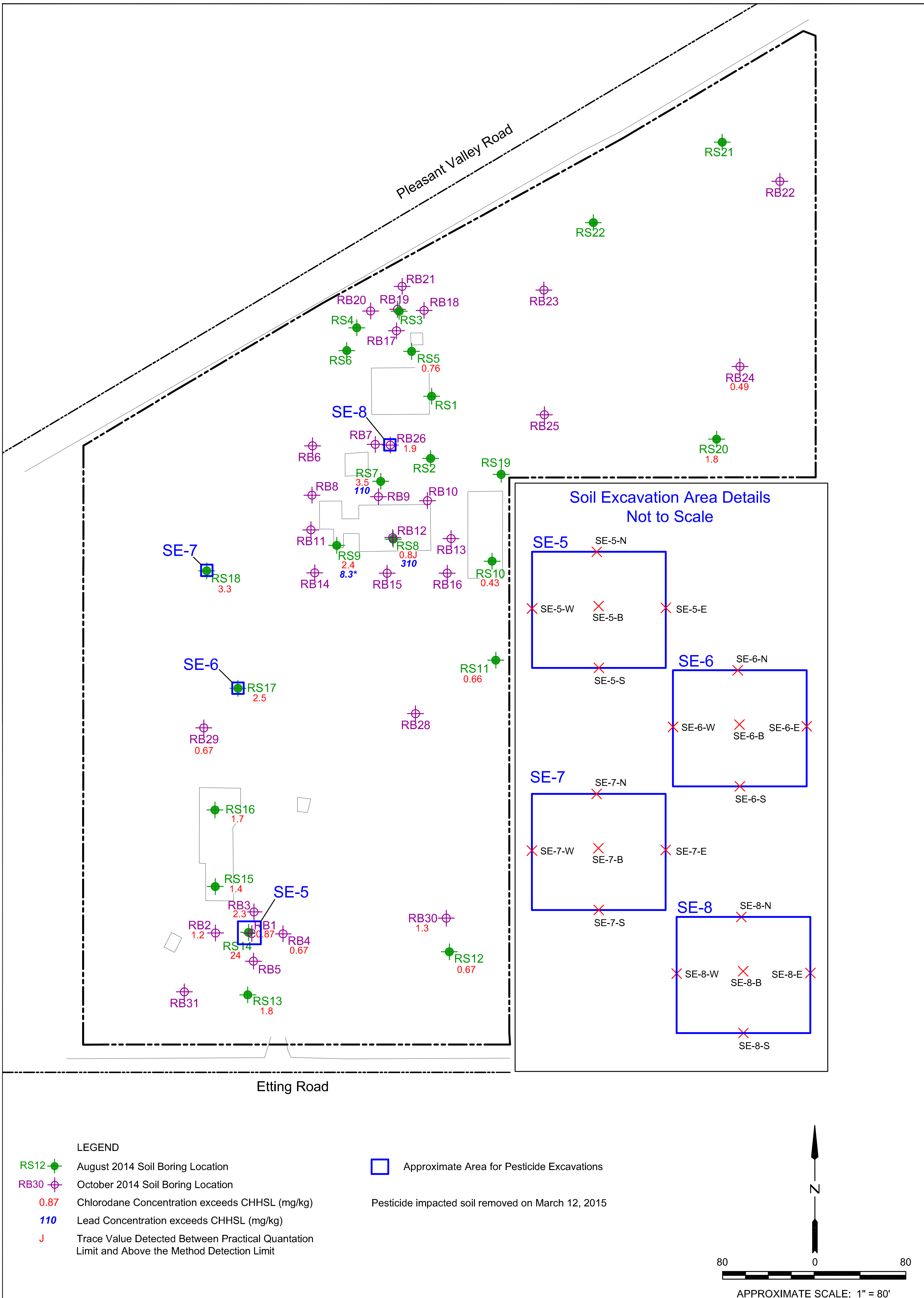
Daly/Dansk Pleasant Valley Road Apartments
2250 E. Pleasant Valley Road
Oxnard, California

DATE
01/08/2015

PROJECT NO.
922

FILE NO.
922F1-SLM

W:\03_Site Assessment & Remediation\USA\USA-SoCAl\Daly_Dansk_Pleasant Valley\DWG\922F1-SLM.dwg



LEGEND

RS12 August 2014 Soil Boring Location

RB30 October 2014 Soil Boring Location

0.87 Chlorodane Concentration exceeds CHHSL (mg/kg)

110 Lead Concentration exceeds CHHSL (mg/kg)

J Trace Value Detected Between Practical Quantation Limit and Above the Method Detection Limit

Approximate Area for Pesticide Excavations

Pesticide impacted soil removed on March 12, 2015

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FIGURE 2

SITE PLAN
SHOWING PESTICIDE EXCAVATION AREAS

Daly/Dansk Pleasant Valley Road Apartments
2250 E. Pleasant Valley Road
Oxnard, California

DATE
03/16/2015

PROJECT NO.
922

FILE NO.
922F2-SP

W:\03_Site Assessment & Remediation\USA\USA-SoCAl\Daly_Dansk_Pleasant Valley\DWG\922F2-SP (Pesticides Excavated).dwg

TABLE

TABLE 1

Summary of Soil Sample Analytical Results
Pleasant Valley Senior Apartments
2250 Pleasant Valley Road
Oxnard, California

Sample ID	Date Sampled	Depth (ft. bgs)	EPA Method 8081A (Organochlorine Pesticides)																			
			α - BHC (mg/kg)	Υ - BHC (mg/kg)	Heptachlor (mg/kg)	Aldrin (mg/kg)	β - BCH (mg/kg)	δ - BCH (mg/kg)	Heptachlor Epoxide (mg/kg)	Endosulfan I (mg/kg)	4,4'-DDE (mg/kg)	Dieldrin (mg/kg)	Endrin (mg/kg)	Endosulfan II (mg/kg)	4,4'-DDD (mg/kg)	4,4'-DDT (mg/kg)	Endrin Aldehyde (mg/kg)	Endosulfan Sulfate (mg/kg)	Methoxychlor (mg/kg)	Endrin Ketone (mg/kg)	Total Chlordane (mg/kg)	Toxaphene (mg/kg)
SE-5-N	03/12/15	0.08 - 0.25	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.380	<0.0025	<0.0025	<0.0025	0.086	0.040	<0.0025	<0.0025	<0.010	<0.005	0.015	<0.050
SE-5-S	03/12/15	0.08 - 0.25	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.250	<0.0025	<0.0025	<0.0025	0.024	0.011	<0.0025	<0.0025	<0.010	<0.005	<0.005	<0.050
SE-5-E	03/12/15	0.08 - 0.25	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.220	<0.0025	<0.0025	<0.0025	0.0105	0.005	<0.0025	<0.0025	<0.010	<0.005	<0.005	<0.050
SE-5-W	03/12/15	0.08 - 0.25	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.424	<0.0025	<0.0025	<0.0025	0.336	0.354	<0.0025	<0.0025	<0.010	<0.005	0.0122	<0.050
SE-5-B	03/12/15	1.5	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.010	<0.005	<0.005	<0.050
SE-6-N	03/12/15	0.08 - 0.25	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.052	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.010	<0.005	0.012	<0.050
SE-6-S	03/12/15	0.08 - 0.25	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.214	<0.0025	<0.0025	<0.0025	0.0105	0.009	<0.0025	<0.0025	<0.010	<0.005	0.048	<0.050
SE-6-E	03/12/15	0.08 - 0.25	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.0146	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.010	<0.005	0.010	<0.050
SE-6-W	03/12/15	0.08 - 0.25	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.100	<0.0025	<0.0025	<0.0025	0.0172	0.006	<0.0025	<0.0025	<0.010	<0.005	0.0428	<0.050
SE-6-B	03/12/15	1.5	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.010	<0.005	<0.005	<0.050
SE-7-N	03/12/15	0.08 - 0.25	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.520	<0.0025	<0.0025	<0.0025	0.0602	0.0296	<0.0025	<0.0025	<0.010	<0.005	0.039	<0.050
SE-7-S	03/12/15	0.08 - 0.25	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.462	<0.0025	<0.0025	<0.0025	0.068	0.0242	<0.0025	<0.0025	<0.010	<0.005	0.0685	<0.050
SE-7-E	03/12/15	0.08 - 0.25	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.440	<0.0025	<0.0025	<0.0025	0.0864	0.0416	<0.0025	<0.0025	<0.010	<0.005	0.058	<0.050
SE-7-W	03/12/15	0.08 - 0.25	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.540	<0.0025	<0.0025	<0.0025	0.102	0.050	<0.0025	<0.0025	<0.010	<0.005	0.054	<0.050
SE-7-B	03/12/15	1.5	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.010	<0.005	<0.005	<0.050
SE-8-N	03/12/15	0.08 - 0.25	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.112	<0.0025	<0.0025	<0.0025	0.044	0.032	<0.0025	<0.0025	<0.010	<0.005	0.076	<0.050
SE-8-S	03/12/15	0.08 - 0.25	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.010	<0.005	0.0066J	<0.050
SE-8-E	03/12/15	0.08 - 0.25	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.010	<0.005	<0.005	<0.050
SE-8-W	03/12/15	0.08 - 0.25	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.080	<0.0025	<0.0025	<0.0025	0.052	0.037	<0.0025	<0.0025	<0.010	<0.005	0.072	<0.050
SE-8-B	03/12/15	1.5	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.010	<0.005	<0.005	<0.050
Residential USEPA RSL			**0.085**	**0.56**	**0.12**	**0.031**	**0.3**	**0.3**	**0.059**	--	**1.6**	**0.033**	--	--	**2.2**	**1.9**	--	--	--	--	**1.8**	**0.48**
Commercial/Industrial USEPA RSL			**0.37**	**2.5**	**0.51**	**0.14**	**1.3**	**1.3**	**0.25**	--	**6.8**	**0.14**	--	--	**9.6**	**6.8**	--	--	--	--	**8**	**2.1**

Notes:

mg/kg = milligrams per kilogram
<1.0 = not detected at or above the stated method detection limit (MDL)
BHC = Hexachlorocyclohexane (α-alpha, Υ-gamma, β-beta, and δ-delta)
Residential and Commercial/Industrial USEPA Regional Screening Levels (RSLs) were taken from the 2015 residential soil table and the 2015 composite worked soil table obtained from http://www.epa.gov/region9/superfund/prg/

Appendix A

AGENCY CORRESPONDENCE

Chris Guesnon

From: Teresa, Gina <Gina.Teresa@ventura.org>
Sent: Monday, March 09, 2015 4:59 PM
To: Chris Guesnon; Vince Daly
Cc: Dane Nygaard
Subject: RE: Workplan for Soil Excavation and Sequestration of Pasticide-Impacted Soil

Chris,
The revised scope of work is approved. Please proceed.
Thanks

Gina L. Teresa, P.G.
Environmental Health Specialist

Hazardous Materials Program
Voluntary Cleanup Program
County of Ventura
800 South Victoria Avenue
Ventura, CA 93009-1730
Phone: 805-662-6510
Fax: 805-477-1595

From: Chris Guesnon [mailto:cguesnon@es-online.com]
Sent: Monday, March 09, 2015 4:57 PM
To: Teresa, Gina; Vince Daly
Cc: Dane Nygaard
Subject: RE: Workplan for Soil Excavation and Sequestration of Pasticide-Impacted Soil

Gina, correct. The proposed pesticide excavation area at RS-14 will be removed also. I apologize, RB-26 has not been removed, but will be addressed also when in the field.

Thank You.

Chris A. Guesnon
Project Manager

petroleum services

ES Engineering, Inc.
1036 West Taft Avenue
Orange, CA 92865
www.es-online.com

t (714) 919-6526
f (714) 919-6501
m (714) 514-9056

Please consider the environment before printing

From: Teresa, Gina [mailto:Gina.Teresa@ventura.org]
Sent: Monday, March 09, 2015 4:51 PM
To: Chris Guesnon; Vince Daly
Cc: Dane Nygaard
Subject: RE: Workplan for Soil Excavation and Sequestration of Pasticide-Impacted Soil

Chris,
To confirm, this is in addition to the proposed pesticide excavation area at RS-14? And has RB-26 (1.9mg/kg) been removed?

Gina Teresa

From: Chris Guesnon [mailto:cguesnon@es-online.com]
Sent: Monday, March 09, 2015 4:14 PM
To: Teresa, Gina; Vince Daly
Cc: Dane Nygaard
Subject: RE: Workplan for Soil Excavation and Sequestration of Pasticide-Impacted Soil

Gina, thank you for discussing the site with us and the recommended changes to the Workplan. Based on our discussion, Chlordane identified in soil exceeding the RSL (1.8 mg/kg) should be removed from the site to satisfy DTSC cleanup requirements. Chlordane impacted soil exceeding the RSL have been identified in the RS-17 and RS-18 locations. Therefore, ES will excavate the RS-17 and RS-18 locations, and conduct verification sampling in those areas to mitigate the pesticide impacts.

The excavation areas at the RS-17 and RS-18 locations are anticipated to be approximately 6-foot by 6-foot areas, and extend to approximately 18-inches below grade. Soil samples will be collected from the excavation sidewalls and bottoms and submitted to an analytical laboratory for analysis. The excavations will remain open until the soil sample analytical results have been reviewed, and the results indicate the Chlordane impacted soil exceeding the RSL has been removed. The Chlordane excavation activities can be conducted concurrently with the DDE, DDT excavation work described in our previous workplan, and wells exploration activities scheduled to be completed later this week.

If this revised Workplan is acceptable to the VCEHD, please reply accordingly.

Thank You.

Chris A. Guesnon
Project Manager

petroleum services

ES Engineering, Inc.
1036 West Taft Avenue
Orange, CA 92865
www.es-online.com

t (714) 919-6526

f (714) 919-6501
m (714) 514-9056

From: Teresa, Gina [mailto:Gina.Teresa@ventura.org]
Sent: Monday, March 09, 2015 2:07 PM
To: Vince Daly
Cc: Chris Guesnon; Dane Nygaard
Subject: Workplan for Soil Excavation and Sequestration of Pasticide-Impacted Soil

Hi Vince,
I'm a little confused. Do you guys want me to write a letter rejecting this workplan or should I wait until the supplemental workplan is submitted.
From my understanding we had talked about amending the workplan to eliminate the residential CHHSLs as the cleanup goal and replace them with the residential RSLs.
The amended workplan should propose removing all concentrations of chlordane at 1.8 mg/kg or greater. And I would recommend some confirmation samples at the potholed or over-excavated locations.
Thanks,

Gina L. Teresa, P.G.
Environmental Health Specialist

Hazardous Materials Program
Voluntary Cleanup Program
County of Ventura
800 South Victoria Avenue
Ventura, CA 93009-1730
Phone: 805-662-6510
Fax: 805-477-1595

Appendix B

LABORATORY ANALYTICAL REPORT

A & R Laboratories

Mr. Chris Guesnon 3/13/2015

ES Engineering, Inc.

1036 West Taft Ave., Suite 200

Orange, CA 92865

Project:	PN: 922
Project Site:	2250 Pleasant Valley Road, Oxnard
Sample Date:	3/12/2015
Lab Job No.:	ES15C021

Dear Mr. Chris Guesnon,

Enclosed please find the analytical report for the samples received by A & R Laboratories on 3/12/2015 and analyzed by the following EPA methods:

EPA 8081A (Organochlorine Pesticides)

All analyses have met the QA/QC criteria of this laboratory.

The sample(s) arrived in good conditions (i.e., chilled, intact) and with a chain of custody record attached.

A & R Laboratories is certified by the CA DHS (Certificate No.2789). Thank you for giving us the opportunity to serve you.

Please feel free to call me at (951)779-0310 if our laboratory can be of further service to you.

Respectfully,

A & R Laboratories

Ken Zheng, M.S.
Laboratory Director

Ken

This cover letter is an integral part of this analytical report.

A & R Laboratories

Client:	ES Engineering, Inc.	Lab Job No.:	ES15C021
Project:	PN: 922	Date Sampled:	3/12/2015
Project Site:	2250 Pleasant Valley Road, Oxnard	Date Received:	3/12/2015
Matrix:	Soil	Date Extracted:	3/12/2015
Extraction Method:	EPA 3550B	Date Analyzed:	3/12-13/2015
Batch No.:	0312-PES-S	Date Reported:	3/13/2015

EPA 8081A (Organochlorine Pesticides)

Reporting Unit: μg/kg (PPB)

DILUTION FACTOR			1	1	1	1
LAB SAMPLE I.D.			ES15C021-1	ES15C021-2	ES15C021-3	ES15C021-4
CLIENT SAMPLE I.D.			SE-5-N	SE-5-S	SE-5-E	SE-5-W
COMPOUND	MDL	RL				
α-BHC	2.5	5	ND	ND	ND	ND
γ-BHC	2.5	5	ND	ND	ND	ND
Heptachlor	2.5	5	ND	ND	ND	ND
Aldrin	2.5	5	ND	ND	ND	ND
β-BHC	2.5	5	ND	ND	ND	ND
δ-BHC	2.5	5	ND	ND	ND	ND
Heptachlor Epoxide	2.5	5	ND	ND	ND	ND
Endosulfan I	2.5	5	ND	ND	ND	ND
4,4'-DDE	2.5	5	380	250	220	424
Dieldrin	2.5	5	ND	ND	ND	ND
Endrin	2.5	5	ND	ND	ND	ND
Endosulfan II	2.5	5	ND	ND	ND	ND
4,4'-DDD	2.5	5	86	24	10.5	336
4,4'-DDT	2.5	5	40	11	5	354
Endrin Aldehyde	2.5	5	ND	ND	ND	ND
Endosulfan Sulfate	2.5	5	ND	ND	ND	ND
Methoxychlor	10	20	ND	ND	ND	ND
Endrin Ketone	5	10	ND	ND	ND	ND
Total Chlordane	5	10	15	ND	ND	12.2
Toxaphene	50	100	ND	ND	ND	ND

RL=Reporting Limit; ND=Not Detected (Below MDL); MDL= Method Detection Limit.

J= Trace Value Detected Bewteen MDL and RL.

A & R Laboratories

Client:	ES Engineering, Inc.	Lab Job No.:	ES15C021
Project:	PN: 922	Date Sampled:	3/12/2015
Project Site:	2250 Pleasant Valley Road, Oxnard	Date Received:	3/12/2015
Matrix:	Soil	Date Extracted:	3/12/2015
Extraction Method:	EPA 3550B	Date Analyzed:	3/12-13/2015
Batch No.:	0312-PES-S	Date Reported:	3/13/2015

EPA 8081A (Organochlorine Pesticides)

Reporting Unit: μg/kg (PPB)

DILUTION FACTOR			1	1	1	1
LAB SAMPLE I.D.			ES15C021-5	ES15C021-6	ES15C021-7	ES15C021-8
CLIENT SAMPLE I.D.			SE-5-B	SE-6-N	SE-6-S	SE-6-E
COMPOUND	MDL	RL				
α-BHC	2.5	5	ND	ND	ND	ND
γ-BHC	2.5	5	ND	ND	ND	ND
Heptachlor	2.5	5	ND	ND	ND	ND
Aldrin	2.5	5	ND	ND	ND	ND
β-BHC	2.5	5	ND	ND	ND	ND
δ-BHC	2.5	5	ND	ND	ND	ND
Heptachlor Epoxide	2.5	5	ND	ND	ND	ND
Endosulfan I	2.5	5	ND	ND	ND	ND
4,4'-DDE	2.5	5	ND	52	214	14.6
Dieldrin	2.5	5	ND	ND	ND	ND
Endrin	2.5	5	ND	ND	ND	ND
Endosulfan II	2.5	5	ND	ND	ND	ND
4,4'-DDD	2.5	5	ND	ND	10.5	ND
4,4'-DDT	2.5	5	ND	ND	9	ND
Endrin Aldehyde	2.5	5	ND	ND	ND	ND
Endosulfan Sulfate	2.5	5	ND	ND	ND	ND
Methoxychlor	10	20	ND	ND	ND	ND
Endrin Ketone	5	10	ND	ND	ND	ND
Total Chlordane	5	10	ND	12	48	10
Toxaphene	50	100	ND	ND	ND	ND

RL=Reporting Limit; ND=Not Detected (Below MDL); MDL= Method Detection Limit.

J= Trace Value Detected Bewteen MDL and RL.

A & R Laboratories

Client:	ES Engineering, Inc.	Lab Job No.:	ES15C021
Project:	PN: 922	Date Sampled:	3/12/2015
Project Site:	2250 Pleasant Valley Road, Oxnard	Date Received:	3/12/2015
Matrix:	Soil	Date Extracted:	3/12/2015
Extraction Method:	EPA 3550B	Date Analyzed:	3/12-13/2015
Batch No.:	0312-PES-S	Date Reported:	3/13/2015

EPA 8081A (Organochlorine Pesticides)

Reporting Unit: μg/kg (PPB)

DILUTION FACTOR			1	1	1	1
LAB SAMPLE I.D.			ES15C021-9	ES15C021-10	ES15C021-11	ES15C021-12
CLIENT SAMPLE I.D.			SE-6-W	SE-6-B	SE-7-N	SE-7-S
COMPOUND	MDL	RL				
α-BHC	2.5	5	ND	ND	ND	ND
γ-BHC	2.5	5	ND	ND	ND	ND
Heptachlor	2.5	5	ND	ND	ND	ND
Aldrin	2.5	5	ND	ND	ND	ND
β-BHC	2.5	5	ND	ND	ND	ND
δ-BHC	2.5	5	ND	ND	ND	ND
Heptachlor Epoxide	2.5	5	ND	ND	ND	ND
Endosulfan I	2.5	5	ND	ND	ND	ND
4,4'-DDE	2.5	5	100	ND	520	462
Dieldrin	2.5	5	ND	ND	ND	ND
Endrin	2.5	5	ND	ND	ND	ND
Endosulfan II	2.5	5	ND	ND	ND	ND
4,4'-DDD	2.5	5	17.2	ND	60.2	68
4,4'-DDT	2.5	5	6	ND	29.6	24.2
Endrin Aldehyde	2.5	5	ND	ND	ND	ND
Endosulfan Sulfate	2.5	5	ND	ND	ND	ND
Methoxychlor	10	20	ND	ND	ND	ND
Endrin Ketone	5	10	ND	ND	ND	ND
Total Chlordane	5	10	42.8	ND	39	68.5
Toxaphene	50	100	ND	ND	ND	ND

RL=Reporting Limit; ND=Not Detected (Below MDL); MDL= Method Detection Limit.

J= Trace Value Detected Bewteen MDL and RL.

A & R Laboratories

Client:	ES Engineering, Inc.	Lab Job No.:	ES15C021
Project:	PN: 922	Date Sampled:	3/12/2015
Project Site:	2250 Pleasant Valley Road, Oxnard	Date Received:	3/12/2015
Matrix:	Soil	Date Extracted:	3/12/2015
Extraction Method:	EPA 3550B	Date Analyzed:	3/12-13/2015
Batch No.:	0312-PES-S	Date Reported:	3/13/2015

EPA 8081A (Organochlorine Pesticides)

Reporting Unit: μg/kg (PPB)

DILUTION FACTOR			1	1	1	1
LAB SAMPLE I.D.			ES15C021-13	ES15C021-14	ES15C021-15	ES15C021-16
CLIENT SAMPLE I.D.			SE-7-E	SE-7-W	SE-7-B	SE-8-N
COMPOUND	MDL	RL				
α-BHC	2.5	5	ND	ND	ND	ND
γ-BHC	2.5	5	ND	ND	ND	ND
Heptachlor	2.5	5	ND	ND	ND	ND
Aldrin	2.5	5	ND	ND	ND	ND
β-BHC	2.5	5	ND	ND	ND	ND
δ-BHC	2.5	5	ND	ND	ND	ND
Heptachlor Epoxide	2.5	5	ND	ND	ND	ND
Endosulfan I	2.5	5	ND	ND	ND	ND
4,4'-DDE	2.5	5	440	540	ND	112
Dieldrin	2.5	5	ND	ND	ND	ND
Endrin	2.5	5	ND	ND	ND	ND
Endosulfan II	2.5	5	ND	ND	ND	ND
4,4'-DDD	2.5	5	86.4	102	ND	44
4,4'-DDT	2.5	5	41.6	50	ND	32
Endrin Aldehyde	2.5	5	ND	ND	ND	ND
Endosulfan Sulfate	2.5	5	ND	ND	ND	ND
Methoxychlor	10	20	ND	ND	ND	ND
Endrin Ketone	5	10	ND	ND	ND	ND
Total Chlordane	5	10	58	54	ND	76
Toxaphene	50	100	ND	ND	ND	ND

RL=Reporting Limit; ND=Not Detected (Below MDL); MDL= Method Detection Limit.

J= Trace Value Detected Bewteen MDL and RL.

A & R Laboratories

Client:	ES Engineering, Inc.	Lab Job No.:	ES15C021
Project:	PN: 922	Date Sampled:	3/12/2015
Project Site:	2250 Pleasant Valley Road, Oxnard	Date Received:	3/12/2015
Matrix:	Soil	Date Extracted:	3/12/2015
Extraction Method:	EPA 3550B	Date Analyzed:	3/12-13/2015
Batch No.:	0312-PES-S	Date Reported:	3/13/2015

EPA 8081A (Organochlorine Pesticides)

Reporting Unit: μg/kg (PPB)

DILUTION FACTOR			1	1	1	1
LAB SAMPLE I.D.			ES15C021-17	ES15C021-18	ES15C021-19	ES15C021-20
CLIENT SAMPLE I.D.			SE-8-S	SE-8-E	SE-8-W	SE-8-B
COMPOUND	MDL	RL				
α-BHC	2.5	5	ND	ND	ND	ND
γ-BHC	2.5	5	ND	ND	ND	ND
Heptachlor	2.5	5	ND	ND	ND	ND
Aldrin	2.5	5	ND	ND	ND	ND
β-BHC	2.5	5	ND	ND	ND	ND
δ-BHC	2.5	5	ND	ND	ND	ND
Heptachlor Epoxide	2.5	5	ND	ND	ND	ND
Endosulfan I	2.5	5	ND	ND	ND	ND
4,4'-DDE	2.5	5	ND	ND	80	ND
Dieldrin	2.5	5	ND	ND	ND	ND
Endrin	2.5	5	ND	ND	ND	ND
Endosulfan II	2.5	5	ND	ND	ND	ND
4,4'-DDD	2.5	5	ND	ND	52	ND
4,4'-DDT	2.5	5	ND	ND	37	ND
Endrin Aldehyde	2.5	5	ND	ND	ND	ND
Endosulfan Sulfate	2.5	5	ND	ND	ND	ND
Methoxychlor	10	20	ND	ND	ND	ND
Endrin Ketone	5	10	ND	ND	ND	ND
Total Chlordane	5	10	6.6J	ND	72	ND
Toxaphene	50	100	ND	ND	ND	ND

RL=Reporting Limit; ND=Not Detected (Below MDL); MDL= Method Detection Limit.

J= Trace Value Detected Bewteen MDL and RL.

A & R Laboratories

EPA Method 8081A
Batch QA/QC Report

Client:	ES Engineering, Inc.	Lab Job No.:	ES15C021
Project:	PN: 922	Lab Sample ID:	ES15C021-20
Matrix:	Soil	Date Analyzed:	3/12-13/2015
Batch No.:	0312-PES-S	Date Reported	3/13/2015

I. MS/MSD Report

Unit: ug/kg

Compound	Sample Conc.	Spike Conc.	MS	MSD	LCS %Rec.	LCSD %Rec.	%RPD	%RPD Accept Limit	%Rec. Accept Limit
γ-BHC	ND	20	15.5	16.5	78	83	6	≤30	50-150
Heptachlor	ND	20	16.4	17.6	82	88	7	≤30	50-150
Aldrin	ND	20	17.8	18.1	89	91	2	≤30	50-140
Dieldrin	ND	40	32.2	33.5	81	84	4	≤30	70-130
Endrin	ND	40	34.5	35.6	86	89	3	≤30	70-150
4,4'-DDT	ND	40	35.1	36.5	88	91	4	≤30	50-130

II. MB/LCS Report

Unit: mg/kg

Analyte	Method Blank	Report Value	True Value	Rec.%	Accept Limit
γ-BHC	ND	18.5	20	93	50-150
Heptachlor	ND	17.6	20	88	50-150
Aldrin	ND	18.5	20	93	50-140
Dieldrin	ND	35.5	40	89	70-130
Endrin	ND	36.5	40	91	70-150
4,4'-DDT	ND	35.1	40	88	30-130

ND: Not Detected (Below RL).

1650 S. Grove Ave., Suite C
Ontario, CA 91761
Tel: (951)779-0310
Fax: (951)779-0344

ARL

A & R Laboratories
1650 S. Grove Ave., Ste C, Ontario, CA 91761
Tel: 909-781-6335 / 951-779-0310 Fax: 951-779-0344
E-mail: office@arlaboratories.com

CHAIN OF CUSTODY

A & R Work Order #: ES15C021

Page 1 of 2

Client Name: ~~[illegible]~~ ES Engineering
E-mail:
Address: 1036 W. Taft Avenue, Orange, Ca
Report Attention: Chris G
Phone #: (714) 919-6500
Fax: #
Sampled By: CAG / KAR

☒ Chilled
☒ Intact
☐ Sample Seal

Project No./ Name: PN:922
Project Site: Pleasant Valley Venture, 2250 Pleasant Valley Road, Oxnard CA

Turn Around Time Requested: ☒ Rush 8 12 24 48 Hours ☐ Normal

Lab # (Lab use)	Client Sample ID	Date	Time	Matrix Type	Sample Preserve	No., type* & size of container	EPA8260B (VOCs & Oxygenates)	EPA8260B(BTEX & Oxygenates)	LUFT / 8015 (Gasoline)	LUFT / 8015 (Diesel)	EPA8081A (Organochlorine Pesticides)	EPA 8082 (PCBs)	EPA 8015M (Carbon Chain C4-C40)	EPA 6010B/7000 (CAM 17 Metals)	Micro: Plate Cnt., Coliform, E-Coli	8081	Remarks
-1	SE-5-N	3/12/15	1130	SS	NONE	1G										X	
-2	SE-5-S																
-3	SE-5-E																
-4	SE-5-W																
-5	SE-5-B		1130														
-6	SE-6-N		1215														
-7	SE-6-S																
-8	SE-6-E																
-9	SE-6-W																
-10	SE-6-B		1215														
-11	SE-7-N		1230														
-12	SE-7-S																
-13	SE-7-E																
-14	SE-7-W																
-15	SE-7-B		1230														

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	RS Eng	3-12-15	1935	[signature]	A&R	3/12/15	19:35
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Note: Samples are discarded 30 days after results are reported unless other arrangements are made.

Matrix Code: DW=Drinking Water, GW=Ground Water, WW=Waste Water, SD=Solid Waste, SL=Sludge, SS=Soil/Sediment, AR=Air, PP=Pure Product

Preservative Code: IC=Ice, HC=HCl, HN=HNO_3, SH=NaOH, ST=$Na_2S_2O_3$, HS=H_2SO_4

* Sample Container Types: T=Tedlar Air Bag, G=Glass Container, ST= Steel Tube, B= Brass Tube, P=Plastic Bottle, V=VOA Vial, E= EnCore

ARL

A & R Laboratories
1650 S. Grove Ave., Ste C, Ontario, CA 91761
Tel: 909-781-6335 / 951-779-0310 Fax: 951-779-0344
E-mail: office@arlaboratories.com

CHAIN OF CUSTODY

A & R Work Order #: ES15C021

Page 2 of 2

Client Name / E-mail: ~~Eastern Strategy Consultants~~ ES Engineering
Address: 1036 W. Taft Avenue, Orange, CA
Report Attention: Chris G
Phone #: (714) 919-6500
Fax: #
Sampled By: CAG / KAK
Project No./ Name: PN: 922
Project Site: Pleasant Valley Venture, 2250 Pleasant Valley Road, Oxnard, CA

☒ Chilled
☒ Intact
☐ Sample Seal

Turn Around Time Requested: ☑ Rush 8 12 24 48 Hours ☐ Normal

Analyses Requested

Lab # (Lab use)	Client Sample ID	Sample Collection Date	Sample Collection Time	Matrix Type	Sample Preserve	No., type* & size of container	EPA8260B (VOCs & Oxygenates)	EPA8260B(BTEX & Oxygenates)	LUFT / 8015 (Gasoline)	LUFT / 8015 (Diesel)	EPA8081A (Organochlorine Pesticides)	EPA 8082 (PCBs)	EPA 8015M (Carbon Chain C4-C40)	EPA 6010B/7000 (CAM 17 Metals)	Micro: Plate Cnt., Coliform, E-Coli	8081						Remarks
-16	SE-8-N	3/12/15	1255	SS	None	1 G										X						
-17	SE-8-S																					
-18	SE-8-E																					
-19	SE-8-W																					
-20	SE-8-B		1255																			

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	ES Eng	3-12-15	7:37	[signature]	A&R	3/12/15	19:37
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Note: Samples are discarded 30 days after results are reported unless other arrangements are made.

Matrix Code: DW=Drinking Water, GW=Ground Water, WW=Waste Water, SD=Solid Waste, SL=Sludge, SS=Soil/Sediment, AR=Air, PP=Pure Product

Preservative Code: IC=Ice, HC=HCl, HN=HNO_3, SH=NaOH, ST=$Na_2S_2O_3$, HS=H_2SO_4

* Sample Container Types: T=Tedlar Air Bag, G=Glass Container, ST= Steel Tube, B= Brass Tube, P=Plastic Bottle, V=VOA Vial, E= EnCore

Rincon Consultants, Inc.
180 North Ashwood Avenue
Ventura, California 93003
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Rincon Project No. 14-00624

Kathleen Mallory, MA, AICP
Principal Planner
Planning & Energy/Entitlement Services
Submitted via email: kmallory@pandes.net

Subject: **Final Technical Memorandum: Statistical Analysis of Sampling Data and Human Health Screening Evaluation, Daly/Dansk Apartments and Senior Living/Memory Care Project, Oxnard, California (APN #s 225-0-014-160 & 190)**

Dear Ms. Mallory:

Rincon Consultants has prepared this Technical Memorandum: Statistical Analysis of Sampling Data and Human Health Screening Evaluation for the above-mentioned Daly/Dansk property located in Oxnard, California (APN #s 225-0-014-160 and 190). This document provides a summary of the results of previous shallow sampling assessments performed to identify the presence of pesticides in the soil; a statistical evaluation of the chlordane data that were collected at the site; and a screening health risk assessment using this information to determine if significant risk associated with this chemical remains in shallow soil on this site.

Please contact us with any questions regarding this Technical Memorandum. Based on the information provided here and the results of the previous assessments, we recommend that a No Further Action determination be made for this project.

Sincerely,
Rincon Consultants, Inc.

Edward A. Morelan

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EXECUTIVE SUMMARY

This memorandum summarizes the findings of previous site investigations and remedial excavations performed at the Daly/Dansk property (APN #s 225-0-014-160 and 190) in the City of Oxnard, California. Based on this information, a screening Human Health Risk Assessment was performed to evaluate the level of risk associated with pesticides remaining in site soils.

Previous environmental assessments have identified multiple organochlorine pesticides (OCPs) in near-surface soils at this site. Remedial excavations were recently performed to remove the most-elevated levels of these chemicals. While low concentrations of OCPs remained in shallow soils following these efforts, their concentrations fall below established environmental screening levels, except for chlordane. In this instance, some of the residual chlordane sample results equaled or slightly exceeded the most conservative value for the protection of human health: the California Human Health Screening Level (CHHSL) for residential land use.

In order to evaluate the risk associated with the residual chlordane in soils, we have calculated a 95% Upper Confidence Limit (UCL) on the arithmetic mean in order to establish a representative chlordane concentration. Using the Pro UCL 5.0 statistical evaluation of all of the chlordane data that represent remaining soils concentrations, we calculated the 95% UCL on the mean as 0.285 milligrams per kilogram (mg/kg) chlordane.

Using the 95% UCL value as representative of site conditions, we used DTSC screening human health risk equations to quantify the cancer and non-cancer risk posed to humans under a residential scenario as a result of exposure to chlordane in soils. The health risk values are:

Cancer Risk - 2.84×10^{-7}
Hazard Index – 1.26×10^{-2}

These health risk values were compared to screening thresholds that are typically used by DTSC to determine if site remediation or further evaluation is warranted. DTSC generally finds that carcinogenic health risk values of less than one in one million (1×10^{-6}), and a hazard index of less than 1.0 are below the threshold whereby further action is warranted. The screening health risk estimates associated with chlordane at this site fall below these two thresholds.

Based on these findings and those of previous environmental site assessments, we recommend that a No Further Action Determination be made for this site.

PROJECT HISTORY

Rincon Consultants previously completed a Phase I Environmental Site Assessment (ESA) for the subject property which identified several recognized environmental conditions (RECs) associated with its past use for agricultural purposes (pesticide application, farm equipment and fuel storage). Subsequent Phase II investigations were conducted by Rincon to determine if these RECs had impacted the property:

- On August 27, 2014, a Geoprobe rig was used to advance 22 borings on the site. Twenty soil borings (RS3 through RS22) were advanced to a depth of 3 feet below grade, and 2 borings (RS1 and RS2) were advanced to 20 feet below grade.

- On October 9, 2014, hand auger tools were used to advance 31 soil borings (RB1 through RB31) throughout the site. The borings were advanced to a total depth of 3 feet below grade and discrete soil samples were collected.

A total of 116 soil samples were collected during these efforts and analyzed for organochlorine pesticides (OCPs) by USEPA Method 8081A. Please refer to Table 1 for a listing of these analytical results. Four pesticides (DDE, DDT, chlordane, and dieldrin) were detected above the established screening levels for residential settings. Chlordane was detected above the established California Human Health Screening Level (CHHSL) for residential settings in 22 of the soil samples collected at the surface; 3 samples collected at 1 foot below grade; and 1 sample collected from 2 feet below grade. All other soil samples analyzed for pesticides, including the bottom samples analyzed from 3 feet below grade, were below the established CHHSLs and Regional Screening Levels (RSLs) for both residential and commercial/industrial settings.

On March 14, 2015 soils were excavated at the site under the direction of ES Engineering in an effort to remove the highest levels of pesticides found during the Phase II site investigations. Soils were removed from the areas in the vicinity of borings RS3, RS7, RS8, RS9, RS12, RS14, RS17, RS18, RS19, RB1, RB3, and RB26. A total of approximately 39 cubic yards of soil were excavated and disposed from the site.

The concentrations of pesticides remaining in site soils following excavation were compared to CHHSLs and RSLs. All of these remaining pesticide concentrations were found to occur below these screening criteria, except for chlordane. The concentrations of chlordane remaining in site soils ranged from non-detect (less than 0.015 milligrams per kilogram, or mg/kg) to 1.8 mg/kg. This highest chlordane concentration equals its RSL of 1.8 mg/kg, and exceeds the CHHSL of 1.7 mg/kg.

HEALTH RISK EVALUATION

A health risk evaluation was performed to determine the health risk posed by chlordane in remaining onsite soil. Our health risk modeling was designed to evaluate the human health risk based on a residential exposure scenario.

In order to establish a representative concentration to model the chlordane risk, Rincon calculated the 95% Upper Confidence Limit (UCL) of the arithmetic mean for the chlordane data set. We used the US EPA's Pro UCL 5.0 to calculate that value. The entire data set which characterizes remaining site soils consists of 97 values, and was used to calculate this number. The input to the statistical calculation is included as Table 2, and the Pro UCL statistical output is included as Table 3 of this Technical Memorandum. The Pro UCL evaluation provides different statistical conditions based on the data set. Pursuant to the Pro UCL output, three 95% UCL values were generated. They are:

- 95% KM (t) UCL - 0.263 mg/kg chlordane
- 95% Approximate Gamma KM-UCL – 0.285 mg/kg chlordane
- 95% GROS Approximate Gamma UCL - 0.249 mg/kg chlordane

For the sake of modeling the health risk, we used the highest value calculated by Pro UCL: 0.285 mg/kg chlordane. We used this value to estimate the cancer and non-cancer human health risk based on a residential exposure scenario. The calculations used equations presented in the DTSC's Preliminary Endangerment Assessment Guidance Manual (January 1994, Interim Final- Revised October 2013). A list of all of the chemical data used in the calculations (Table 2); the output derived from ProUCL 5.0 that was used to calculate the 95% UCL (Table 3); equations that were used to calculate health risk; and the results of the calculations (Figures 1 and 2) are included and discussed below.

HEALTH RISK CALCULATION RESULTS

We used health risk equations to quantify the health risk posed to humans under a residential scenario as a result of exposure to chlordane in soils. The health risk values are:

Cancer Risk- 2.84×10^{-7}
Hazard Index- 1.26×10^{-2}

These health risk values were compared to health risk thresholds that are typically used by DTSC to determine if further action is warranted for a site. DTSC generally concludes that carcinogenic health risk values of less than one in one million (1×10^{-6}), and a hazard index of less than 1.0 are below the threshold whereby further environmental action is warranted. The health risk calculation estimates presented above that are associated with chlordane remaining at this site fall below these two thresholds.

HEALTH RISK CONCLUSIONS

The health risk modeling shows that the human health risk under a residential land use scenario is within the acceptable health risk promulgated by DTSC.

RECOMMENDATIONS

Based on the results of the health risk evaluation, the concentration of chlordane remaining in site soils is below the threshold requiring further action. Therefore, no additional soil removal is recommended for this site. We recommend that the remaining soil be allowed to remain onsite and be incorporated into future site development without restriction of future land use.

We further recommend that a No Further Action determination be made for this site.

LIMITATIONS

This report has been prepared for and is intended for the exclusive use of the City of Oxnard. The contents of this report should not be relied upon by any other party other than the City of Oxnard without the written consent of Rincon Consultants, Inc.

Our conclusions regarding the site are based on observations of existing site conditions and the results of a limited subsurface sampling program. The results of this evaluation are qualified by the fact that only limited sampling and analytical testing was conducted during this assessment.

This scope was not intended to completely establish the quantities and distribution of contaminants present at the site. The concentrations of contaminants measured at any given location may not be representative of conditions at other locations. Further, conditions may change at any particular location as a function of time in response to natural conditions, chemical reactions and other events. Conclusions regarding the condition of the site do not represent a warranty that all areas within the site are similar to those sampled and evaluated.

ATTACHMENTS

Table 1 – *Soil Analytical Summary – Organochlorine Pesticides*

Table 2 – *Input for 95% UCL Calculation*

Table 3 – *95% UCL Statistics for Daly Dansk Chlordane Dataset*

Figure 1 – *Human Health Screening Evaluation – Cancer Risk*

Figure 2 – *Human Health Screening Evaluation – Hazard Index*

Table 1
Soil Analytical Summary - Organochlorine Pesticides
Daly/Dansk Apartments and Senior Living/Memory Care Project, Oxnard, California (APN #s 225-0-014-160 and 190)

Sample Designation	Sample Depth (feet)	Sample Date	Organochlorine Pesticides											
			4,4-DDD	4,4-DDE	4,4-DDT	Chlordane	Dieldrin	Endrin	alpha-BHC	delta-BHC	gamma-BHC	heptachlor	Toxaphene	Other Pesticides
			units = mg/kg											
RS3	0.5	8/27/2014	0.017	0.038	0.045	ND<0.42	0.017							ND
RS4	0.5	8/27/2014	0.0072	0.068	0.068	ND<0.38	ND<0.0005							ND
RS5	0.5	8/27/2014	0.026J	0.27	0.12	**0.76**	0.0049	0.016J						ND
RS6	0.5	8/27/2014	ND<0.0005	0.00049J	0.00034J	ND<0.015	ND<0.0005							ND
RS7	0.5	8/27/2014	0.11	0.4	0.49	**3.5**	**0.2**	0.055						ND
	3	8/27/2014	ND<0.0005	ND<0.0005	ND<0.0005	0.034	ND<0.0005			0.00056				ND
RS8	0.5	8/27/2014	0.052J	0.14	0.35	**0.8J**	0.021				0.0058J	0.025		ND
RS9	0.5	8/27/2014	0.13	0.19	0.78	**2.4**	0.0095J							ND
	3	8/27/2014	ND<0.0005	0.00023	ND<0.0005	0.058J	ND<0.0005			0.00093				ND
RS10	0.5	8/27/2014	0.035J	0.068	0.16	**0.43**	0.0051							ND
RS11	0.5	8/27/2014	0.028J	0.073	0.18	**0.66**	0.0027							ND
RS12	0.5	8/27/2014	0.029J	0.12	0.13	**0.67**	ND>0.0005		0.0017					ND
RS13	0.5	8/27/2014	0.066	0.52	0.55	**1.8**	0.0023							ND
	3	8/27/2014	ND<0.0005	0.0026	0.0021	ND<0.05	ND<0.0005			0.00086				ND
RS14	0.5	8/27/2014	1J	**4.9**	**5.6**	**24**	**0.55**							ND
	3	8/27/2014	ND<0.0005	0.0026	ND<0.0005	ND<0.05	ND<0.0005			0.00055				ND
RS15	0.5	8/27/2014	0.018J	0.32	0.26	**1.4**	0.027J							ND
RS16	0.5	8/27/2014	0.011J	0.47	0.16	**1.7**	0.004							ND
	3	8/27/2014	ND<0.0005	ND<0.0005	ND<0.0005	ND<0.05	ND<0.0005							ND
RS17	0.5	8/27/2014	0.0058	0.062	0.033	**2.5**	0.0006							ND
RS18	0.5	8/27/2014	0.013J	0.27	0.18	**3.3**	ND<0.0005							ND
	3	8/27/2014	ND<0.0005	ND<0.0005	ND<0.0005	ND<0.05	ND<0.0005							ND
RS19	0.5	8/27/2014	0.0091J	0.083	0.11	0.3	0.0021							ND
RS20	0.5	8/27/2014	0.07	0.36	0.28	**1.8**	0.03J							ND
	3	8/27/2014	ND<0.0005	ND<0.0005	ND<0.0005	ND<0.05	0.00023J							ND
RS21	0.5	8/27/2014	0.0041	0.019	0.019	0.3J	ND<0.0005							ND
RB1	0.5	10/9/2014	ND<0.0016	0.5	0.07	**0.87**	ND<0.0015							ND
	1	10/9/2014	ND<0.0016	ND<0.0016	ND<0.0016	ND<0.047	ND<0.0016							ND
	1.5	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015							ND
	2	10/9/2014	ND<0.0014	0.015	0.0039	ND<0.043	ND<0.0014							ND
	2.5	10/9/2014	ND<0.0016	ND<0.0016	ND<0.0016	ND<0.047	ND<0.0016							ND
	3	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015							ND
RB2	0.5	10/9/2014	ND<0.0015	0.76	0.098	**1.2**	ND<0.0015							ND
	1	10/9/2014	ND<0.0015	0.48	0.23	**1.2**	ND<0.0015							ND
	1.5	10/9/2014	ND<0.0014	ND<0.0014	ND<0.0014	ND<0.043	ND<0.0014							ND
	2	10/9/2014	ND<0.0014	0.14	0.09	**0.52**	ND<0.0014							ND
	2.5	10/9/2014	ND<0.0014	ND<0.0014	ND<0.0014	ND<0.043	ND<0.0014							ND
	3	10/9/2014	ND<0.0014	ND<0.0014	ND<0.0014	ND<0.043	ND<0.0014							ND

Data provided by ES Engineering 3/27/15.

Table 1
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Daly/Dansk Apartments and Senior Living/Memory Care Project, Oxnard, California (APN #s 225-0-014-160 and 190)

Sample Designation	Sample Depth (feet)	Sample Date	Organochlorine Pesticides											
			4,4-DDD	4,4-DDE	4,4-DDT	Chlordane	Dieldrin	Endrin	alpha-BHC	delta-BHC	gamma-BHC	heptachlor	Toxaphene	Other Pesticides
RB3	0.5	10/9/2014	0.018	1.5	0.31	**2.3**	ND<0.0015							ND
	1	10/9/2014	ND<0.0015	0.044	0.0017	ND<0.045	ND<0.0015							ND
	1.5	10/9/2014	0.0041J	0.0064	0.0018	ND<0.044	ND<0.0015							ND
	2	10/9/2014	ND<0.0014	0.0011	ND<0.0014	0.074	ND<0.0014							ND
	2.5	10/9/2014	ND<0.0016	0.00038J	ND<0.0016	ND<0.047	ND<0.0015							ND
	3	10/9/2014	ND<0.0015	0.0022	0.00053J	ND<0.046	ND<0.0015							ND
RB4	0.5	10/9/2014	0.0043	0.33	0.052	**0.58**	ND<0.0014							ND
	1	10/9/2014	0.0079	0.23	0.13	**0.67**	ND<0.0015							ND
	1.5	10/9/2014	ND<0.0016	ND<0.0016	0.017	ND<0.047	ND<0.0016							ND
	2	10/9/2014	ND<0.0015	0.001J	0.00049J	ND<0.045	ND<0.0015							ND
	2.5	10/9/2014	ND<0.0014	ND<0.0014	0.0014	ND<0.041	ND<0.0014							ND
	3	10/9/2014	ND<0.0015	ND<0.0015	0.00022J	ND<0.045	ND<0.0015							ND
RB5	0.5	10/9/2014	0.011	0.62	0.29	ND<0.044	ND<0.0015							ND
	1	10/9/2014	ND<0.0015	0.0024	0.00093J	ND<0.046	ND<0.0015							ND
	1.5	10/9/2014	ND<0.0016	0.0012J	0.0005J	ND<0.047	ND<0.0016							ND
	2	10/9/2014	ND<0.0015	0.0015	0.00065J	ND<0.046	ND<0.0015							ND
	2.5	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015							ND
	3	10/9/2014	ND<0.0015	0.00051J	0.00029J	ND<0.045	ND<0.0015							ND
RB22	0.5	10/9/2014	ND<0.0014	0.032	0.021	0.17	ND<0.0014						0.075J	ND
	1	10/9/2014	ND<0.0015	0.0072	0.0079	0.12J	ND<0.0015						0.035J	ND
	1.5	10/9/2014	ND<0.0015	0.0012J	0.0012J	ND<0.045	ND<0.0015							ND
	2	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015							ND
	2.5	10/9/2014	ND<0.0014	0.0017	0.0014	ND<0.042	ND<0.0014							ND
	3	10/9/2014	ND<0.0014	ND<0.0014	ND<0.0014	ND<0.042	ND<0.0014							ND
RB23	0.5	10/9/2014	ND<0.0015	0.002	0.001J	ND<0.045	ND<0.0015							ND
	1	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.044	ND<0.0015							ND
	1.5	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015							ND
	2	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015							ND
	2.5	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.044	ND<0.0015							ND
	3	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015							ND
RB24	0.5	10/9/2014	ND<0.0014	0.11	0.057	**0.49**	ND<0.0014						0.3	ND
	1	10/9/2014	ND<0.0015	0.032	0.018	ND<0.045	ND<0.0015							ND
	1.5	10/9/2014	ND<0.0014	0.032	0.019	0.19	ND<0.0014						0.084J	ND
	2	10/9/2014	ND<0.0015	ND<0.0015	0.00064J	ND<0.045	ND<0.0015							ND
	2.5	10/9/2014	ND<0.0014	0.0022	0.00098J	ND<0.042	ND<0.0014							ND
	3	10/9/2014	ND<0.0015	0.0048	0.0034	ND<0.045	ND<0.0015							ND

Data provided by ES Engineering 3/27/15.

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Daly/Dansk Apartments and Senior Living/Memory Care Project, Oxnard, California (APN #s 225-0-014-160 and 190)

Sample Designation	Sample Depth (feet)	Sample Date	Organochlorine Pesticides											
			4,4-DDD	4,4-DDE	4,4-DDT	Chlordane	Dieldrin	Endrin	alpha-BHC	delta-BHC	gamma-BHC	heptachlor	Toxaphene	Other Pesticides
RB25	0.5	10/9/2014	ND<0.0014	0.03	0.025	0.22	ND<0.0014						0.13J	ND
	1	10/9/2014	ND<0.0015	0.0082	0.0055	0.1J	ND<0.0015						0.029J	ND
	1.5	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.044	ND<0.0015							ND
	2	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.044	ND<0.0015							ND
	2.5	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015							ND
	3	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015							ND
RB26	0.5	10/9/2014	0.063	0.54	0.2	**1.9**	0.021							ND
	1	10/9/2014	0.0022	0.029	0.011	0.13	ND<0.0016							ND
	1.5	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015							ND
	2	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015							ND
	2.5	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.044	ND<0.0015							ND
	3	10/9/2014	ND<0.0015	ND<0.0015	0.00093J	ND<0.045	ND<0.0015							ND
RB27	0.5	10/9/2014	0.00024J	0.0021	0.00066J	ND<0.043	ND<0.0014							ND
	1	10/9/2014	ND<0.0014	ND<0.0014	ND<0.0014	ND<0.043	ND<0.0014							ND
	1.5	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.044	ND<0.0015							ND
	2	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015							ND
	2.5	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.046	ND<0.0015							ND
	3	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.046	ND<0.0015							ND
RB28	0.5	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.046	ND<0.0015							ND
	1	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015							ND
	1.5	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015							ND
	2	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015							ND
	2.5	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.045	ND<0.0015							ND
	3	10/9/2014	ND<0.0015	ND<0.0015	ND<0.0015	ND<0.043	ND<0.0015							ND
RB29	0.5	10/9/2014	ND<0.0015	0.31	0.12	**0.67**	ND<0.0015							ND
	1	10/9/2014	ND<0.0015	0.21	0.063	**0.54**	ND<0.0015							ND
	1.5	10/9/2014	ND<0.0015	0.0032	0.0014J	ND<0.045	ND<0.0015							ND
	2	10/9/2014	ND<0.0014	0.0065	0.0041	ND<0.043	ND<0.0014							ND
	2.5	10/9/2014	ND<0.0014	0.0008J	0.0006J	ND<0.043	ND<0.0014							ND
	3	10/9/2014	ND<0.0014	0.0015	0.0008J	ND<0.043	ND<0.0014							ND
RB30	0.5	10/9/2014	ND<0.0016	0.53	0.4	**1.3**	ND<0.0016							ND
	1	10/9/2014	ND<0.0014	0.055	0.019	ND<0.043	ND<0.0014							ND
	1.5	10/9/2014	ND<0.0015	0.0016	0.00076J	ND<0.045	ND<0.0015							ND
	2	10/9/2014	ND<0.0014	ND<0.0014	ND<0.0014	ND<0.043	ND<0.0014							ND
	2.5	10/9/2014	ND<0.0015	0.0015	0.00033J	ND<0.045	ND<0.0015							ND
	3	10/9/2014	ND<0.0014	0.00085J	0.00034J	ND<0.043	ND<0.0014							ND

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Sample Designation	Sample Depth (feet)	Sample Date	Organochlorine Pesticides											
			4,4-DDD	4,4-DDE	4,4-DDT	Chlordane	Dieldrin	Endrin	alpha-BHC	delta-BHC	gamma-BHC	heptachlor	Toxaphene	Other Pesticides
RB31	0.5	10/9/2014	ND<0.0014	0.17	0.015	ND<0.043	ND<0.0014							ND
	1	10/9/2014	ND<0.0014	0.0032	0.0022	ND<0.043	ND<0.0014							ND
	1.5	10/9/2014	ND<0.0015	0.00057J	ND<0.0015	ND<0.045	ND<0.0015							ND
	2	10/9/2014	ND<0.0014	0.00042J	ND<0.0014	ND<0.043	ND<0.0014							ND
	2.5	10/9/2014	ND<0.0015	0.00038J	0.00036J	ND<0.046	ND<0.0015							ND
	3	10/9/2014	ND<0.0015	0.00035J	ND<0.0015	ND<0.044	ND<0.0015							ND
Residential CHHSL			2.3	1.6	1.6	0.43	0.035	21	NA	NA	0.5	0.13	0.46	varies
Commercial/ Industrial CHHSL			9.0	6.3	6.3	1.7	0.13	230	NA	NA	2.0	0.52	1.8	varies
Residential USEPA RSL			2.2	1.6	1.9	1.8	0.033	NA	0.085	6.4*	0.56	0.12	0.48	varies
Commercial/ Industrial USEPA RSL			9.6	6.8	6.8	8.0	0.14	NA	0.37	NA	2.5	0.51	2.1	varies

mg/kg = milligrams per kilogram

ND = Not detected above laboratory detection limits

J -Flag indicates detection is below the practical quantitation limit and above the method detection limit.

Background Concentration = Kearney, *Background Concentrations of Trace and Major Elements in California Soils,*
University of California, 1996 CHHSL = California Human Health Screening Levels, January 2005

RSLs = USEPA Regional Screening Levels for Chemical Contaminants at Superfund Sites,
May 2014 Concentrations in BOLD exceed the residential CHHSL

Soil samples analyzed by BC Laboratories, Inc.

Analysis: organochlorine pesticides by EPA Method 8081A

= Soil Sample excavated during Previous Remedial Activity

* = EPA Freshwater Sediment Screening Level (no CHHSLs or RSLs available)

NA = Not Available/Not Applicable

Table 2
Input for 95% UCL Calculation
Daly Dansk Property (APN #s 225-0-014-160 and 190)

Chlordane - Total Dataset	Chlordane Data - Excavated Samples Removed	Chlordane Data - Excavated Samples Removed with NDs as values	Detects = "1" Nondetects = "0"
ND<0.42	ND<0.38	0.38	0
ND<0.38	**0.76**	**0.76**	1
0.76	ND<0.015	0.015	0
ND<0.015	0.034	0.034	1
3.5	0.058J	0.058	1
0.034	**0.43**	**0.43**	1
0.8J	**0.66**	**0.66**	1
2.4	**1.8**	**1.8**	1
0.058J	ND<0.05	0.05	0
0.43	**1.4**	**1.4**	1
0.66	**1.7**	**1.7**	1
0.67	ND<0.05	0.05	0
1.8	ND<0.05	0.05	0
ND<0.05	**1.8**	**1.8**	1
24	ND<0.05	0.05	0
ND<0.05	0.3J	0.3	1
1.4	ND<0.043	0.043	0
1.7	ND<0.047	0.047	0
ND<0.05	ND<0.045	0.045	0
2.5	**1.2**	**1.2**	1
3.3	**1.2**	**1.2**	1
ND<0.05	ND<0.043	0.043	0
0.3	**0.52**	**0.52**	1
1.8	ND<0.043	0.043	0
ND<0.05	ND<0.043	0.043	0
0.3J	0.074	0.074	1
0.87	ND<0.047	0.047	0
ND<0.047	ND<0.046	0.046	0
ND<0.045	**0.58**	**0.58**	1
ND<0.043	**0.67**	**0.67**	1
ND<0.047	ND<0.047	0.047	0
ND<0.045	ND<0.045	0.045	0
1.2	ND<0.041	0.041	0
1.2	ND<0.045	0.045	0
ND<0.043	ND<0.044	0.044	0
0.52	ND<0.046	0.046	0
ND<0.043	ND<0.047	0.047	0
ND<0.043	ND<0.046	0.046	0
2.3	ND<0.045	0.045	0
ND<0.045	ND<0.045	0.045	0
ND<0.044	0.17	0.17	1
0.074	0.12J	0.12	1
ND<0.047	ND<0.045	0.045	0
ND<0.046	ND<0.045	0.045	0
0.58	ND<0.042	0.042	0
0.67	ND<0.042	0.042	0
ND<0.047	ND<0.045	0.045	0
ND<0.045	ND<0.044	0.044	0
ND<0.041	ND<0.045	0.045	0
ND<0.045	ND<0.045	0.045	0
ND<0.044	ND<0.044	0.044	0
ND<0.046	ND<0.045	0.045	0
ND<0.047	**0.49**	**0.49**	1
ND<0.046	ND<0.045	0.045	0
ND<0.045	0.19	0.19	1
ND<0.045	ND<0.045	0.045	0
0.17	ND<0.042	0.042	0
0.12J	ND<0.045	0.045	0
ND<0.045	0.22	0.22	1
ND<0.045	0.1J	0.1	1
ND<0.042	ND<0.044	0.044	0
ND<0.042	ND<0.044	0.044	0
ND<0.045	ND<0.045	0.045	0
ND<0.044	ND<0.045	0.045	0
ND<0.045	ND<0.045	0.045	0
ND<0.045	ND<0.044	0.044	0
ND<0.044	ND<0.045	0.045	0
ND<0.045	ND<0.043	0.043	0
0.49	ND<0.043	0.043	0
ND<0.045	ND<0.044	0.044	0

Notes: 1) All values are in mg/kg.
2) Data provided by ES Engineering, 3/27/15. Data highlighted in yellow were removed during remedial excavation.

Table 2
Input for 95% UCL Calculation
Daly Dansk Property (APN #s 225-0-014-160 and 190)

0.19
ND<0.045
ND<0.042
ND<0.045
0.22
0.1J
ND<0.044
ND<0.044
ND<0.045
ND<0.045
1.9
0.13
ND<0.045
ND<0.045
ND<0.044
ND<0.045
ND<0.043
ND<0.043
ND<0.044
ND<0.045
ND<0.046
ND<0.046
ND<0.046
ND<0.045
ND<0.045
ND<0.045
ND<0.045
ND<0.043
0.67
0.54
ND<0.045
ND<0.043
ND<0.043
ND<0.043
1.3
ND<0.043
ND<0.045
ND<0.043
ND<0.045
ND<0.043
ND<0.043
ND<0.043
ND<0.045
ND<0.043
ND<0.046
ND<0.044

ND<0.045
ND<0.046
ND<0.046
ND<0.046
ND<0.045
ND<0.045
ND<0.045
ND<0.045
ND<0.043
0.67
0.54
ND<0.045
ND<0.043
ND<0.043
ND<0.043
1.3
ND<0.043
ND<0.045
ND<0.043
ND<0.045
ND<0.043
ND<0.043
ND<0.043
ND<0.045
ND<0.043
ND<0.046
ND<0.044

0.045	0
0.046	0
0.046	0
0.046	0
0.045	0
0.045	0
0.045	0
0.045	0
0.043	0
0.67	1
0.54	1
0.045	0
0.043	0
0.043	0
0.043	0
1.3	1
0.043	0
0.045	0
0.043	0
0.045	0
0.043	0
0.043	0
0.043	0
0.045	0
0.043	0
0.046	0
0.044	0

Notes: 1) All values are in mg/kg.
2) Data provided by ES Engineering, 3/27/15. Data highlighted in yellow were removed during remedial excavation.

Table 3
95% UCL Statistics for Daly Dansk Chlordane Data Set (with Non-detects)

UCL Statistics for Data Sets with Non-Detects

User Selected Options	
Date/Time of Computation	4/2/2015 5:29:09 PM
From File	Pesticide Data Summary - Daly Dansk_a.xls
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

CLDN

General Statistics

Total Number of Observations	97	Number of Distinct Observations	32
Number of Detects	25	Number of Non-Detects	72
Number of Distinct Detects	22	Number of Distinct Non-Detects	10
Minimum Detect	0.034	Minimum Non-Detect	0.015
Maximum Detect	1.8	Maximum Non-Detect	0.38
Variance Detects	0.326	Percent Non-Detects	74.23%
Mean Detects	0.679	SD Detects	0.571
Median Detects	0.54	CV Detects	0.841
Skewness Detects	0.788	Kurtosis Detects	-0.566
Mean of Logged Detects	-0.864	SD of Logged Detects	1.14

Normal GOF Test on Detects Only

Shapiro Wilk Test Statistic	0.881	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.918	Detected Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.187	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.177	Detected Data Not Normal at 5% Significance Level

Detected Data Not Normal at 5% Significance Level

Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs

Mean	0.193	Standard Error of Mean	0.0421
SD	0.404	95% KM (BCA) UCL	0.271
95% KM (t) UCL	0.263	95% KM (Percentile Bootstrap) UCL	0.267
95% KM (z) UCL	0.263	95% KM Bootstrap t UCL	0.277
90% KM Chebyshev UCL	0.32	95% KM Chebyshev UCL	0.377
97.5% KM Chebyshev UCL	0.456	99% KM Chebyshev UCL	0.613

Gamma GOF Tests on Detected Observations Only

A-D Test Statistic	0.346	**Anderson-Darling GOF Test**
5% A-D Critical Value	0.769	Detected data appear Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.116	**Kolmogrov-Smirnoff GOF**
5% K-S Critical Value	0.179	Detected data appear Gamma Distributed at 5% Significance Level

Detected data appear Gamma Distributed at 5% Significance Level

Table 3
95% UCL Statistics for Daly Dansk Chlordane Data Set (with Non-detects)

2	UCL Statistics for Data Sets with Non-Detects			
47	Gamma Statistics on Detected Data Only			
48	k hat (MLE)	1.186	k star (bias corrected MLE)	1.07
49	Theta hat (MLE)	0.573	Theta star (bias corrected MLE)	0.635
50	nu hat (MLE)	59.3	nu star (bias corrected)	53.52
51	MLE Mean (bias corrected)	0.679	MLE Sd (bias corrected)	0.657
52				
53	Gamma Kaplan-Meier (KM) Statistics			
54	k hat (KM)	0.229	nu hat (KM)	44.52
55	Approximate Chi Square Value (44.52, α)	30.22	Adjusted Chi Square Value (44.52, β)	30.04
56	95% Gamma Approximate KM-UCL (use when n>=50)	0.285	95% Gamma Adjusted KM-UCL (use when n<50)	0.287
57				
58	Gamma ROS Statistics using Imputed Non-Detects			
59	GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs			
60	GROS may not be used when kstar of detected data is small such as < 0.1			
61	For such situations, GROS method tends to yield inflated values of UCLs and BTVs			
62	For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates			
63	Minimum	0.01	Mean	0.183
64	Maximum	1.8	Median	0.01
65	SD	0.41	CV	2.241
66	k hat (MLE)	0.349	k star (bias corrected MLE)	0.345
67	Theta hat (MLE)	0.524	Theta star (bias corrected MLE)	0.53
68	nu hat (MLE)	67.78	nu star (bias corrected)	67.02
69	MLE Mean (bias corrected)	0.183	MLE Sd (bias corrected)	0.311
70			Adjusted Level of Significance (β)	0.0475
71	Approximate Chi Square Value (67.02, α)	49.18	Adjusted Chi Square Value (67.02, β)	48.95
72	95% Gamma Approximate UCL (use when n>=50)	0.249	95% Gamma Adjusted UCL (use when n<50)	0.251
73				
74	Lognormal GOF Test on Detected Observations Only			
75	Shapiro Wilk Test Statistic	0.932	Shapiro Wilk GOF Test	
76	5% Shapiro Wilk Critical Value	0.918	Detected Data appear Lognormal at 5% Significance Level	
77	Lilliefors Test Statistic	0.153	Lilliefors GOF Test	
78	5% Lilliefors Critical Value	0.177	Detected Data appear Lognormal at 5% Significance Level	
79	Detected Data appear Lognormal at 5% Significance Level			
80				
81	Lognormal ROS Statistics Using Imputed Non-Detects			
82	Mean in Original Scale	0.194	Mean in Log Scale	-3.44
83	SD in Original Scale	0.406	SD in Log Scale	1.98
84	95% t UCL (assumes normality of ROS data)	0.262	95% Percentile Bootstrap UCL	0.265
85	95% BCA Bootstrap UCL	0.276	95% Bootstrap t UCL	0.276
86	95% H-UCL (Log ROS)	0.451		
87				
88	UCLs using Lognormal Distribution and KM Estimates when Detected data are Lognormally Distributed			
89	KM Mean (logged)	-3.039	95% H-UCL (KM -Log)	0.204
90	KM SD (logged)	1.446	95% Critical H Value (KM-Log)	2.731

Table 3
95% UCL Statistics for Daly Dansk Chlordane Data Set (with Non-detects)

UCL Statistics for Data Sets with Non-Detects			
KM Standard Error of Mean (logged)	0.265		
DL/2 Statistics			
DL/2 Normal		**DL/2 Log-Transformed**	
Mean in Original Scale	0.193	Mean in Log Scale	-3.033
SD in Original Scale	0.406	SD in Log Scale	1.427
95% t UCL (Assumes normality)	0.262	95% H-Stat UCL	0.198
DL/2 is not a recommended method, provided for comparisons and historical reasons			
Nonparametric Distribution Free UCL Statistics			
Detected Data appear Gamma Distributed at 5% Significance Level			
Suggested UCL to Use			
95% KM (t) UCL	0.263	95% GROS Approximate Gamma UCL	0.249
95% Approximate Gamma KM-UCL	0.285		
Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.			
Recommendations are based upon data size, data distribution, and skewness.			
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).			
However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.			

Figure 1

HUMAN HEALTH SCREENING EVALUATION - CANCER RISK[1]

Project Name: Daly Dansk Pleasant Valley Road Property (APN #s 225-0-014-160 &190)

Chemical of Potential Concern: Chlordane

Basic Equation:

$$\text{Cancer Risk}_{soil} = SF_o \times C_s \times \frac{IR_{s,adult} \times EF \times ED_{adult} \times 10^{-6}\text{ kg/mg}}{BW_{adult} \times AT} +$$

$$SF_o \times Cs \times \frac{IR_{s,child} \times EF \times ED_{child} \times 10^{-6}\text{ kg/mg}}{BW_{child} \times AT} +$$

$$SF_o \times Cs \times \frac{SA_{adult} \times AF \times ABS \times EF \times ED_{adult} \times 10^{-6}\text{ kg/mg}}{BW_{adult} \times AT} +$$

$$SF_o \times C_s \times \frac{SA_{child} \times AF \times ABS \times EF \times ED_{child} \times 10^{-6}\text{ kg/mg}}{BW_{child} \times AT}$$

Reduced Equation:

$$\text{Cancer Risk}_{soil} = (SF_o \times C_s \times 1.57 \times 10^{-6}) + (SF_o \times C_s \times 5.1\ 10^{-6} \times ABS)$$

Where:	Adult	Child
SF_o [2] = Slope factor ($[mg/kg\text{-}day]^{-1}$) =	3.50E-01	3.50E-01
BW = body weight (70 kg-adults, 15 kg-child) =	70	15
AT = averaging time (70 years x 365 days/yr; 25,550 days) =	25550	25550
EF = exposure frequency for soil injestion (350 days/year) =	350	350
ED = exposure duration (24 years-adult, 6 years-child) =	24	6
IR_s = incidental soil injestion rate (100 mg/kg-adult, 200 mg/day-child) =	100	200
SA = exposed skin surface area (5700 cm^2-adult, 2900 cm^2- child) =	5700	2900
AF = soil to skin adherence factor (0.07mg/cm^2-adult, 0.2 mg/cm^2-child) =	0.07	0.2
ABS [3] = fraction of chemical absorbed from soil =	2.50E-01	2.50E-01
C_s [4] = concentration of chemical in soil (mg/kg) =	0.285	0.285

$\text{Cancer Risk}_{soil}$ =

2.84E-07

[1] Calculated per Figure 2.7, *Preliminary Endangerment Assessment Guidance Manual* , California Department of Toxic Substances Control, January 1994 (Interim Final - Revised October 2013).

[2] SF_o obtained from USEPA Integrated Risk Management System (IRIS): *Chlordane (Technical) (CASRN 12789-03-6), Section II.B.: Quantitative Estimate of Carcinogenic Risk from Oral Exposure, Summary of Risk Estimates.* Website accessed 4/2/15.

[3] ABS selected from Appendix A, Table 1, *Preliminary Endangerment Assessment Guidance Manual* , California Department of Toxic Substances Control, January 1994 (Interim Final - Revised October 2013).

[4] C_s represents 95% upper confidence level of the arithmetic mean, as calculated using *ProUCL 5.0* .

Data input fields highlighted in yellow represent chemical-specific values from sources described above. Other fields represent default values presented in the *PEA Guidance Manual* .

Figure 2

HUMAN HEALTH SCREENING EVALUATION - HAZARD INDEX[1]

Project Name: Daly Dansk Pleasant Valley Road Property (APN #s 225-0-014-160 &190)

Chemical of Potential Concern: Chlordane

Basic Equation:

$$\text{Hazard Index}_{soil} = (1/RfD_o) \times C_s \times \frac{IR_{s,child} \times EF \times ED_{child} \times 10^{-6}\ kg/mg}{BW_{child} \times AT} +$$

$$(1/RfD) \times Cs \times \frac{SA_{child} \times AF \times ABS \times EF_{child} \times ED_{child} \times 10^{-6}\ kg/mg}{BW_{child} \times AT}$$

Reduced Equation:

$$\text{Hazard Index}_{soil} = [(C_s/RfD) \times 1.28 \times 10^{-5}] + [(C_s/RfD) \times 3.70\ 10^{-5} \times ABS]$$

Hazard Index$_{soil}$ =

1.26E-02

Where:

RfD_o [2] = oral reference dose (mg/kg-day) =	5.00E-04
BW = body weight (15 kg-child) =	15
AT = averaging time (6 years x 365 days/yr; 2190 days-child) =	2190
EF = exposure frequency for soil injestion and dermal contact (350 days/year) =	350
ED = exposure duration (6 years-child) =	6
Ir_s = incidental soil injestion rate (200 mg/day-child) =	200
SA = exposed skin surface area (2900 cm^2-child) =	2900
AF = soil to skin adherence factor (0.2 mg/cm^2-child) =	0.2
ABS [3] = fraction of chemical absorbed from soil =	2.50E-01
Cs [4] = concentration of chemical in soil (mg/kg) =	0.285

[1] Calculated per Figure 2.6, *Preliminary Endangerment Assessment Guidance Manual* , California Department of Toxic Substances Control, January 1994 (Interim Final - Revised October 2013).

[2] RfD_o obtained from USEPA Integrated Risk Management System (IRIS): *Chlordane (Technical) (CASRN 12789-03-6), Section I.A.: Reference Dose for Chronic Oral Exposure, Oral RfD Summary.* Website accessed 4/2/15.

[3] ABS selected from Appendix A, Table 1, *Preliminary Endangerment Assessment Guidance Manual* , California Department of Toxic Substances Control, January 1994 (Interim Final - Revised October 2013).

[4] C_s represents 95% upper confidence level of the arithmetic mean, as calculated using *ProUCL 5.0* .

Data input fields highlighted in yellow represent chemical-specific values from sources described above. Other fields represent default values presented in the *PEA Guidance Manual* .

Environmental Health Division
William C. Stratton
Director

May 15, 2015

File #SR0011805

Via email: Vince@dalygroupinc.com

Mr. Vincent Daly
Pleasant Valley Venture, LLC
6591 Collins Drive, Suite E-11
Camarillo, California 93021

COMPLETION OF VENTURA COUNTY CLEANUP PROGRAM REQUIREMENTS: PLEASANT VALLEY SENIOR APARTMENTS, 2295 ETTING RD & 2250 PLEASANT VALLEY RD, OXNARD, CALIFORNIA (APN 225-0-014-165 & 225-0-014-190)

This letter confirms completion of the site investigation and remediation activities described in the Cleanup Program Remedial Action Agreement No. SR0011805.

The Ventura County Environmental Health Division (EHD) staff completed a review of the reports and other documentation submitted for the above location. The reports present the results of site assessment and soil excavation activities of pesticide, TPH and lead impacted soil due historic agricultural use of the property. Approximately 70 tons of impacted soil was removed and disposed offsite. Residual concentrations of pesticides are at or below the USEPA recommended regional screening levels for residential soils.

Based on the information provided and with the provision that the information provided is accurate and representative of site conditions, EHD has determined that no further action is warranted at this site and EHD does not require restricted use of the property with respect to the residual pesticide concentrations in soil.

If you have any questions, please contact Gina Teresa at 805/662-6510.

Rick Bandelin, Manager
Ventura County Cleanup Program
Environmental Health Division

Enclosure: Case Closure Summary Form

c: Mr. Chris Guesnon, ES Engineering (w/o enclosure via email)
Mr. Dane Nygaard, ES Engineering (w/o enclosure via email)

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Case Closure Summary

Ventura County Cleanup Program

I. Agency Information

Date: May 8, 2015

Agency name: Ventura County Environmental Health	Address: 800 South Victoria Avenue
City/State/ZIP: Ventura, CA 93009-1730	Phone: 805-662-6510
Responsible staff person: Gina L. Teresa	Title: Environmental Health Specialist

II. Case Information

Site facility name: Pleasant Valley Senior Apartments	
Site facility address: 2295 Etting Road & 2250 Pleasant Valley Road, Oxnard, California, 93033 (APN 225-0-014-165 and 225-0-014-190)	
RB Case No: n/a	Local Case No: SR0011805
Responsible Parties:	Interested Parties:
Mr. Vincent Daly Pleasant Valley Venture, LLC 6591 Collins Drive, Suite E-11 Camarillo, California 93021 Vince@dalygroupinc.com	

III. Release and Site Characterization Information

Cause and type of release: Lead, TPH, & Pesticides (DDE, DDT, chlordane and dieldrin)		
Site characterization complete? Yes	Date approved by oversight agency: 5/7/2015	
Monitoring Wells installed? No	Number: 0	Proper screened interval? n/a
Depth to Ground Water below ground surface: ~10 feet		Flow direction: southerly
Most sensitive current use: Residential		
Are drinking water wells affected? No	Aquifer name: Oxnard Plain	
Is surface water affected? No	Nearest/~~affected~~ SW name: Industrial drain (~1.5 miles west of Site) that flows to Pacific Ocean (~3 miles southwest of Site)	
Off-site beneficial use impacts (addresses/locations): None		
Report(s) on file? Yes	Where are reports filed? State's GeoTracker database	

Treatment and Disposal of Affected Material:

Material	Amount	Action	Dates
Pesticide-impacted soil	39 cubic yards	Excavated and disposed offsite at Simi Valley Landfill	March 12, 2015
Lead impacted soil	27 cubic yards	Excavated and disposed offsite at Simi Valley Landfill	January 6 & 7, 2015
TPH-impacted soil	3.7 cubic yards	Excavated and disposed offsite at Crosby & Overton, Long Beach	January 6, 2015

Case Closure Summary

Ventura County Cleanup Program

VCCP File # SR0011805

III. Release and Site Characterization Information (Continued)

Maximum Documented Contaminant Concentrations – Before and After Remediation

Contaminant	Soil (mg/kg)		Water (ug/L)		Contaminant	Soil (mg/kg)		Water (ug/L)	
	Before	After	Before	After		Before	After	Before	After
DDE	4.9	0.76	NA	NA	Arsenic	4.6	4.6	NA	NA
DDT	5.6	0.55	NA	NA	Lead	310	32	NA	NA
Chlordane	24	1.8	NA	NA	TPH-diesel	140	62	NA	NA
Dieldrin	0.55	0.021	NA	NA	TPH-oil	450	33	NA	NA

Comments:

ND = not detected above method detection limit, NA = data not available, not analyzed or not applicable
Before= maximum concentrations detected on site. After= concentrations after excavation or left in place.

During Phase II site assessment activities conducted in August 2014, elevated concentrations of pesticides (DDE, DDT, chlordane and dieldrin), TPH (diesel and oil), and lead were detected in shallow soil samples. Arsenic concentrations are at background levels. Groundwater analytical results indicate the shallow groundwater beneath the site is not impacted. Additional soil sampling and remedial excavation activities were conducted at the site between January and March 2015. Areas where DDE, DDT, chlordane, dieldrin, TPH and lead exceeded their respective regional screening level (RSL) were excavated and disposed offsite. Approximately 70 cubic yards of impacted soil was removed from the site.

The residual concentrations in soil are at or below the USEPA recommended residential RSL's. The residual concentrations in soil do not pose a threat to human health or the environment; therefore, EHD recommends no further action for this site.

IV. Closure

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? Yes		
Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? Yes		
Do cleanup levels exceed Regional Board requirements? No	Identify: n/a	
Rationale for exceeding RB requirements: n/a		
Does corrective action protect public health for current land use? Yes		
Site management requirements: None		
Should corrective action be reviewed if land use changes? No		
Monitoring wells Decommissioned: n/a	Number Decommissioned: n/a	Number Retained: n/a
List enforcement actions taken: None	List enforcement actions rescinded: None	

V. Local Agency Representative Data

Name: Gina L. Teresa	Title: Environmental Health Specialist
Signature:	Date: 5/8/2015

Appendix H

Conceptual Hydrology and Hydraulics Study

CONCEPTUAL HYDROLOGY AND HYDRAULICS STUDY

5/30/2014 PROJECT NO. 6826
(updated 10/29/2014)

LOCATION:

Pleasant Valley Road/Etting Road
Oxnard, California

CLIENT: DANSK INVESTMENTS

Table of Contents

List of Appendices

List of Figures

1. Introduction

The subject property is located between Pleasant Valley Road and Etting Road, approximately ¼ mile west of the intersection of Pleasant Valley Road and Highway 1, in the City of Oxnard, California. The property currently consists of a single family home with orchards and some small agricultural use buildings. The proposed development consists of an apartment complex and a senior care housing center with parking lots and associated hardscape and landscaping. The site does not receive any offsite flow from the adjacent properties.

2. References

a. "Modified Cook's Method for Stormwater Runoff Calculations," City of Oxnard, Public Works Department, Standard Plan Plate #59.

b. "Ventura County Hydrology Manual", Ventura County Watershed Protection District, dated December, 2010.

c. "Ventura County Technical Guidance Manual for Stormwater Quality Control Measures," Ventura Countywide Watershed Protection District, dated July 13, 2011.

3. Objectives

The purpose of this hydrology/hydraulics study is to size the drainage structures associated with this development as well as to size the Storm Water Quality areas.

4. Hydrologic Analysis

a. Watershed Area:

The limits for the watershed area were determined from a topographic survey and a grading and drainage plan which was utilized as the base sheet for the hydrology maps. The subject property abuts Etting Road to the south, Pleasant Valley Road to the north, undeveloped property to the west, and a mobile home park as well as a small housing tract to the east. There is no runoff from offsite areas. Currently, the runoff generated onsite flows from the northern and eastern perimeter of the property towards the southwest in the form of sheet flow and is intercepted in various catch basins and conveyed to the street. The City of Oxnard has a master plan of the storm water drainage and this entire site is programmed for ultimate development flow to be discharged into the Etting Road storm drain facilities.

In the developed condition, the runoff from the proposed apartment building and parking will be collected in roof drains and catch basins and will be conveyed to pipes which will be connected to bioretention areas. Once the runoff water is cleaned through the bioretention area, it will be collected in catch basins and will be conveyed to the existing Etting Road storm drain facility.

b. Hydrologic Parameters:

The hydrology parameters were obtained from the City of Oxnard Standard Plates and Design Criteria for Public Works Construction, 2002 Edition and from the Ventura County. The soil type was determined to be number 3, which can be found using the Hydrologic Map in Appendix A, and the percent impervious of 70% was used.

c. Hydrologic Calculations:

The Modified Cook's method was utilized as the hydrologic calculation method. Calculations are included in Appendix B.

5. Hydraulic Calculations

Hydraulic calculations were prepared to ensure the catch basins and pipes have adequate capacity to capture convey the 50-year flow to the bioretention areas. Calculations are included in Appendix B.

6. Stormwater Quality

The Ventura County Technical Guidance Manual for Stormwater Quality Control Measures, dated July 13, 2011, was referenced for the required MS4 mitigation measure requirements. The utilization of Bio-Retention Basins and Grass Swale Filters as shown on the Hydrology map in Appendix D, is implemented to comply with the Los Angeles Regional Water Quality Control Board's municipal separate storm sewer system (MS4) permit. The factors of safety used in the calculations were based on the 2011 Technical Guidance Manual, tables 6-2 and 6-3. The assessment method was based on an estimate at this stage, and therefore was a High Concern. The soil number for the site was 3, which equates to a High Concern. The soil site variability is homogeneous based on the soils report, and therefore is Low Concern. The depth to groundwater was measured at 10' from the facility bottom and is therefore a Medium Concern. The tributary area size is greater than 2 acres but less than 10, and is therefore a Medium Concern. The level of pre-treatment/expected sediment load is a Low Concern based on the fact that the facility only treats runoff from relatively clean surfaces with no sediment expected. The redundancy of treatment was considered High Concern due to having no redundancy in BMP treatment train. Finally, the compaction during construction was considered to be Low Concern since heavy equipment will be prohibited from the infiltration areas during construction.

A summary of the calculations and quantities are listed below and included in Appendix C.

7. Results

Based on the results of this study, for the existing condition, the Q_{10} and Q_{50} for the entire project site were calculated to be 2.9 cfs and 5 cfs, respectively. For the developed condition, the Q_{10} and Q_{50} were calculated to be 6.7 cfs and 11.4 cfs, respectively. The discharge was calculated using the Cook's Method and the calculations can be found in Appendix B.

8. Conclusions

The above itemized Hydrology and Hydraulic Calculations indicate that the use of Bioretention basins within the site development will limit the post-development outflow to 5% of the effective impervious area during the ¾-inch storm event. Additionally, the pipes and catch basins were sized to convey the 50-year event. During construction, erosion control devices should be installed, which would include, at a minimum, sand bags and silt fences, along with other typical erosion control devices.

9. Limitations

This report is prepared for use by Dansk Investments and its authorized agents and should not be considered transferable. Prior to the use by others, the subject site and this report should be reviewed by this office to determine if any additional work is required to update this report. It is the intent of this report to aid in the design and construction of the described project. Implementation of the advice presented in this report is intended to reduce risk associated with construction projects. The professional opinions contained in this report are not intended to imply total performance of the project. Furthermore, the opinions contained within this report are based on the referenced materials.

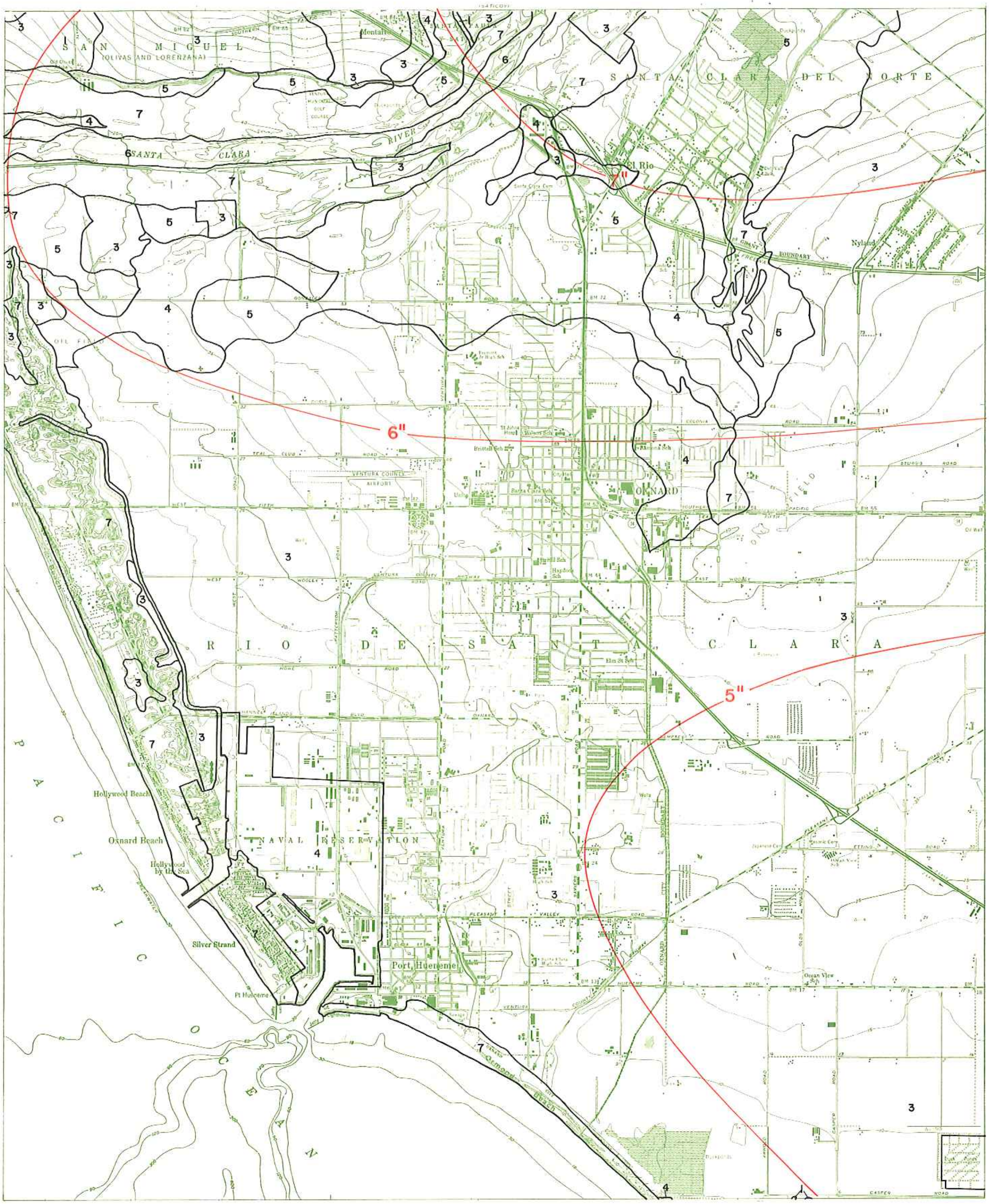
This report has been prepared in accordance with generally accepted engineering practices and makes no warranties, either expressed or implied, as to the professional opinions provided.

Should you have any questions, please don't hesitate to call.

Respectfully submitted,

Jim D. Faul, QSD, PE 52258
Civil Department Manager

APPENDIX A



LEGEND

1000 0 1000 2000
SCALE IN FEET

5 SOIL NUMBER
SOIL TYPE BOUNDARY

K RAINFALL ZONE
50-YEAR, 24-HOUR ISOHYET

HYDROLOGIC MAP OXNARD 1967

B

VENTURA COUNTY HYDROLOGY MANUAL

FREQUENCY FACTORS – %

RETURN FREQUENCY	RETURN PERIOD	FACTOR
50%	2	25
20%	5	65
10%	10	100
4%	25	135
2%	50	170
1%	100	200
0.1%	1,000	400

RAINFALL INTENSITY CORRECTION FACTOR

OXNARD AREA	=	123%

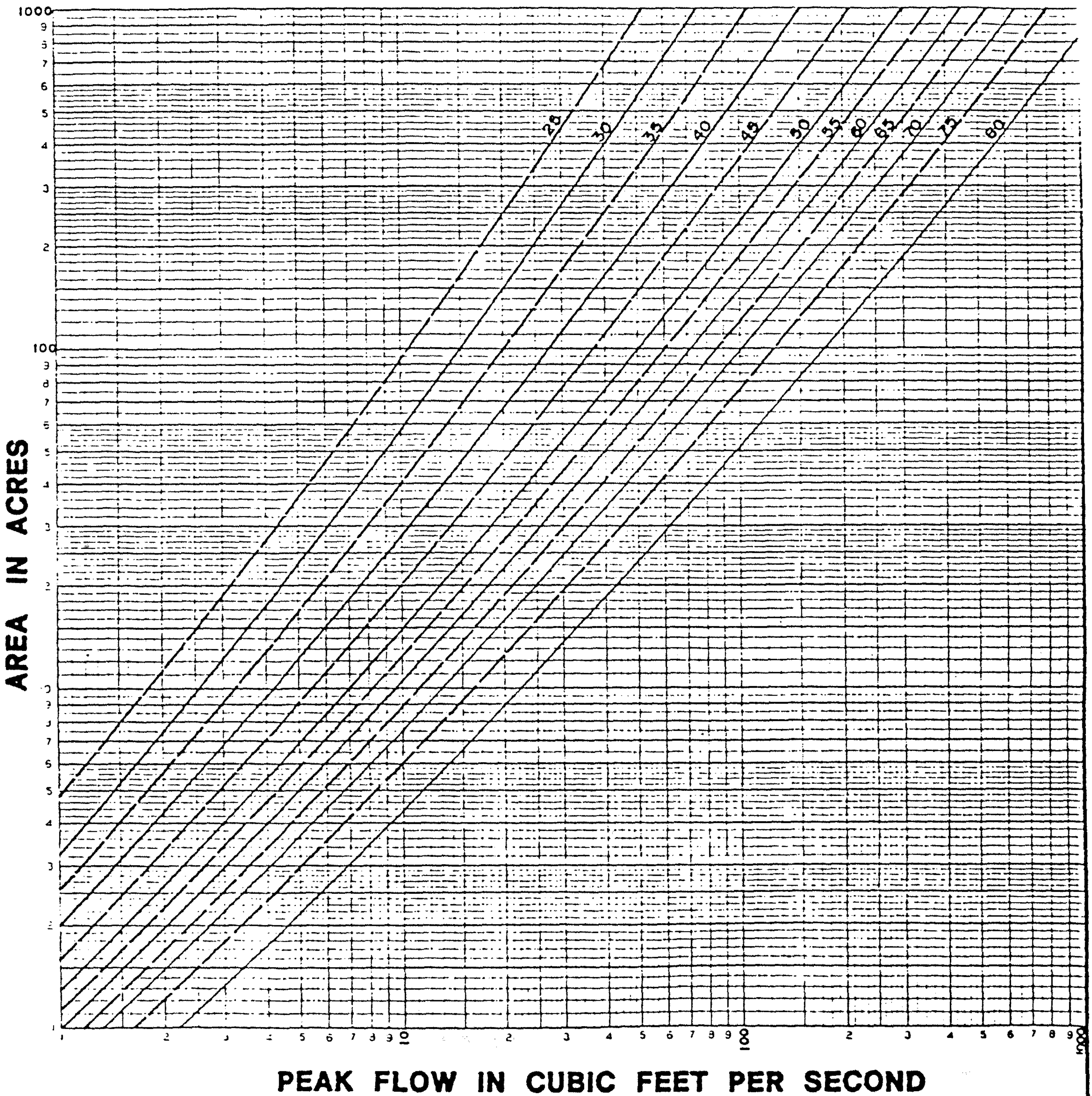
SHAPE CORRECTION FACTORS – %

L/W \ AREA	0.01 S.M.	0.1 S.M.	1 S.M.	10 S.M.	100 S.M.	1,000 S.M.
1	115	125	132	141	154	172
1.5	112	115	119	124	131	141
2	108	110	110	113	117	122
3	100	100	100	100	100	100
4	98	95	94	91	89	86
5 or greater	95	91	88	85	82	78

1 S.M. = 1 Square Mile = 640 Acres | Just for information only

REV.	APPR BY	DATE

CITY OF Oxnard	GENERAL REQUIREMENTS – DRAINAGE	STANDARD PLAN PLATE 61
	DRAWN: SOHER CKD. Jay Patel APPR. BY Benjamin Y. Wong	
	Public Works Department	SHEET OF



CITY OF Oxnard

GENERAL REQUIREMENTS - DRAINAGE

DRAWN: SOHER | CKD. Jay Patel | APPR. BY Benjamin Y. Wong

Public Works Department

STANDARD PLAN

PLATE 62

SHEET OF

APPENDIX B

MODIFIED COOKS - HYDROLOGIC CALCULATIONS

Project:	Dansk Investments	Job No.	6826	sheet	1	of	1
Watershed:		Designed	J. Azad	date	10/17/2014		
Concentration Point		checked	J. Azad	date	10/20/2014		

Watershed Constants:

Drainage Area 7.1 acres

Length 900 feet   Fall 10.00 feet   Slope 0.0111 %

Width=(Area x 43560)/length= 344 feet

Length/width = 2.62 feet   Shape correction factor= 103 %

Soil Type 3   RI correction factor 123 %

Computation of "C"

Type of Development	"C" Factor	Present	Future
Undeveloped	40-45	X	
Residential	60		X
Commerical and Industrial	70		

Composite "C" Factor

Runoff: Q from curve = 2.3 x L/F Factor 1.03 x RI-Corr. Factor 1.23 = 2.9 cfs/ac

Frequency	Frequency Factor	Q	
20%	65%	1.9	cfs
10%	100%	2.9	cfs
4%	135%	3.9	cfs
2%	170%	5.0	cfs
1%	200%	5.8	cfs

MODIFIED COOKS - HYDROLOGIC CALCULATIONS

Project:	Dansk Investments	Job No.	6826	sheet	1	of	1
Watershed:		Designed	J. Azad	date	10/17/2014		
Concentration Point		checked	J. Azad	date	10/20/2014		

Watershed Constants:

Drainage Area	7.1	acres						
Length	900	feet	Fall	10.00	feet	Slope	0.01111	%
Width=(Area x 43560)= length	344	feet						
Length = Width	2.62	feet	Shape correction factor=	103	%			
Soil Type	3		RI correction factor	123	%			

Computation of "C"

Type of Development	"C" Factor	Present	Future
Undeveloped	40-45	X	
Residential	60		X
Commerical and Industrial	70		

Composite "C" Factor

Runoff: Q from curve = 5.3 x L/w Factor 1.03 x RI-Corr. Factor 1.23 = 6.7 cfs 0.95 cfs/ac

Frequency	Frequency Factor	Q	
20%	65%	4.4	cfs
10%	100%	6.7	cfs
4%	135%	9.1	cfs
2%	170%	11.4	cfs
1%	200%	13.4	cfs

Developed Conditions - 50-year event
Pleasant Valley Road
Oxnard, CA
job number 6826

interior subarea	area (sq ft)	area (acres)	discharge per acre (cfs)	50-year discharge (cfs)
A(1)	6566	0.15	1.6	0.24
A(2)	6629	0.15	1.6	0.24
A(3)	4939	0.11	1.6	0.18
A(4)	5164	0.12	1.6	0.19
A(5)	4455	0.10	1.6	0.16
A(6)	4676	0.11	1.6	0.17
A(7)	9104	0.21	1.6	0.33
A(8)	9247	0.21	1.6	0.34
A(9)	41478	0.95	1.6	1.52
A(10)	39213	0.90	1.6	1.44
A(11)	39357	0.90	1.6	1.45
A(12)	30501	0.70	1.6	1.12
A(13)	52008	1.19	1.6	1.91
A(14)	12292	0.28	1.6	0.45
A(15)	31750	0.73	1.6	1.17
A(16)	11786	0.27	1.6	0.43

Grating Basin Sizing

Pleasant Valley Road
Oxnard, CA
job number 6826
50-year grate sizing

Grating Basin subarea	50-year Discharge (Q) (cfs)	# of basins	discharge per basin (cfs)	assumed max. head on grate (H) (ft)	calculated grate size opening (sq ft)	grate type	grate size	actual opening size (sq ft)
A(1)	0.24	1	0.24	0.1	0.31	square	12"x12"	0.413
A(2)	0.24	1	0.24	0.1	0.31	square	12"x12"	0.413
A(3)	0.18	1	0.18	0.1	0.23	square	12"x12"	0.413
A(4)	0.19	1	0.19	0.1	0.25	square	12"x12"	0.413
A(5)	0.16	1	0.16	0.1	0.21	square	12"x12"	0.413
A(6)	0.17	1	0.17	0.1	0.22	square	12"x12"	0.413
A(7)	0.33	1	0.33	0.1	0.43	square	12"x12"	0.849
A(8)	0.34	1	0.34	0.1	0.44	square	12"x12"	0.849
A(9)	1.52	1	1.52	0.1	1.96	square	24"x24"	2.306
A(10)	1.44	1	1.44	0.1	1.86	square	24"x24"	2.306
A(11)	1.45	1	1.45	0.1	1.87	square	24"x24"	2.306
A(12)	1.12	1	1.12	0.1	1.45	square	24"x24"	1.611
A(13)	1.91	2	0.96	0.1	1.23	square	24"x24"	1.611
A(14)	0.45	1	0.45	0.1	0.58	square	12"x12"	0.849
A(15)	1.17	1	1.17	0.1	1.51	square	24"x24"	1.611
A(16)	0.43	4	0.11	0.1	0.14	square	12"x12"	0.413

FORMULA:

Q =A*.61*(2gh)^0.5
a = Q/(((2gh)^0.5)*.61)

CATCH BASIN SIZE:	**6" AREA DRAIN**	**12"X12" (part 1213)**	**12"x12" (part 1215)**	**24"x24" (part 2412)**	**24"x24" (part 2415)**	**Channel drain 6"x100'**	**9" ATRIUM GRATE**	**6" ATRIUM GRATE**
OPEN AREA (in^2)	9.1	59.5	122.3	232	332.06	1985	31.5	28.4
OPEN AREA (ft^2)	**0.063**	**0.413**	**0.849**	**1.611**	**2.306**	**13.785**	**0.219**	**0.197**

Determination of Required Pipe Size (50-year event)

Pleasant Valley Road
Oxnard, CA
job number 6826

For Hancor HDPE pipe, Kprov from Hancor Water Management Drainage Handbook, table 3-1

Pipe Size	Kprov
(in)	
4	2.5
6	7.3
8	15.7
10	28.5
12	46.3
15	84.0
18	136.6
21	206.0
24	294.4
30	533.0
36	866.8

Equations:

Kreq = Q/((S)^0.5) Kreq=Krequired

Kprov=46.3d^(8/3) Kprov=Kprovided

Kprov must be greater than Kreq

contributing subareas	Q50 (cfs)	slope	Kreq	Pipe Size (in)	Kprov	Kreq/Kprov
A(1)	0.42	0.010	4.2	6	7.3	58%
A(2)	0.43	0.010	4.3	6	7.3	59%
A(3)	0.18	0.010	1.8	4	2.5	72%
A(4)	0.19	0.010	1.9	4	2.5	76%
A(5)	0.16	0.010	1.6	4	2.5	64%
A(6)	0.17	0.010	1.7	4	2.5	68%
A(7)	0.49	0.072	1.8	4	2.5	73%
A(8)	0.34	0.010	3.4	6	7.3	47%
A(9)	1.52	0.010	15.2	8	15.7	97%
A(10)	1.44	1.410	1.2	4	2.5	49%
A(11)	1.45	0.011	13.8	8	15.7	88%
A(12)	1.12	1.130	1.1	4	2.5	42%
A(13)	0.96	0.020	6.8	6	7.3	93%
A(14)	0.45	0.010	4.5	6	7.3	62%
A(15)	1.17	0.010	11.7	8	15.7	75%
A(16)	0.43	0.008	4.9	6	7.3	68%

APPENDIX C

DESIGN PROCEDURE FORM FOR INF-3		**BIORETENTION**	
PROJECT:6826		**Area A(1)**	
1. DETERMINE WATER QUALITY DESIGN VOLUME			
1-1. Enter project area	***Aproject***	0.151	*acres*
1-2. Enter the maximum allowable percent of the project area that may be effective impervious area (%)	$\%_{allowable}$	5	*%*
1-3. Determine the maximum allowable effective impervious area (acres)	$EIA_{allowable}$	0.008	*acres*
1-4. Enter project impervious fraction	***Imp***	0.700	
1-5. Determine the Project Total Impervious Area (acres)	***TIA***	0.11	*acres*
1-6. Determine the total area from which runoff must be retained (acres)	A_{retain}	0.098	*acres*
1-7. Determine pervious runoff coefficient using Table E-1, Cp	***Cp***	0.1	
1-8. Calculate runoff coefficient	***C***	0.695	
1-9. Enter design rainfall depth of the storm (in)	***Pi***	0.75	*in*
1-10. Calculate rainfall depth (ft)	***P***	0.0625	*ft*
1-11. Calculate water quality design volume (ft^3)	***SQDV***	185.4	ft^3
2. Determine the design percolation rate		**Area A(1)**	
2-1. Enter measured soil percolation rate (in/hr) (0.5 in/hr minimum), $P_{measured}$	$P_{measured}$	1.1	*in/hr*
2-2. Determine percolation rate correction factor, S_A based on suitability assessment (see Section 6 INF-3)	S_A	2.25	
2-3. Determine percolation rate correction factor, S_B based on design (see Section 6 INF-3	S_B	1.5	
2-4. Calculate combined safety factor, $S=S_A \times S_B$	***S***	3.375	
2-5. Calculate the design percolation rate (in/hr), $P_{design}=P_{measured}/S$	P_{design}	0.326	*in/hr*
3. Calc. Bioretention infiltrating surface area		**Area A(1)**	
3-1. Enter water quality design volume	***SQDV=***	185.4	ft^3
3-2. Enter design percolation rate (in/hr)	***Pdesign***	0.326	*in/hr*
3-3. Enter the required drain time	$t_{ponding}$	48	*hrs*
3-3. Calculate the maximum depth of surface ponding that can be infiltrated within the required drain time (ft)	d_{max}	1.3	*ft*
3-4. Select surface ponding depth (ft), dp, such that dp<=dmax	d_p	1.3	*ft*
3-5. Select thickness of amended media (2 ft min)	l_{media}	3	*ft*
3-6. Enter porosity of amended media (roughly 25% or 0.25ft/ft)	n_{media}	0.25	*ft/ft*
3-7. Select thickness of optional gravel layer	l_{gravel}	1	*ft*
3-8. Enter porosity of gravel (roughly 30% or 0.3 ft/ft)	n_{gravel}	0.3	*ft/ft*
3-9. Calculate the total effective storage depth of bioretention facility (ft)	$d_{effective}$	2.35	*ft*
3-10. Check that the entire effective depth infiltrates in required drainage time, 96 hours	t_{total}	87	*hours*
3-11. Calculate the required infiltrating surface area	***Areq***	78.9	ft^2
4. Calc. Bioretention Area Total Footprint (CHECK)			
4-1. Calculate total footprint required by including a buffer for side slopes and freeboard	***Atot***	79	ft^2

DESIGN PROCEDURE FORM FOR INF-3		BIORETENTION	
PROJECT:6826		**Area A(2)**	
1. DETERMINE WATER QUALITY DESIGN VOLUME			
1-1. Enter project area	***Aproject***	0.152	*acres*
1-2. Enter the maximum allowable percent of the project area that may be effective impervious area (%)	***$\%_{allowable}$***	5	*%*
1-3. Determine the maximum allowable effective impervious area (acres)	***$EIA_{allowable}$***	0.008	*acres*
1-4. Enter project impervious fraction	***Imp***	0.700	
1-5. Determine the Project Total Impervious Area (acres)	***TIA***	0.11	*acres*
1-6. Determine the total area from which runoff must be retained (acres)	***A_{retain}***	0.099	*acres*
1-7. Determine pervious runoff coefficient using Table E-1, Cp	***Cp***	0.1	
1-8. Calculate runoff coefficient	***C***	0.695	
1-9. Enter design rainfall depth of the storm (in)	***Pi***	0.75	*in*
1-10. Calculate rainfall depth (ft)	***P***	0.0625	*ft*
1-11. Calculate water quality design volume (ft^3)	***SQDV***	187.2	*ft^3*
2. Determine the design percolation rate		**Area A(2)**	
2-1. Enter measured soil percolation rate (in/hr) (0.5 in/hr minimum), $P_{measured}$	***$P_{measured}$***	1.1	*in/hr*
2-2. Determine percolation rate correction factor, S_A based on suitability assessment (see Section 6 INF-3)	***S_A***	2.25	
2-3. Determine percolation rate correction factor, S_B based on design (see Section 6 INF-3	***S_B***	1.5	
2-4. Calculate combined safety factor, $S=S_A \times S_B$	***S***	3.375	
2-5. Calculate the design percolation rate (in/hr), $P_{design}=P_{measured}/S$	***P_{design}***	0.326	*in/hr*
3. Calc. Bioretention infiltrating surface area		**Area A(2)**	
3-1. Enter water quality design volume	***SQDV=***	187.2	*ft^3*
3-2. Enter design percolation rate (in/hr)	***Pdesign***	0.326	*in/hr*
3-3. Enter the required drain time	***$t_{ponding}$***	48	*hrs*
3-3. Calculate the maximum depth of surface ponding that can be infiltrated within the required drain time (ft)	***d_{max}***	1.3	*ft*
3-4. Select surface ponding depth (ft), dp, such that dp<=dmax	***d_p***	1.3	*ft*
3-5. Select thickness of amended media (2 ft min)	***l_{media}***	3	*ft*
3-6. Enter porosity of amended media (roughly 25% or 0.25ft/ft)	***n_{media}***	0.25	*ft/ft*
3-7. Select thickness of optional gravel layer	***l_{gravel}***	1	*ft*
3-8. Enter porosity of gravel (roughly 30% or 0.3 ft/ft)	***n_{gravel}***	0.3	*ft/ft*
3-9. Calculate the total effective storage depth of bioretention facility (ft)	***$d_{effective}$***	2.35	*ft*
3-10. Check that the entire effective depth infiltrates in required drainage time, 96 hours	***t_{total}***	87	*hours*
3-11. Calculate the required infiltrating surface area	***Areq***	80	*ft^2*
4. Calc. Bioretention Area Total Footprint (CHECK)			
4-1. Calculate total footprint required by including a buffer for side slopes and freeboard	***Atot***	80	*ft^2*

DESIGN PROCEDURE FORM FOR INF-3		BIORETENTION	
PROJECT:6826		**Area A(3)**	
1. DETERMINE WATER QUALITY DESIGN VOLUME			
1-1. Enter project area	***Aproject***	0.113	*acres*
1-2. Enter the maximum allowable percent of the project area that may be effective impervious area (%)	***%*** $_{allowable}$	5	*%*
1-3. Determine the maximum allowable effective impervious area (acres)	***EIA*** $_{allowable}$	0.006	*acres*
1-4. Enter project impervious fraction	***Imp***	0.700	
1-5. Determine the Project Total Impervious Area (acres)	***TIA***	0.08	*acres*
1-6. Determine the total area from which runoff must be retained (acres)	A_{retain}	0.074	*acres*
1-7. Determine pervious runoff coefficient using Table E-1, Cp	***Cp***	0.1	
1-8. Calculate runoff coefficient	***C***	0.695	
1-9. Enter design rainfall depth of the storm (in)	***Pi***	0.75	*in*
1-10. Calculate rainfall depth (ft)	***P***	0.0625	*ft*
1-11. Calculate water quality design volume (ft^3)	***SQDV***	139.4	ft^3
2. Determine the design percolation rate		**Area A(3)**	
2-1. Enter measured soil percolation rate (in/hr) (0.5 in/hr minimum), $P_{measured}$	$P_{measured}$	1.1	*in/hr*
2-2. Determine percolation rate correction factor, S_A based on suitability assessment (see Section 6 INF-3)	S_A	2.25	
2-3. Determine percolation rate correction factor, S_B based on design (see Section 6 INF-3	S_B	1.5	
2-4. Calculate combined safety factor, $S=S_A \times S_B$	***S***	3.375	
2-5. Calculate the design percolation rate (in/hr), $P_{design}=P_{measured}/S$	P_{design}	0.326	*in/hr*
3. Calc. Bioretention infiltrating surface area		**Area A(3)**	
3-1. Enter water quality design volume	***SQDV=***	139.4	ft^3
3-2. Enter design percolation rate (in/hr)	***Pdesign***	0.326	*in/hr*
3-3. Enter the required drain time	$t_{ponding}$	48	*hrs*
3-3. Calculate the maximum depth of surface ponding that can be infiltrated within the required drain time (ft)	d_{max}	1.3	*ft*
3-4. Select surface ponding depth (ft), dp, such that dp<=dmax	d_p	1.3	*ft*
3-5. Select thickness of amended media (2 ft min)	l_{media}	3	*ft*
3-6. Enter porosity of amended media (roughly 25% or 0.25ft/ft)	n_{media}	0.25	*ft/ft*
3-7. Select thickness of optional gravel layer	l_{gravel}	1	*ft*
3-8. Enter porosity of gravel (roughly 30% or 0.3 ft/ft)	n_{gravel}	0.3	*ft/ft*
3-9. Calculate the total effective storage depth of bioretention facility (ft)	$d_{effective}$	2.35	*ft*
3-10. Check that the entire effective depth infiltrates in required drainage time, 96 hours	t_{total}	87	*hours*
3-11. Calculate the required infiltrating surface area	***Areq***	59.3	ft^2
4. Calc. Bioretention Area Total Footprint (CHECK)			
4-1. Calculate total footprint required by including a buffer for side slopes and freeboard	***Atot***	59	ft^2

DESIGN PROCEDURE FORM FOR INF-3		BIORETENTION	
PROJECT:6826		**Area A(4)**	
1. DETERMINE WATER QUALITY DESIGN VOLUME			
1-1. Enter project area	***Aproject***	0.119	*acres*
1-2. Enter the maximum allowable percent of the project area that may be effective impervious area (%)	***%*** $_{allowable}$	5	*%*
1-3. Determine the maximum allowable effective impervious area (acres)	***EIA*** $_{allowable}$	0.006	*acres*
1-4. Enter project impervious fraction	***Imp***	0.700	
1-5. Determine the Project Total Impervious Area (acres)	***TIA***	0.083	*acres*
1-6. Determine the total area from which runoff must be retained (acres)	***A*** $_{retain}$	0.077	*acres*
1-7. Determine pervious runoff coefficient using Table E-1, Cp	***Cp***	0.1	
1-8. Calculate runoff coefficient	***C***	0.695	
1-9. Enter design rainfall depth of the storm (in)	***Pi***	0.75	*in*
1-10. Calculate rainfall depth (ft)	***P***	0.0625	*ft*
1-11. Calculate water quality design volume (ft^3)	***SQDV***	145.8	ft^3
2. Determine the design percolation rate		**Area A(4)**	
2-1. Enter measured soil percolation rate (in/hr) (0.5 in/hr minimum), $P_{measured}$	***P*** $_{measured}$	1.1	*in/hr*
2-2. Determine percolation rate correction factor, S_A based on suitability assessment (see Section 6 INF-3)	S_A	2.25	
2-3. Determine percolation rate correction factor, S_B based on design (see Section 6 INF-3	S_B	1.5	
2-4. Calculate combined safety factor, $S=S_A \times S_B$	***S***	3.375	
2-5. Calculate the design percolation rate (in/hr), $P_{design}=P_{measured}/S$	***P*** $_{design}$	0.326	*in/hr*
3. Calc. Bioretention infiltrating surface area		**Area A(4)**	
3-1. Enter water quality design volume	***SQDV=***	145.8	ft^3
3-2. Enter design percolation rate (in/hr)	***Pdesign***	0.326	*in/hr*
3-3. Enter the required drain time	$t_{ponding}$	48	*hrs*
3-3. Calculate the maximum depth of surface ponding that can be infiltrated within the required drain time (ft)	d_{max}	1.3	*ft*
3-4. Select surface ponding depth (ft), dp, such that dp<=dmax	d_p	1.3	*ft*
3-5. Select thickness of amended media (2 ft min)	l_{media}	3	*ft*
3-6. Enter porosity of amended media (roughly 25% or 0.25ft/ft)	n_{media}	0.25	*ft/ft*
3-7. Select thickness of optional gravel layer	l_{gravel}	1	*ft*
3-8. Enter porosity of gravel (roughly 30% or 0.3 ft/ft)	n_{gravel}	0.3	*ft/ft*
3-9. Calculate the total effective storage depth of bioretention facility (ft)	$d_{effective}$	2.35	*ft*
3-10. Check that the entire effective depth infiltrates in required drainage time, 96 hours	t_{total}	87	*hours*
3-11. Calculate the required infiltrating surface area	***Areq***	62.0	ft^2
4. Calc. Bioretention Area Total Footprint (CHECK)			
4-1. Calculate total footprint required by including a buffer for side slopes and freeboard	***Atot***	62	ft^2

DESIGN PROCEDURE FORM FOR INF-3		**BIORETENTION**	
PROJECT:6826		**Area A(5)**	
1. DETERMINE WATER QUALITY DESIGN VOLUME			
1-1. Enter project area	***Aproject***	0.102	*acres*
1-2. Enter the maximum allowable percent of the project area that may be effective impervious area (%)	***$\%_{allowable}$***	5	*%*
1-3. Determine the maximum allowable effective impervious area (acres)	***$EIA_{allowable}$***	0.005	*acres*
1-4. Enter project impervious fraction	***Imp***	0.700	
1-5. Determine the Project Total Impervious Area (acres)	***TIA***	0.072	*acres*
1-6. Determine the total area from which runoff must be retained (acres)	***A_{retain}***	0.066	*acres*
1-7. Determine pervious runoff coefficient using Table E-1, Cp	***Cp***	0.1	
1-8. Calculate runoff coefficient	***C***	0.695	
1-9. Enter design rainfall depth of the storm (in)	***Pi***	0.75	*in*
1-10. Calculate rainfall depth (ft)	***P***	0.0625	*ft*
1-11. Calculate water quality design volume (ft^3)	***SQDV***	125.8	*ft^3*
2. Determine the design percolation rate		**Area A(5)**	
2-1. Enter measured soil percolation rate (in/hr) (0.5 in/hr minimum), $P_{measured}$	***$P_{measured}$***	1.1	*in/hr*
2-2. Determine percolation rate correction factor, S_A based on suitability assessment (see Section 6 INF-3)	***S_A***	2.25	
2-3. Determine percolation rate correction factor, S_B based on design (see Section 6 INF-3	***S_B***	1.5	
2-4. Calculate combined safety factor, $S=S_A \times S_B$	***S***	3.375	
2-5. Calculate the design percolation rate (in/hr), $P_{design}=P_{measured}/S$	***P_{design}***	0.326	*in/hr*
3. Calc. Bioretention infiltrating surface area		**Area A(5)**	
3-1. Enter water quality design volume	***SQDV=***	125.8	*ft^3*
3-2. Enter design percolation rate (in/hr)	***Pdesign***	0.326	*in/hr*
3-3. Enter the required drain time	***$t_{ponding}$***	48	*hrs*
3-3. Calculate the maximum depth of surface ponding that can be infiltrated within the required drain time (ft)	***d_{max}***	1.3	*ft*
3-4. Select surface ponding depth (ft), dp, such that dp<=dmax	***d_p***	1.3	*ft*
3-5. Select thickness of amended media (2 ft min)	***l_{media}***	3	*ft*
3-6. Enter porosity of amended media (roughly 25% or 0.25ft/ft)	***n_{media}***	0.25	*ft/ft*
3-7. Select thickness of optional gravel layer	***l_{gravel}***	1	*ft*
3-8. Enter porosity of gravel (roughly 30% or 0.3 ft/ft)	***n_{gravel}***	0.3	*ft/ft*
3-9. Calculate the total effective storage depth of bioretention facility (ft)	***$d_{effective}$***	2.35	*ft*
3-10. Check that the entire effective depth infiltrates in required drainage time, 96 hours	***t_{total}***	87	*hours*
3-11. Calculate the required infiltrating surface area	***Areq***	53.5	*ft^2*
4. Calc. Bioretention Area Total Footprint (CHECK)			
4-1. Calculate total footprint required by including a buffer for side slopes and freeboard	***Atot***	54	*ft^2*

DESIGN PROCEDURE FORM FOR INF-3		BIORETENTION	
PROJECT:6826		**Area A(6)**	
1. DETERMINE WATER QUALITY DESIGN VOLUME			
1-1. Enter project area	***Aproject***	0.107	*acres*
1-2. Enter the maximum allowable percent of the project area that may be effective impervious area (%)	$\%_{allowable}$	5	*%*
1-3. Determine the maximum allowable effective impervious area (acres)	$EIA_{allowable}$	0.005	*acres*
1-4. Enter project impervious fraction	***Imp***	0.700	
1-5. Determine the Project Total Impervious Area (acres)	***TIA***	0.075	*acres*
1-6. Determine the total area from which runoff must be retained (acres)	A_{retain}	0.070	*acres*
1-7. Determine pervious runoff coefficient using Table E-1, Cp	***Cp***	0.1	
1-8. Calculate runoff coefficient	***C***	0.695	
1-9. Enter design rainfall depth of the storm (in)	***Pi***	0.75	*in*
1-10. Calculate rainfall depth (ft)	***P***	0.0625	*ft*
1-11. Calculate water quality design volume (ft^3)	***SQDV***	132.0	ft^3
2. Determine the design percolation rate		**Area A(6)**	
2-1. Enter measured soil percolation rate (in/hr) (0.5 in/hr minimum), $P_{measured}$	$P_{measured}$	1.1	*in/hr*
2-2. Determine percolation rate correction factor, S_A based on suitability assessment (see Section 6 INF-3)	S_A	2.25	
2-3. Determine percolation rate correction factor, S_B based on design (see Section 6 INF-3	S_B	1.5	
2-4. Calculate combined safety factor, $S=S_A \times S_B$	***S***	3.375	
2-5. Calculate the design percolation rate (in/hr), $P_{design}=P_{measured}/S$	P_{design}	0.326	*in/hr*
3. Calc. Bioretention infiltrating surface area		**Area A(6)**	
3-1. Enter water quality design volume	***SQDV=***	132.0	ft^3
3-2. Enter design percolation rate (in/hr)	***Pdesign***	0.326	*in/hr*
3-3. Enter the required drain time	$t_{ponding}$	48	*hrs*
3-3. Calculate the maximum depth of surface ponding that can be infiltrated within the required drain time (ft)	d_{max}	1.3	*ft*
3-4. Select surface ponding depth (ft), dp, such that dp<=dmax	d_p	1.3	*ft*
3-5. Select thickness of amended media (2 ft min)	l_{media}	3	*ft*
3-6. Enter porosity of amended media (roughly 25% or 0.25ft/ft)	n_{media}	0.25	*ft/ft*
3-7. Select thickness of optional gravel layer	l_{gravel}	1	*ft*
3-8. Enter porosity of gravel (roughly 30% or 0.3 ft/ft)	n_{gravel}	0.3	*ft/ft*
3-9. Calculate the total effective storage depth of bioretention facility (ft)	$d_{effective}$	2.35	*ft*
3-10. Check that the entire effective depth infiltrates in required drainage time, 96 hours	t_{total}	87	*hours*
3-11. Calculate the required infiltrating surface area	***Areq***	56.2	ft^2
4. Calc. Bioretention Area Total Footprint (CHECK)			
4-1. Calculate total footprint required by including a buffer for side slopes and freeboard	***Atot***	56	ft^2

DESIGN PROCEDURE FORM FOR INF-3		BIORETENTION	
PROJECT:6826		**Area A(7)**	
1. DETERMINE WATER QUALITY DESIGN VOLUME			
1-1. Enter project area	***Aproject***	0.209	*acres*
1-2. Enter the maximum allowable percent of the project area that may be effective impervious area (%)	***% allowable***	5	*%*
1-3. Determine the maximum allowable effective impervious area (acres)	***EIA allowable***	0.010	*acres*
1-4. Enter project impervious fraction	***Imp***	0.700	
1-5. Determine the Project Total Impervious Area (acres)	***TIA***	0.146	*acres*
1-6. Determine the total area from which runoff must be retained (acres)	***A retain***	0.136	*acres*
1-7. Determine pervious runoff coefficient using Table E-1, Cp	***Cp***	0.1	
1-8. Calculate runoff coefficient	***C***	0.695	
1-9. Enter design rainfall depth of the storm (in)	***Pi***	0.75	*in*
1-10. Calculate rainfall depth (ft)	***P***	0.0625	*ft*
1-11. Calculate water quality design volume (ft^3)	***SQDV***	257.0	*ft^3*
2. Determine the design percolation rate		**Area A(7)**	
2-1. Enter measured soil percolation rate (in/hr) (0.5 in/hr minimum), $P_{measured}$	***P measured***	1.1	*in/hr*
2-2. Determine percolation rate correction factor, S_A based on suitability assessment (see Section 6 INF-3)	***S_A***	2.25	
2-3. Determine percolation rate correction factor, S_B based on design (see Section 6 INF-3	***S_B***	1.5	
2-4. Calculate combined safety factor, $S=S_A \times S_B$	***S***	3.375	
2-5. Calculate the design percolation rate (in/hr), $P_{design}=P_{measured}/S$	***P design***	0.326	*in/hr*
3. Calc. Bioretention infiltrating surface area		**Area A(7)**	
3-1. Enter water quality design volume	***SQDV=***	257.0	*ft^3*
3-2. Enter design percolation rate (in/hr)	***Pdesign***	0.326	*in/hr*
3-3. Enter the required drain time	***t ponding***	48	*hrs*
3-3. Calculate the maximum depth of surface ponding that can be infiltrated within the required drain time (ft)	***d max***	1.3	*ft*
3-4. Select surface ponding depth (ft), dp, such that dp<=dmax	***d_p***	1.3	*ft*
3-5. Select thickness of amended media (2 ft min)	***l media***	3	*ft*
3-6. Enter porosity of amended media (roughly 25% or 0.25ft/ft)	***n media***	0.25	*ft/ft*
3-7. Select thickness of optional gravel layer	***l gravel***	1	*ft*
3-8. Enter porosity of gravel (roughly 30% or 0.3 ft/ft)	***n gravel***	0.3	*ft/ft*
3-9. Calculate the total effective storage depth of bioretention facility (ft)	***d effective***	2.35	*ft*
3-10. Check that the entire effective depth infiltrates in required drainage time, 96 hours	***t total***	87	*hours*
3-11. Calculate the required infiltrating surface area	***Areq***	109.4	*ft^2*
4. Calc. Bioretention Area Total Footprint (CHECK)			
4-1. Calculate total footprint required by including a buffer for side slopes and freeboard	***Atot***	109	*ft^2*

DESIGN PROCEDURE FORM FOR INF-3		BIORETENTION	
PROJECT:6826		**Area A(8)**	
1. DETERMINE WATER QUALITY DESIGN VOLUME			
1-1. Enter project area	***Aproject***	0.212	*acres*
1-2. Enter the maximum allowable percent of the project area that may be effective impervious area (%)	***%** $_{allowable}$*	5	*%*
1-3. Determine the maximum allowable effective impervious area (acres)	***EIA** $_{allowable}$*	0.011	*acres*
1-4. Enter project impervious fraction	***Imp***	0.700	
1-5. Determine the Project Total Impervious Area (acres)	***TIA***	0.149	*acres*
1-6. Determine the total area from which runoff must be retained (acres)	***A** $_{retain}$*	0.138	*acres*
1-7. Determine pervious runoff coefficient using Table E-1, Cp	***Cp***	0.1	
1-8. Calculate runoff coefficient	***C***	0.695	
1-9. Enter design rainfall depth of the storm (in)	***Pi***	0.75	*in*
1-10. Calculate rainfall depth (ft)	***P***	0.0625	*ft*
1-11. Calculate water quality design volume (ft^3)	***SQDV***	261.1	ft^3
2. Determine the design percolation rate		**Area A(8)**	
2-1. Enter measured soil percolation rate (in/hr) (0.5 in/hr minimum), $P_{measured}$	***P** $_{measured}$*	1.1	*in/hr*
2-2. Determine percolation rate correction factor, S_A based on suitability assessment (see Section 6 INF-3)	S_A	2.25	
2-3. Determine percolation rate correction factor, S_B based on design (see Section 6 INF-3	S_B	1.5	
2-4. Calculate combined safety factor, $S=S_A \times S_B$	***S***	3.375	
2-5. Calculate the design percolation rate (in/hr), $P_{design}=P_{measured}/S$	***P** $_{design}$*	0.326	*in/hr*
3. Calc. Bioretention infiltrating surface area		**Area A(8)**	
3-1. Enter water quality design volume	***SQDV=***	261.1	ft^3
3-2. Enter design percolation rate (in/hr)	***Pdesign***	0.326	*in/hr*
3-3. Enter the required drain time	$t_{ponding}$	48	*hrs*
3-3. Calculate the maximum depth of surface ponding that can be infiltrated within the required drain time (ft)	d_{max}	1.3	*ft*
3-4. Select surface ponding depth (ft), dp, such that dp<=dmax	d_p	1.3	*ft*
3-5. Select thickness of amended media (2 ft min)	l_{media}	3	*ft*
3-6. Enter porosity of amended media (roughly 25% or 0.25ft/ft)	n_{media}	0.25	*ft/ft*
3-7. Select thickness of optional gravel layer	l_{gravel}	1	*ft*
3-8. Enter porosity of gravel (roughly 30% or 0.3 ft/ft)	n_{gravel}	0.3	*ft/ft*
3-9. Calculate the total effective storage depth of bioretention facility (ft)	$d_{effective}$	2.35	*ft*
3-10. Check that the entire effective depth infiltrates in required drainage time, 96 hours	t_{total}	87	*hours*
3-11. Calculate the required infiltrating surface area	***Areq***	111.1	ft^2
4. Calc. Bioretention Area Total Footprint (CHECK)			
4-1. Calculate total footprint required by including a buffer for side slopes and freeboard	***Atot***	111	ft^2

DESIGN PROCEDURE FORM FOR INF-3		BIORETENTION	
PROJECT:6826		**Area A(9)**	
1. DETERMINE WATER QUALITY DESIGN VOLUME			
1-1. Enter project area	***Aproject***	0.952	*acres*
1-2. Enter the maximum allowable percent of the project area that may be effective impervious area (%)	***% $_{allowable}$***	5	*%*
1-3. Determine the maximum allowable effective impervious area (acres)	***EIA $_{allowable}$***	0.048	*acres*
1-4. Enter project impervious fraction	***Imp***	0.700	
1-5. Determine the Project Total Impervious Area (acres)	***TIA***	0.667	*acres*
1-6. Determine the total area from which runoff must be retained (acres)	***A_{retain}***	0.619	*acres*
1-7. Determine pervious runoff coefficient using Table E-1, Cp	***Cp***	0.1	
1-8. Calculate runoff coefficient	***C***	0.695	
1-9. Enter design rainfall depth of the storm (in)	***Pi***	0.75	*in*
1-10. Calculate rainfall depth (ft)	***P***	0.0625	*ft*
1-11. Calculate water quality design volume (ft^3)	***SQDV***	1171.1	*ft^3*
2. Determine the design percolation rate		**Area A(9)**	
2-1. Enter measured soil percolation rate (in/hr) (0.5 in/hr minimum), $P_{measured}$	***$P_{measured}$***	1.1	*in/hr*
2-2. Determine percolation rate correction factor, S_A based on suitability assessment (see Section 6 INF-3)	***S_A***	2.25	
2-3. Determine percolation rate correction factor, S_B based on design (see Section 6 INF-3	***S_B***	1.5	
2-4. Calculate combined safety factor, $S=S_A \times S_B$	***S***	3.375	
2-5. Calculate the design percolation rate (in/hr), $P_{design}=P_{measured}/S$	***P_{design}***	0.326	*in/hr*
3. Calc. Bioretention infiltrating surface area		**Area A(9)**	
3-1. Enter water quality design volume	***SQDV=***	1171.1	*ft^3*
3-2. Enter design percolation rate (in/hr)	***Pdesign***	0.326	*in/hr*
3-3. Enter the required drain time	***$t_{ponding}$***	48	*hrs*
3-3. Calculate the maximum depth of surface ponding that can be infiltrated within the required drain time (ft)	***d_{max}***	1.3	*ft*
3-4. Select surface ponding depth (ft), dp, such that dp<=dmax	***d_p***	1.3	*ft*
3-5. Select thickness of amended media (2 ft min)	***l_{media}***	3	*ft*
3-6. Enter porosity of amended media (roughly 25% or 0.25ft/ft)	***n_{media}***	0.25	*ft/ft*
3-7. Select thickness of optional gravel layer	***l_{gravel}***	1	*ft*
3-8. Enter porosity of gravel (roughly 30% or 0.3 ft/ft)	***n_{gravel}***	0.3	*ft/ft*
3-9. Calculate the total effective storage depth of bioretention facility (ft)	***$d_{effective}$***	2.35	*ft*
3-10. Check that the entire effective depth infiltrates in required drainage time, 96 hours	***t_{total}***	87	*hours*
3-11. Calculate the required infiltrating surface area	***Areq***	498.3	*ft^2*
4. Calc. Bioretention Area Total Footprint (CHECK)			
4-1. Calculate total footprint required by including a buffer for side slopes and freeboard	***Atot***	498	*ft^2*

DESIGN PROCEDURE FORM FOR INF-3		BIORETENTION	
PROJECT:6826		**Area A(10)**	
1. DETERMINE WATER QUALITY DESIGN VOLUME			
1-1. Enter project area	***Aproject***	0.900	*acres*
1-2. Enter the maximum allowable percent of the project area that may be effective impervious area (%)	***$\%_{allowable}$***	5	*%*
1-3. Determine the maximum allowable effective impervious area (acres)	***$EIA_{allowable}$***	0.045	*acres*
1-4. Enter project impervious fraction	***Imp***	0.700	
1-5. Determine the Project Total Impervious Area (acres)	***TIA***	0.630	*acres*
1-6. Determine the total area from which runoff must be retained (acres)	***A_{retain}***	0.585	*acres*
1-7. Determine pervious runoff coefficient using Table E-1, Cp	***Cp***	0.1	
1-8. Calculate runoff coefficient	***C***	0.695	
1-9. Enter design rainfall depth of the storm (in)	***Pi***	0.75	*in*
1-10. Calculate rainfall depth (ft)	***P***	0.0625	*ft*
1-11. Calculate water quality design volume (ft^3)	***SQDV***	1107.2	*ft^3*
2. Determine the design percolation rate		**Area A(10)**	
2-1. Enter measured soil percolation rate (in/hr) (0.5 in/hr minimum), $P_{measured}$	***$P_{measured}$***	1.1	*in/hr*
2-2. Determine percolation rate correction factor, S_A based on suitability assessment (see Section 6 INF-3)	***S_A***	2.25	
2-3. Determine percolation rate correction factor, S_B based on design (see Section 6 INF-3	***S_B***	1.5	
2-4. Calculate combined safety factor, $S=S_A \times S_B$	***S***	3.375	
2-5. Calculate the design percolation rate (in/hr), $P_{design}=P_{measured}/S$	***P_{design}***	0.326	*in/hr*
3. Calc. Bioretention infiltrating surface area		**Area A(10)**	
3-1. Enter water quality design volume	***SQDV=***	1107.2	*ft^3*
3-2. Enter design percolation rate (in/hr)	***Pdesign***	0.326	*in/hr*
3-3. Enter the required drain time	***$t_{ponding}$***	48	*hrs*
3-3. Calculate the maximum depth of surface ponding that can be infiltrated within the required drain time (ft)	***d_{max}***	1.3	*ft*
3-4. Select surface ponding depth (ft), dp, such that dp<=dmax	***d_p***	1.3	*ft*
3-5. Select thickness of amended media (2 ft min)	***l_{media}***	3	*ft*
3-6. Enter porosity of amended media (roughly 25% or 0.25ft/ft)	***n_{media}***	0.25	*ft/ft*
3-7. Select thickness of optional gravel layer	***l_{gravel}***	1	*ft*
3-8. Enter porosity of gravel (roughly 30% or 0.3 ft/ft)	***n_{gravel}***	0.3	*ft/ft*
3-9. Calculate the total effective storage depth of bioretention facility (ft)	***$d_{effective}$***	2.35	*ft*
3-10. Check that the entire effective depth infiltrates in required drainage time, 96 hours	***t_{total}***	87	*hours*
3-11. Calculate the required infiltrating surface area	***Areq***	471.1	*ft^2*
4. Calc. Bioretention Area Total Footprint (CHECK)			
4-1. Calculate total footprint required by including a buffer for side slopes and freeboard	***Atot***	471	*ft^2*

DESIGN PROCEDURE FORM FOR INF-3		BIORETENTION	
PROJECT:6826		Area A(11)	
1. DETERMINE WATER QUALITY DESIGN VOLUME			
1-1. Enter project area	***Aproject***	0.904	*acres*
1-2. Enter the maximum allowable percent of the project area that may be effective impervious area (%)	$\%_{allowable}$	5	*%*
1-3. Determine the maximum allowable effective impervious area (acres)	$EIA_{allowable}$	0.045	*acres*
1-4. Enter project impervious fraction	***Imp***	0.700	
1-5. Determine the Project Total Impervious Area (acres)	***TIA***	0.632	*acres*
1-6. Determine the total area from which runoff must be retained (acres)	A_{retain}	0.587	*acres*
1-7. Determine pervious runoff coefficient using Table E-1, Cp	***Cp***	0.1	
1-8. Calculate runoff coefficient	***C***	0.695	
1-9. Enter design rainfall depth of the storm (in)	***Pi***	0.75	*in*
1-10. Calculate rainfall depth (ft)	***P***	0.0625	*ft*
1-11. Calculate water quality design volume (ft^3)	***SQDV***	1111.2	ft^3
2. Determine the design percolation rate		**Area A(11)**	
2-1. Enter measured soil percolation rate (in/hr) (0.5 in/hr minimum), $P_{measured}$	$P_{measured}$	1.1	*in/hr*
2-2. Determine percolation rate correction factor, S_A based on suitability assessment (see Section 6 INF-3)	S_A	2.25	
2-3. Determine percolation rate correction factor, S_B based on design (see Section 6 INF-3	S_B	1.5	
2-4. Calculate combined safety factor, $S=S_A \times S_B$	***S***	3.375	
2-5. Calculate the design percolation rate (in/hr), $P_{design}=P_{measured}/S$	P_{design}	0.326	*in/hr*
3. Calc. Bioretention infiltrating surface area		**Area A(11)**	
3-1. Enter water quality design volume	***SQDV=***	1111.2	ft^3
3-2. Enter design percolation rate (in/hr)	***Pdesign***	0.326	*in/hr*
3-3. Enter the required drain time	$t_{ponding}$	48	*hrs*
3-3. Calculate the maximum depth of surface ponding that can be infiltrated within the required drain time (ft)	d_{max}	1.3	*ft*
3-4. Select surface ponding depth (ft), dp, such that dp<=dmax	d_p	1.3	*ft*
3-5. Select thickness of amended media (2 ft min)	l_{media}	3	*ft*
3-6. Enter porosity of amended media (roughly 25% or 0.25ft/ft)	n_{media}	0.25	*ft/ft*
3-7. Select thickness of optional gravel layer	l_{gravel}	1	*ft*
3-8. Enter porosity of gravel (roughly 30% or 0.3 ft/ft)	n_{gravel}	0.3	*ft/ft*
3-9. Calculate the total effective storage depth of bioretention facility (ft)	$d_{effective}$	2.35	*ft*
3-10. Check that the entire effective depth infiltrates in required drainage time, 96 hours	t_{total}	87	*hours*
3-11. Calculate the required infiltrating surface area	***Areq***	473	ft^2
4. Calc. Bioretention Area Total Footprint (CHECK)			
4-1. Calculate total footprint required by including a buffer for side slopes and freeboard	***Atot***	473	ft^2

DESIGN PROCEDURE FORM FOR INF-3		**BIORETENTION**	
PROJECT:6826		**Area A(12)**	
1. DETERMINE WATER QUALITY DESIGN VOLUME			
1-1. Enter project area	***Aproject***	0.700	*acres*
1-2. Enter the maximum allowable percent of the project area that may be effective impervious area (%)	$\%_{allowable}$	5	*%*
1-3. Determine the maximum allowable effective impervious area (acres)	$EIA_{allowable}$	0.035	*acres*
1-4. Enter project impervious fraction	***Imp***	0.700	
1-5. Determine the Project Total Impervious Area (acres)	***TIA***	0.490	*acres*
1-6. Determine the total area from which runoff must be retained (acres)	A_{retain}	0.455	*acres*
1-7. Determine pervious runoff coefficient using Table E-1, Cp	***Cp***	0.1	
1-8. Calculate runoff coefficient	***C***	0.695	
1-9. Enter design rainfall depth of the storm (in)	***Pi***	0.75	*in*
1-10. Calculate rainfall depth (ft)	***P***	0.0625	*ft*
1-11. Calculate water quality design volume (ft^3)	***SQDV***	861.2	ft^3
2. Determine the design percolation rate		**Area A(12)**	
2-1. Enter measured soil percolation rate (in/hr) (0.5 in/hr minimum), $P_{measured}$	$P_{measured}$	1.1	*in/hr*
2-2. Determine percolation rate correction factor, S_A based on suitability assessment (see Section 6 INF-3)	S_A	2.25	
2-3. Determine percolation rate correction factor, S_B based on design (see Section 6 INF-3)	S_B	1.5	
2-4. Calculate combined safety factor, $S=S_A \times S_B$	***S***	3.375	
2-5. Calculate the design percolation rate (in/hr), $P_{design}=P_{measured}/S$	P_{design}	0.326	*in/hr*
3. Calc. Bioretention infiltrating surface area		**Area A(12)**	
3-1. Enter water quality design volume	***SQDV=***	861.2	ft^3
3-2. Enter design percolation rate (in/hr)	***Pdesign***	0.326	*in/hr*
3-3. Enter the required drain time	$t_{ponding}$	48	*hrs*
3-3. Calculate the maximum depth of surface ponding that can be infiltrated within the required drain time (ft)	d_{max}	1.3	*ft*
3-4. Select surface ponding depth (ft), dp, such that dp<=dmax	d_p	1.3	*ft*
3-5. Select thickness of amended media (2 ft min)	l_{media}	3	*ft*
3-6. Enter porosity of amended media (roughly 25% or 0.25ft/ft)	n_{media}	0.25	*ft/ft*
3-7. Select thickness of optional gravel layer	l_{gravel}	1	*ft*
3-8. Enter porosity of gravel (roughly 30% or 0.3 ft/ft)	n_{gravel}	0.3	*ft/ft*
3-9. Calculate the total effective storage depth of bioretention facility (ft)	$d_{effective}$	2.35	*ft*
3-10. Check that the entire effective depth infiltrates in required drainage time, 96 hours	t_{total}	87	*hours*
3-11. Calculate the required infiltrating surface area	***Areq***	366	ft^2
4. Calc. Bioretention Area Total Footprint (CHECK)			
4-1. Calculate total footprint required by including a buffer for side slopes and freeboard	***Atot***	366	ft^2

DESIGN PROCEDURE FORM FOR INF-3		BIORETENTION	
PROJECT:6826		**Area A(13)**	
1. DETERMINE WATER QUALITY DESIGN VOLUME			
1-1. Enter project area	***Aproject***	1.194	*acres*
1-2. Enter the maximum allowable percent of the project area that may be effective impervious area (%)	$\%_{allowable}$	5	*%*
1-3. Determine the maximum allowable effective impervious area (acres)	$EIA_{allowable}$	0.060	*acres*
1-4. Enter project impervious fraction	***Imp***	0.700	
1-5. Determine the Project Total Impervious Area (acres)	***TIA***	0.836	*acres*
1-6. Determine the total area from which runoff must be retained (acres)	A_{retain}	0.776	*acres*
1-7. Determine pervious runoff coefficient using Table E-1, Cp	***Cp***	0.1	
1-8. Calculate runoff coefficient	***C***	0.695	
1-9. Enter design rainfall depth of the storm (in)	***Pi***	0.75	*in*
1-10. Calculate rainfall depth (ft)	***P***	0.0625	*ft*
1-11. Calculate water quality design volume (ft^3)	***SQDV***	1468.4	ft^3
2. Determine the design percolation rate		**Area A(13)**	
2-1. Enter measured soil percolation rate (in/hr) (0.5 in/hr minimum), $P_{measured}$	$P_{measured}$	1.1	*in/hr*
2-2. Determine percolation rate correction factor, S_A based on suitability assessment (see Section 6 INF-3)	S_A	2.25	
2-3. Determine percolation rate correction factor, S_B based on design (see Section 6 INF-3	S_B	1.5	
2-4. Calculate combined safety factor, $S=S_A \times S_B$	***S***	3.375	
2-5. Calculate the design percolation rate (in/hr), $P_{design}=P_{measured}/S$	P_{design}	0.326	*in/hr*
3. Calc. Bioretention infiltrating surface area		**Area A(13)**	
3-1. Enter water quality design volume	***SQDV=***	1468.4	ft^3
3-2. Enter design percolation rate (in/hr)	***Pdesign***	0.326	*in/hr*
3-3. Enter the required drain time	$t_{ponding}$	48	*hrs*
3-3. Calculate the maximum depth of surface ponding that can be infiltrated within the required drain time (ft)	d_{max}	1.3	*ft*
3-4. Select surface ponding depth (ft), dp, such that dp<=dmax	d_p	1.3	*ft*
3-5. Select thickness of amended media (2 ft min)	l_{media}	3	*ft*
3-6. Enter porosity of amended media (roughly 25% or 0.25ft/ft)	n_{media}	0.25	*ft/ft*
3-7. Select thickness of optional gravel layer	l_{gravel}	1	*ft*
3-8. Enter porosity of gravel (roughly 30% or 0.3 ft/ft)	n_{gravel}	0.3	*ft/ft*
3-9. Calculate the total effective storage depth of bioretention facility (ft)	$d_{effective}$	2.35	*ft*
3-10. Check that the entire effective depth infiltrates in required drainage time, 96 hours	t_{total}	87	*hours*
3-11. Calculate the required infiltrating surface area	***Areq***	625	ft^2
4. Calc. Bioretention Area Total Footprint (CHECK)			
4-1. Calculate total footprint required by including a buffer for side slopes and freeboard	***Atot***	625	ft^2

DESIGN PROCEDURE FORM FOR INF-3		BIORETENTION	
PROJECT:6826		Area A(14)	
1. DETERMINE WATER QUALITY DESIGN VOLUME			
1-1. Enter project area	*Aproject*	0.282	*acres*
1-2. Enter the maximum allowable percent of the project area that may be effective impervious area (%)	$\%_{allowable}$	5	*%*
1-3. Determine the maximum allowable effective impervious area (acres)	$EIA_{allowable}$	0.014	*acres*
1-4. Enter project impervious fraction	*Imp*	0.700	
1-5. Determine the Project Total Impervious Area (acres)	*TIA*	0.198	*acres*
1-6. Determine the total area from which runoff must be retained (acres)	A_{retain}	0.183	*acres*
1-7. Determine pervious runoff coefficient using Table E-1, Cp	*Cp*	0.1	
1-8. Calculate runoff coefficient	*C*	0.695	
1-9. Enter design rainfall depth of the storm (in)	*Pi*	0.75	*in*
1-10. Calculate rainfall depth (ft)	*P*	0.0625	*ft*
1-11. Calculate water quality design volume (ft^3)	*SQDV*	347.1	ft^3
2. Determine the design percolation rate		**Area A(14)**	
2-1. Enter measured soil percolation rate (in/hr) (0.5 in/hr minimum), $P_{measured}$	$P_{measured}$	1.1	*in/hr*
2-2. Determine percolation rate correction factor, S_A based on suitability assessment (see Section 6 INF-3)	S_A	2.25	
2-3. Determine percolation rate correction factor, S_B based on design (see Section 6 INF-3	S_B	1.5	
2-4. Calculate combined safety factor, $S=S_A \times S_B$	*S*	3.375	
2-5. Calculate the design percolation rate (in/hr), $P_{design}=P_{measured}/S$	P_{design}	0.326	*in/hr*
3. Calc. Bioretention infiltrating surface area		**Area A(14)**	
3-1. Enter water quality design volume	*SQDV=*	347.1	ft^3
3-2. Enter design percolation rate (in/hr)	*Pdesign*	0.326	*in/hr*
3-3. Enter the required drain time	$t_{ponding}$	48	*hrs*
3-3. Calculate the maximum depth of surface ponding that can be infiltrated within the required drain time (ft)	d_{max}	1.3	*ft*
3-4. Select surface ponding depth (ft), dp, such that dp<=dmax	d_p	1.3	*ft*
3-5. Select thickness of amended media (2 ft min)	l_{media}	3	*ft*
3-6. Enter porosity of amended media (roughly 25% or 0.25ft/ft)	n_{media}	0.25	*ft/ft*
3-7. Select thickness of optional gravel layer	l_{gravel}	1	*ft*
3-8. Enter porosity of gravel (roughly 30% or 0.3 ft/ft)	n_{gravel}	0.3	*ft/ft*
3-9. Calculate the total effective storage depth of bioretention facility (ft)	$d_{effective}$	2.35	*ft*
3-10. Check that the entire effective depth infiltrates in required drainage time, 96 hours	t_{total}	87	*hours*
3-11. Calculate the required infiltrating surface area	*Areq*	148	ft^2
4. Calc. Bioretention Area Total Footprint (CHECK)			
4-1. Calculate total footprint required by including a buffer for side slopes and freeboard	*Atot*	148	ft^2

DESIGN PROCEDURE FORM FOR INF-3		BIORETENTION	
PROJECT:6826		**Area A(15)**	
1. DETERMINE WATER QUALITY DESIGN VOLUME			
1-1. Enter project area	***Aproject***	0.729	*acres*
1-2. Enter the maximum allowable percent of the project area that may be effective impervious area (%)	$\%_{allowable}$	5	*%*
1-3. Determine the maximum allowable effective impervious area (acres)	$EIA_{allowable}$	0.036	*acres*
1-4. Enter project impervious fraction	***Imp***	0.700	
1-5. Determine the Project Total Impervious Area (acres)	***TIA***	0.510	*acres*
1-6. Determine the total area from which runoff must be retained (acres)	A_{retain}	0.474	*acres*
1-7. Determine pervious runoff coefficient using Table E-1, Cp	***Cp***	0.1	
1-8. Calculate runoff coefficient	***C***	0.695	
1-9. Enter design rainfall depth of the storm (in)	***Pi***	0.75	*in*
1-10. Calculate rainfall depth (ft)	***P***	0.0625	*ft*
1-11. Calculate water quality design volume (ft^3)	***SQDV***	896.4	ft^3
2. Determine the design percolation rate		**Area A(15)**	
2-1. Enter measured soil percolation rate (in/hr) (0.5 in/hr minimum), $P_{measured}$	$P_{measured}$	1.1	*in/hr*
2-2. Determine percolation rate correction factor, S_A based on suitability assessment (see Section 6 INF-3)	S_A	2.25	
2-3. Determine percolation rate correction factor, S_B based on design (see Section 6 INF-3	S_B	1.5	
2-4. Calculate combined safety factor, $S=S_A \times S_B$	***S***	3.375	
2-5. Calculate the design percolation rate (in/hr), $P_{design}=P_{measured}/S$	P_{design}	0.326	*in/hr*
3. Calc. Bioretention infiltrating surface area		**Area A(15)**	
3-1. Enter water quality design volume	***SQDV=***	896.4	ft^3
3-2. Enter design percolation rate (in/hr)	***Pdesign***	0.326	*in/hr*
3-3. Enter the required drain time	$t_{ponding}$	48	*hrs*
3-3. Calculate the maximum depth of surface ponding that can be infiltrated within the required drain time (ft)	d_{max}	1.3	*ft*
3-4. Select surface ponding depth (ft), dp, such that dp<=dmax	d_p	1.3	*ft*
3-5. Select thickness of amended media (2 ft min)	l_{media}	3	*ft*
3-6. Enter porosity of amended media (roughly 25% or 0.25ft/ft)	n_{media}	0.25	*ft/ft*
3-7. Select thickness of optional gravel layer	l_{gravel}	1	*ft*
3-8. Enter porosity of gravel (roughly 30% or 0.3 ft/ft)	n_{gravel}	0.3	*ft/ft*
3-9. Calculate the total effective storage depth of bioretention facility (ft)	$d_{effective}$	2.35	*ft*
3-10. Check that the entire effective depth infiltrates in required drainage time, 96 hours	t_{total}	87	*hours*
3-11. Calculate the required infiltrating surface area	***Areq***	381	ft^2
4. Calc. Bioretention Area Total Footprint (CHECK)			
4-1. Calculate total footprint required by including a buffer for side slopes and freeboard	***Atot***	381	ft^2

DESIGN PROCEDURE FORM FOR INF-3		BIORETENTION	
PROJECT:6826		**Area A(16)**	
1. DETERMINE WATER QUALITY DESIGN VOLUME			
1-1. Enter project area	***Aproject***	0.271	*acres*
1-2. Enter the maximum allowable percent of the project area that may be effective impervious area (%)	$\%_{allowable}$	5	*%*
1-3. Determine the maximum allowable effective impervious area (acres)	$EIA_{allowable}$	0.014	*acres*
1-4. Enter project impervious fraction	***Imp***	0.700	
1-5. Determine the Project Total Impervious Area (acres)	***TIA***	0.189	*acres*
1-6. Determine the total area from which runoff must be retained (acres)	A_{retain}	0.176	*acres*
1-7. Determine pervious runoff coefficient using Table E-1, Cp	***Cp***	0.1	
1-8. Calculate runoff coefficient	***C***	0.695	
1-9. Enter design rainfall depth of the storm (in)	***Pi***	0.75	*in*
1-10. Calculate rainfall depth (ft)	***P***	0.0625	*ft*
1-11. Calculate water quality design volume (ft^3)	***SQDV***	332.8	ft^3
2. Determine the design percolation rate		**Area A(16)**	
2-1. Enter measured soil percolation rate (in/hr) (0.5 in/hr minimum), $P_{measured}$	$P_{measured}$	1.1	*in/hr*
2-2. Determine percolation rate correction factor, S_A based on suitability assessment (see Section 6 INF-3)	S_A	2.25	
2-3. Determine percolation rate correction factor, S_B based on design (see Section 6 INF-3	S_B	1.5	
2-4. Calculate combined safety factor, $S=S_A \times S_B$	***S***	3.375	
2-5. Calculate the design percolation rate (in/hr), $P_{design}=P_{measured}/S$	P_{design}	0.326	*in/hr*
3. Calc. Bioretention infiltrating surface area		**Area A(16)**	
3-1. Enter water quality design volume	***SQDV=***	332.8	ft^3
3-2. Enter design percolation rate (in/hr)	***Pdesign***	0.326	*in/hr*
3-3. Enter the required drain time	$t_{ponding}$	48	*hrs*
3-3. Calculate the maximum depth of surface ponding that can be infiltrated within the required drain time (ft)	d_{max}	1.3	*ft*
3-4. Select surface ponding depth (ft), dp, such that dp<=dmax	d_p	1.3	*ft*
3-5. Select thickness of amended media (2 ft min)	l_{media}	3	*ft*
3-6. Enter porosity of amended media (roughly 25% or 0.25ft/ft)	n_{media}	0.25	*ft/ft*
3-7. Select thickness of optional gravel layer	l_{gravel}	1	*ft*
3-8. Enter porosity of gravel (roughly 30% or 0.3 ft/ft)	n_{gravel}	0.3	*ft/ft*
3-9. Calculate the total effective storage depth of bioretention facility (ft)	$d_{effective}$	2.35	*ft*
3-10. Check that the entire effective depth infiltrates in required drainage time, 96 hours	t_{total}	87	*hours*
3-11. Calculate the required infiltrating surface area	***Areq***	142	ft^2
4. Calc. Bioretention Area Total Footprint (CHECK)			
4-1. Calculate total footprint required by including a buffer for side slopes and freeboard	***Atot***	142	ft^2

DESIGN PROCEDURE FORM FOR INF-5		PERMEABLE PAVEMENT	
PROJECT:6826		Area 1A(2)	
1. DETERMINE WATER QUALITY DESIGN VOLUME			
1-1. Enter project area	*Aproject*	0.51	*acres*
1-2. Enter the maximum allowable percent of the project area that may be effective impervious area (%)	*$\%_{allowable}$*	5	*%*
1-3. Determine the maximum allowable effective impervious area (acres)	*$EIA_{allowable}$*	0.0255	*acres*
1-4. Enter project impervious fraction	*Imp*	0.70	
1-5. Determine the Project Total Impervious Area (acres)	*TIA*	0.357	*acres*
1-6. Determine the total area from which runoff must be retained (acres)	*A_{retain}*	0.332	*acres*
1-7. Determine pervious runoff coefficient using Table E-1, Cp	*Cp*	0.1	
1-8. Calculate runoff coefficient	*C*	0.695	
1-9. Enter design rainfall depth of the storm (in)	*Pi*	0.75	*in*
1-10. Calculate rainfall depth (ft)	*P*	0.0625	*ft*
1-11. Calculate water quality design volume (ft^3)	*SQDV*	627	*ft^3*
2. Determine the design percolation rate		**Area 1A(2)**	
2-1. Enter measured soil percolation rate (in/hr) (0.5 in/hr minimum), $P_{measured}$	*$P_{measured}$*	2	*in/hr*
2-2. Determine percolation rate correction factor, S_A based on suitability assessment (see Section 6 INF-5)	*S_A*	2.25	
2-3. Determine percolation rate correction factor, S_B based on design (see Section 6 INF-3	*S_B*	1.5	
2-4. Calculate combined safety factor, $S=S_A \times S_B$	*S*	3.375	
2-5. Calculate the design percolation rate (in/hr), $P_{design}=P_{measured}/S$	*P_{design}*	0.593	*in/hr*
3. BASIN SURFACE AREA		**Area 1A(2)**	
3-1. Enter drawdown time (72 hrs max.), t	*t=*	72	*hrs*
3-2. Calculate max. depth of runoff (ft) that can be infiltrated within the t, $d_{max}=(P_{design}*t)/12$	*d_{max} =*	3.56	*ft*
3-3. Enter the gravel drainage layer porosity, n (typically 32% or 0.32 for gravel)	*n=*	0.32	
3-4. Select the gravel drainage layer depth (ft) such that dmax>(n x l)	*l=*	2.00	*ft*
4. Determine infiltrating surface area		**Area 1A(2)**	
4-1. Enter gravel drainage layer porosity, n	*n=*	0.32	
4-2. Enter depth of gravel drainage layer (ft), l	*l=*	2	*ft*
4-3. Enter the time to fill the gravel drainage layer with water (Use 2 hours for most designs), T	*T=*	2	*hrs*
4-4. Calculate infiltrating surface area (ft^3): $A=SQDV/((TP_{design}/12)+nl)$	*A=*	980	*ft^2*

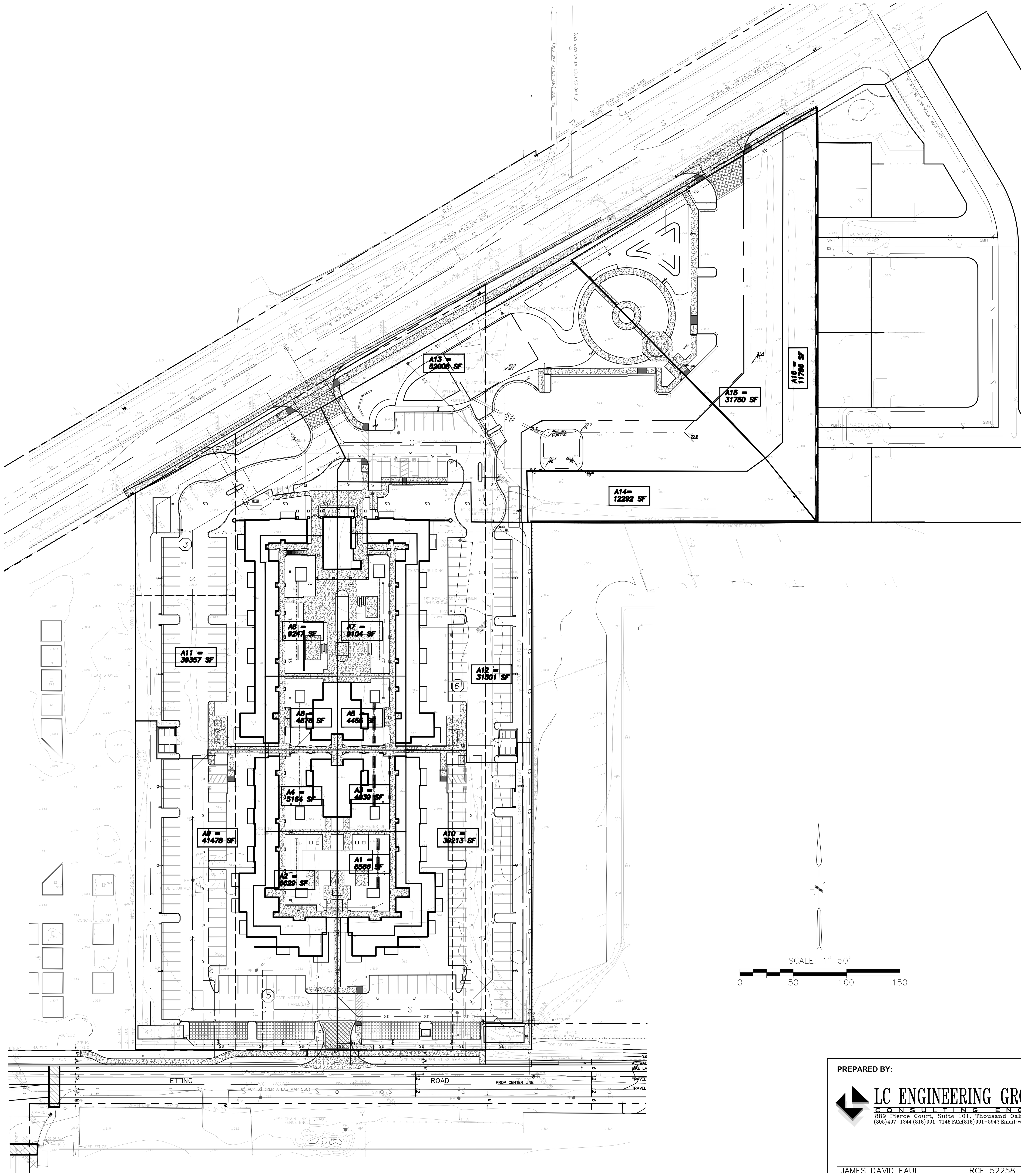
DESIGN PROCEDURE FORM FOR INF-5		PERMEABLE PAVEMENT	
PROJECT:6826		**Area 1A(3)**	
1. DETERMINE WATER QUALITY DESIGN VOLUME			
1-1. Enter project area	***Aproject***	0.54	*acres*
1-2. Enter the maximum allowable percent of the project area that may be effective impervious area (%)	***$\%_{allowable}$***	5	*%*
1-3. Determine the maximum allowable effective impervious area (acres)	***$EIA_{allowable}$***	0.027	*acres*
1-4. Enter project impervious fraction	***Imp***	0.70	
1-5. Determine the Project Total Impervious Area (acres)	***TIA***	0.378	*acres*
1-6. Determine the total area from which runoff must be retained (acres)	***A_{retain}***	0.351	*acres*
1-7. Determine pervious runoff coefficient using Table E-1, Cp	***Cp***	0.1	
1-8. Calculate runoff coefficient	***C***	0.695	
1-9. Enter design rainfall depth of the storm (in)	***Pi***	0.75	*in*
1-10. Calculate rainfall depth (ft)	***P***	0.0625	*ft*
1-11. Calculate water quality design volume (ft^3)	***SQDV***	664	*ft^3*
2. Determine the design percolation rate		**Area 1A(3)**	
2-1. Enter measured soil percolation rate (in/hr) (0.5 in/hr minimum), $P_{measured}$	***$P_{measured}$***	2	*in/hr*
2-2. Determine percolation rate correction factor, S_A based on suitability assessment (see Section 6 INF-5)	***S_A***	2.25	
2-3. Determine percolation rate correction factor, S_B based on design (see Section 6 INF-3	***S_B***	1.5	
2-4. Calculate combined safety factor, $S=S_A \times S_B$	***S***	3.375	
2-5. Calculate the design percolation rate (in/hr), $P_{design}=P_{measured}/S$	***P_{design}***	0.593	*in/hr*
3. BASIN SURFACE AREA		**Area 1A(3)**	
3-1. Enter drawdown time (72 hrs max.), t	***t=***	72	*hrs*
3-2. Calculate max. depth of runoff (ft) that can be infiltrated within the t, $d_{max}=(P_{design}*t)/12$	***d_{max}=***	3.56	*ft*
3-3. Enter the gravel drainage layer porosity, n (typically 32% or 0.32 for gravel)	***n=***	0.32	
3-4. Select the gravel drainage layer depth (ft) such that dmax>(n x l)	***l=***	2.00	*ft*
4. Determine infiltrating surface area		**Area 1A(3)**	
4-1. Enter gravel drainage layer porosity, n	***n=***	0.32	
4-2. Enter depth of gravel drainage layer (ft), l	***l=***	2	*ft*
4-3. Enter the time to fill the gravel drainage layer with water (Use 2 hours for most designs), T	***T=***	2	*hrs*
4-4. Calculate infiltrating surface area (ft^3): $A=SQDV/((TP_{design}/12)+nl)$	***A=***	1038	*ft^2*

DESIGN PROCEDURE FORM FOR INF-5		PERMEABLE PAVEMENT	
PROJECT:6826		**Area 1A(4)**	
1. DETERMINE WATER QUALITY DESIGN VOLUME			
1-1. Enter project area	***Aproject***	0.51	*acres*
1-2. Enter the maximum allowable percent of the project area that may be effective impervious area (%)	***% allowable***	5	*%*
1-3. Determine the maximum allowable effective impervious area (acres)	***EIA allowable***	0.0255	*acres*
1-4. Enter project impervious fraction	***Imp***	0.70	
1-5. Determine the Project Total Impervious Area (acres)	***TIA***	0.357	*acres*
1-6. Determine the total area from which runoff must be retained (acres)	***A_{retain}***	0.332	*acres*
1-7. Determine pervious runoff coefficient using Table E-1, Cp	***Cp***	0.1	
1-8. Calculate runoff coefficient	***C***	0.695	
1-9. Enter design rainfall depth of the storm (in)	***Pi***	0.75	*in*
1-10. Calculate rainfall depth (ft)	***P***	0.0625	*ft*
1-11. Calculate water quality design volume (ft^3)	***SQDV***	627	*ft^3*
2. Determine the design percolation rate		**Area 1A(4)**	
2-1. Enter measured soil percolation rate (in/hr) (0.5 in/hr minimum), $P_{measured}$	***$P_{measured}$***	2	*in/hr*
2-2. Determine percolation rate correction factor, S_A based on suitability assessment (see Section 6 INF-5)	***S_A***	2.25	
2-3. Determine percolation rate correction factor, S_B based on design (see Section 6 INF-3	***S_B***	1.5	
2-4. Calculate combined safety factor, $S=S_A$ x S_B	***S***	3.375	
2-5. Calculate the design percolation rate (in/hr), $P_{design}=P_{measured}/S$	***P_{design}***	0.593	*in/hr*
3. BASIN SURFACE AREA		**Area 1A(4)**	
3-1. Enter drawdown time (72 hrs max.), t	***t=***	72	*hrs*
3-2. Calculate max. depth of runoff (ft) that can be infiltrated within the t, $d_{max}=(P_{design}*t)/12$	***d_{max}=***	3.56	*ft*
3-3. Enter the gravel drainage layer porosity, n (typically 32% or 0.32 for gravel)	***n=***	0.32	
3-4. Select the gravel drainage layer depth (ft) such that dmax>(n x l)	***l=***	2.00	*ft*
4. Determine infiltrating surface area		**Area 1A(4)**	
4-1. Enter gravel drainage layer porosity, n	***n=***	0.32	
4-2. Enter depth of gravel drainage layer (ft), l	***l=***	2	*ft*
4-3. Enter the time to fill the gravel drainage layer with water (Use 2 hours for most designs), T	***T=***	2	*hrs*
4-4. Calculate infiltrating surface area (ft^3): $A=SQDV/((TP_{design}/12)+nl)$	***A=***	980	*ft^2*

Infiltration Facility Safety Factor Determination Worksheet

Factor Category		Factor Description	Assigned Weight (w)	Factor Value (v)	Product (p) p=w x v
A	Suitability Assessment	soil assessment methods	0.25	3	0.75
		Predominant soil texture	0.25	3	0.75
		Site soil variability	0.25	1	0.25
		Depth to groundwater/impervious layer	0.25	2	0.5
		Design Safety Factor, S_A=sum(p)			2.25
B	Design	Tributary area size	0.25	1	0.25
		Level of pre-treatment /expected sediment loads	0.25	1	0.25
		Redundancy	0.25	3	0.75
		compaction during construction	0.25	1	0.25
		Design Safety Factor, S_B=sum(p)			1.5
combined safery factor					3.38

APPENDIX D



SCALE: 1"=50'

0 50 100 150

LEGEND

PROPERTY LINE
SEWER LINE
W WATER LINE
SD STORM DRAIN LINE
FLOW LINE
CONCRETE
ASPHALT CONCRETE
PERVIOUS PAVEMENT
3 CEMETERY EASEMENT
5 SCE EASEMENT
6 SCE EASEMENT

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REGISTERED PROFESSIONAL ENGINEER
JAMES DAVID FAUL
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EXP. DEC. 2014
CIVIL
STATE OF CALIFORNIA

JAMES DAVID FAUL RCE 52258 DATE

REVISIONS			
MARK	DATE	DESCRIPTION	BY

REVIEWED BY:

DATE

CITY OF OXNARD CALIFORNIA

DEVELOPMENT SERVICES DEPARTMENT

PROPOSED HYDROLOGY MAP

APPROVED:
CITY ENGINEER R.C.E. EXP. DATE DATE

SCALE: HORIZ.: AS SHOWN
VERT.: N/A

DESIGN BY: DG

SHEET DRAWING NUMBER
SHEET No. 2 OF

DRAWING NUMBER

Drawing Name: X:\LCE GROUP\Civil\JOBS\6800\6826 DANSK INVESTMENTS\CIVIL\CALC\HYDRO\6826 HYDROLOGY MAP.dwg
Date / Time: Nov 12, 2014 - 6:17pm by Jila Azad

Appendix I

Noise Modeling and Measurement

Etting Road Noise Measurement

Address	Time	Measurme	LAeq	LAE	LAmax	LAmin	LA10	LA33	LA50	LA90	LA95	Lppeak	Over	Under	Pause
1	10/23/2014 13:33	0:15:00	55.9	85.4	71.9	43.3	58	48.8	47.6	45.1	44.7	100.4	-	-	-

C:\LARDAV\GRANDK9.bin   Interval Data   PLEASANT VALLEY ROAD NOISE MEASUREMENT

Peak Meas Site	Uwpk Excd Location	Excd Number	Over Date	Time	Duration	Leq	SEL	Lmax	Lmin	Peak	Uwpk	L(10)	L(33)	L(50)	L(90)	Count	Count	loads
0		0	14Apr 15	18:03:33	900	75.2	104.7	87.1	52.5	102.6	109.7	79.3	74.8	72.5	63.9	126	255	0

DalyDansk traffic noise

* * * * CASE INFORMATION * * * *

* * * * Results calculated with TNM Version 2.5 * * * *

DalyDansk traffic noise

* * * * TRAFFIC VOLUME/SPEED INFORMATION * * * *

Automobile volume (v/h):	2406.0
Average automobile speed (mph):	45.0
Medium truck volume (v/h):	63.0
Average medium truck speed (mph):	45.0
Heavy truck volume (v/h):	63.0
Average heavy truck speed (mph):	45.0
Bus volume (v/h):	0.0
Average bus speed (mph):	0.0
Motorcycle volume (v/h):	0.0
Average Motorcycle speed (mph):	0.0

* * * * TERRAIN SURFACE INFORMATION * * * *

Terrain surface: hard

* * * * RECEIVER INFORMATION * * * *

DESCRIPTION OF RECEIVER # 1

Residence

Distance from center of 12-ft wide, single lane roadway (ft):	75.0
A-weighted Hourly Equivalent Sound Level without Barrier (dBA):	70.8

DalyDansk traffic noise with proj

* * * * CASE INFORMATION * * * *

* * * * Results calculated with TNM Version 2.5 * * * *

DalyDank traffic noise with project along Pleasant Vly Road

* * * * TRAFFIC VOLUME/SPEED INFORMATION * * * *

Automobile volume (v/h):	2454.0
Average automobile speed (mph):	45.0
Medium truck volume (v/h):	64.0
Average medium truck speed (mph):	45.0
Heavy truck volume (v/h):	64.0
Average heavy truck speed (mph):	45.0
Bus volume (v/h):	0.0
Average bus speed (mph):	0.0
Motorcycle volume (v/h):	0.0
Average Motorcycle speed (mph):	0.0

* * * * TERRAIN SURFACE INFORMATION * * * *

Terrain surface:	hard

* * * * RECEIVER INFORMATION * * * *

DESCRIPTION OF RECEIVER # 1

Residence

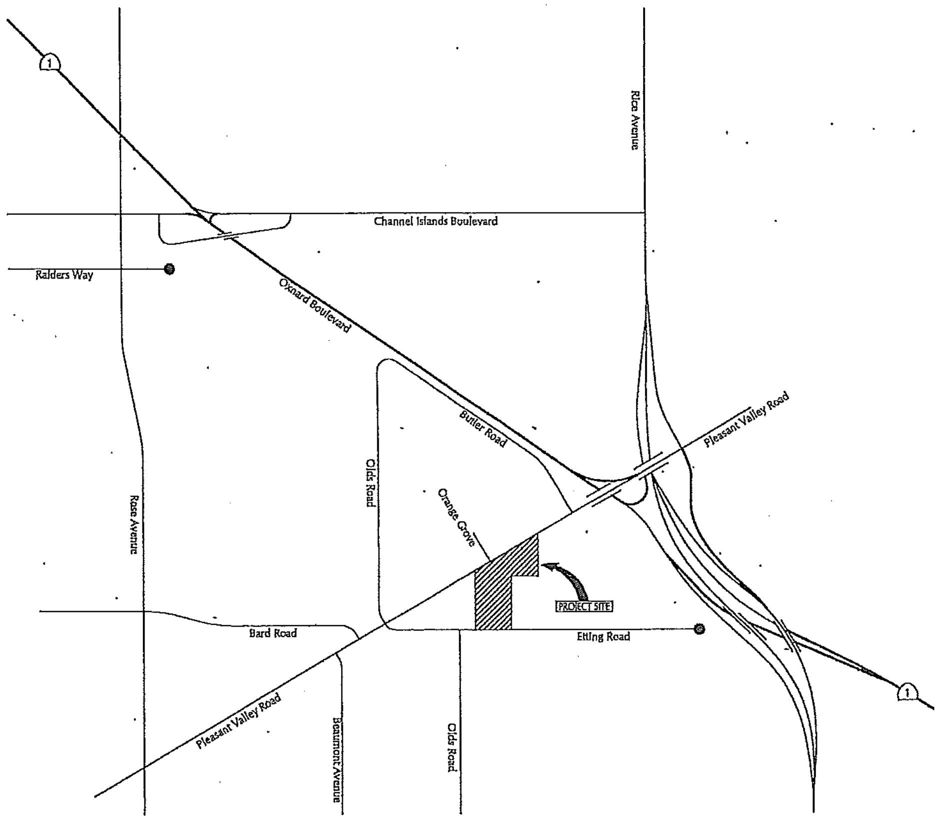
Distance from center of 12-ft wide, single lane roadway (ft):	75.0
A-weighted Hourly Equivalent Sound Level without Barrier (dBA):	70.9

Appendix J

Traffic and Circulation Study

NAUMANN RANCH
OXNARD, CALIFORNIA

REVISED TRAFFIC AND CIRCULATION STUDY



May 8, 2015 **ATE Project 14017**

Prepared for:

The Daly Group
6591 Collins Drive, Suite E11
Moorpark, California 93021

ASSOCIATED TRANSPORTATION ENGINEERS

100 N. Hope Avenue, Suite 4, Santa Barbara, CA 93110-1686 • (805) 687-4418 • FAX (805) 682-8509

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

INTRODUCTION

The following study contains an analysis of the potential traffic and circulation impacts associated with the proposed Naumann Ranch Project, located in the City of Oxnard. The guidelines set forth in the City of Oxnard's Traffic Impact Study standards were utilized in formatting the various sections of the traffic study. The study provides information relative to existing, existing + project, cumulative (existing + approved/pending projects) and cumulative + project traffic conditions. Site access and circulation are also addressed in the traffic study.

PROJECT DESCRIPTION

As shown on Figure 1, the Naumann Ranch Project is located on Pleasant Valley Road in the southeastern section of the City of Oxnard. The project includes an apartment complex with 101 units and a 72-bed senior housing/assisted living facility. Access to the project site would be provided by two driveway connections on Pleasant Valley Road and one outbound only driveway on Etting Road. The Pleasant Valley Road driveway opposite Orange Grove would provide inbound right and left-turn access to the project site and would be restricted to right-turns outbound only. An exit only driveway from the senior housing/assisted living portion of the project is also provided on Pleasant Valley Road. The Etting Road driveway would be outbound only and proved secondary emergency access. The senior housing/assisted living portion would also be allowed to use the outbound only driveway on Etting Road. The project site plan is illustrated on Figure 2. The Naumann Ranch Project will be required to complete roadway improvements (curb, gutter and sidewalk) on Etting Road and Pleasant Valley Road along its frontage.

EXISTING CONDITIONS

Existing Street Network

The project site is served by a circulation system comprising of arterials and collector streets, which are illustrated on Figure 1. The major roadways serving the site are discussed in the following text.

State Route 1 (Oxnard Boulevard), located east of the project site is a 4-lane facility that serves as a major north-south route in the City of Oxnard. The City and Caltrans have developed a project that includes relocating State Route 1 from Oxnard Boulevard to Rice Avenue.

Pleasant Valley Road, a 2- to 4-lane roadway, extends from east from the Naval Construction Battalion Center in Port Hueneme to U.S. Highway 101 where it becomes Santa Rosa Road. Pleasant Valley Road serves as the primary route for east-west travel in the south Oxnard area. In the study-area, this roadway is signalized at Rose Avenue, Beaumont Avenue, Bard Road, Etting Road, and Oxnard Boulevard.

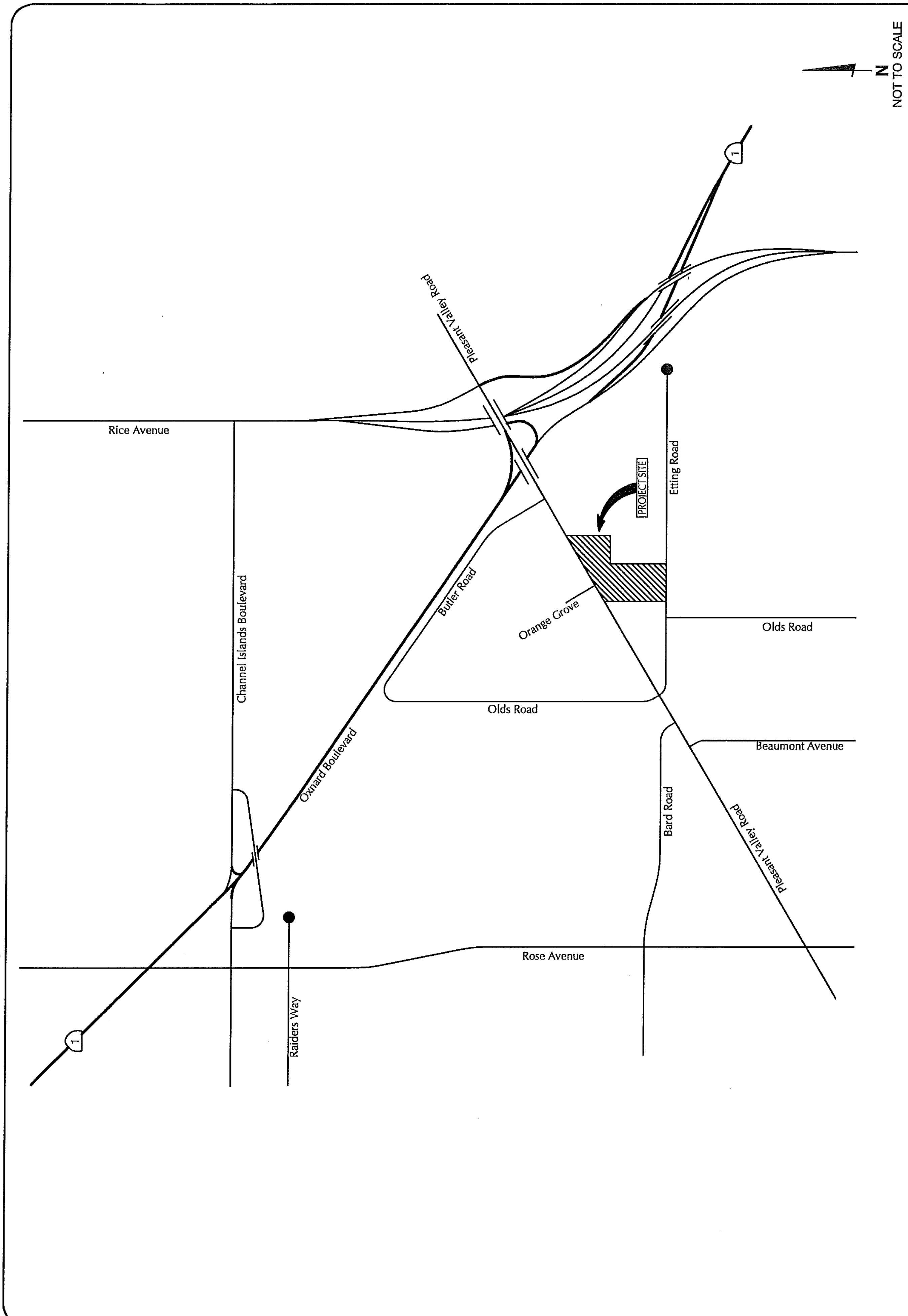


FIGURE 1

PROJECT SITE LOCATION AND EXISTING STREET NETWORK

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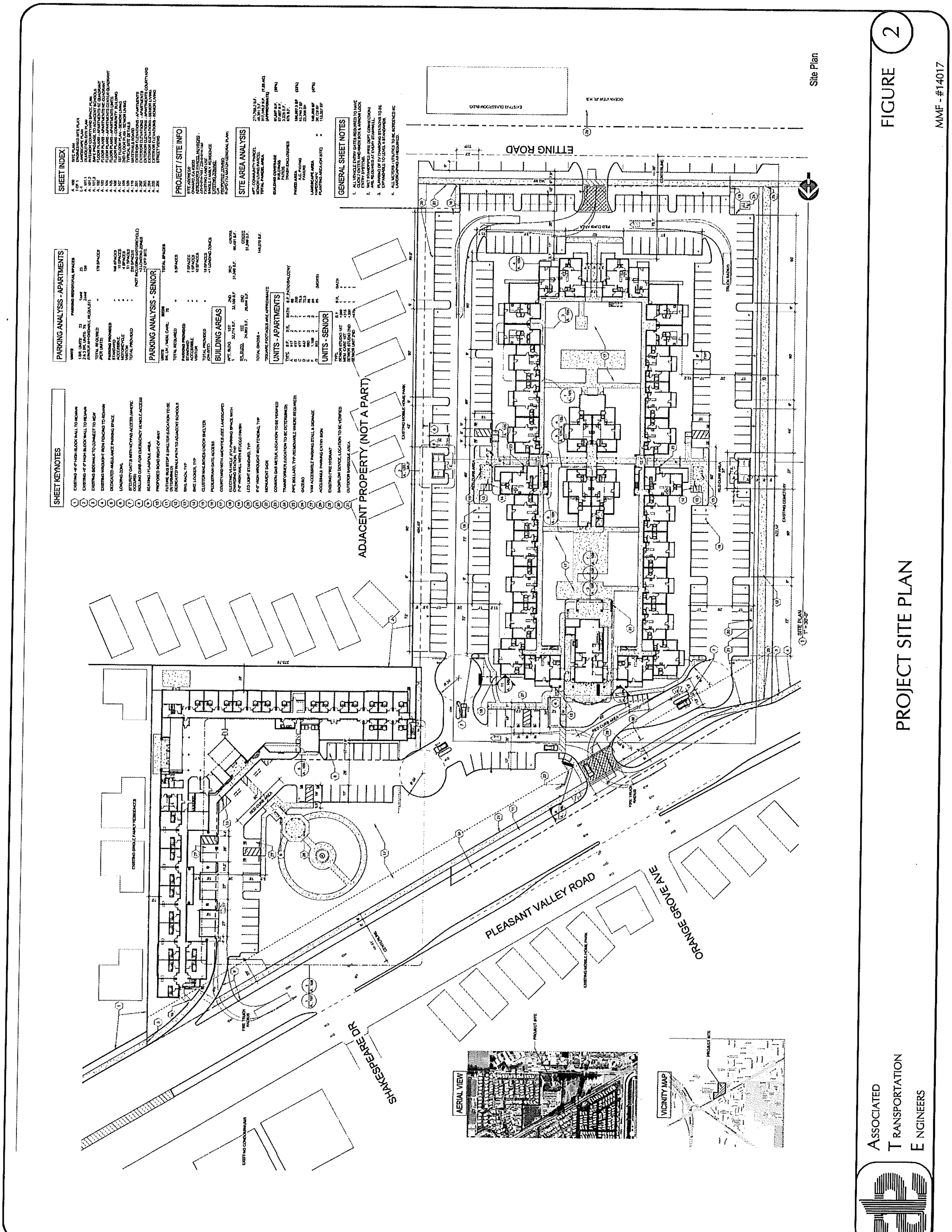
PROJECT SITE PLAN
FIGURE 2
MMF - #14017
Site Plan
ETTING ROAD
PLEASANT VALLEY ROAD
ORANGE GROVE AVE
SHAKESPEARE DR
ADJACENT PROPERTY (NOT A PART)
SHEET KEYNOTES
SHEET INDEX
PARKING ANALYSIS - APARTMENTS
PARKING ANALYSIS - SENIOR
BUILDING AREAS
UNITS - APARTMENTS
UNITS - SENIOR
PROJECT / SITE INFO
SITE AREA ANALYSIS
GENERAL SHEET NOTES
AERIAL VIEW
VICINITY MAP
ASSOCIATED TRANSPORTATION ENGINEERS

Rose Avenue is a 2- to 4-lane north-south roadway that extends north from Sanford Street to State Route 118 (Los Angeles Avenue). Rose Avenue provides a major link between the residential areas in Oxnard and the commercial centers along the U.S. Highway 101 corridor.

Channel Islands Boulevard is a 2- to 4-lane divided arterial roadway that extends easterly from Ocean Drive to the Rice Avenue. Channel Islands Boulevard serves residential and commercial uses in the cities of Port Hueneme and Oxnard. Channel Islands Boulevard is signalized at Rose Avenue.

Bard Road, located north of the project, is a 2- to 4-lane roadway that extends easterly from Ventura Road to Pleasant Valley Road. In the study-area, Bard Road is signalized at Rose Avenue and Pleasant Valley Road.

Olds Road is a 2-lane local roadway in the study-area. Olds Road extends south from Etting Road to Hueneme Road. South of Etting Road, Olds Road primarily serves residential and agricultural land uses. North of Pleasant Valley Road, Olds Road primarily serves residential land uses. In the study-area, Olds Road is signalized at Pleasant Valley Road.

Etting Road is a 2-lane east-west local roadway. Etting Road serves residential and agricultural uses. Etting Road also serves the Ocean View School District offices and three schools. Within the study-area the Pleasant Valley Road/Etting Road intersection is signalized.

Existing Volumes and Intersection Levels of Service

Traffic flow on urban arterials is most constrained at intersections. Therefore, a detailed analysis of traffic flows must examine the operating conditions of critical intersections during peak travel periods. In rating intersection operations, "Levels of Service" (LOS) A through F are used, with LOS A indicating free flow operations and LOS F indicating congested operations (more complete definitions of levels of service are included in the Technical Appendix). In the City of Oxnard LOS C is the acceptable operating standard for intersection operations.

Figure 3 illustrates the study-area intersections, the existing traffic controls and the intersection geometries. Existing A.M. and P.M. peak hour period traffic volumes at the study-area intersections are illustrated on Figure 4. The intersection traffic counts collected for this study and are included in the Technical Appendix.

Existing levels of service were calculated for the study-area intersections using the Intersection Capacity Utilization (ICU) methodology for signalized intersections and the Highway Capacity Manual (HCM) methodology for unsignalized intersections, as required by the City of Oxnard. Worksheets illustrating the level of service calculations are contained in the Technical Appendix for reference. Table 1 lists the level of service for the twelve study-area intersections during the A.M. and P.M. peak hour periods.

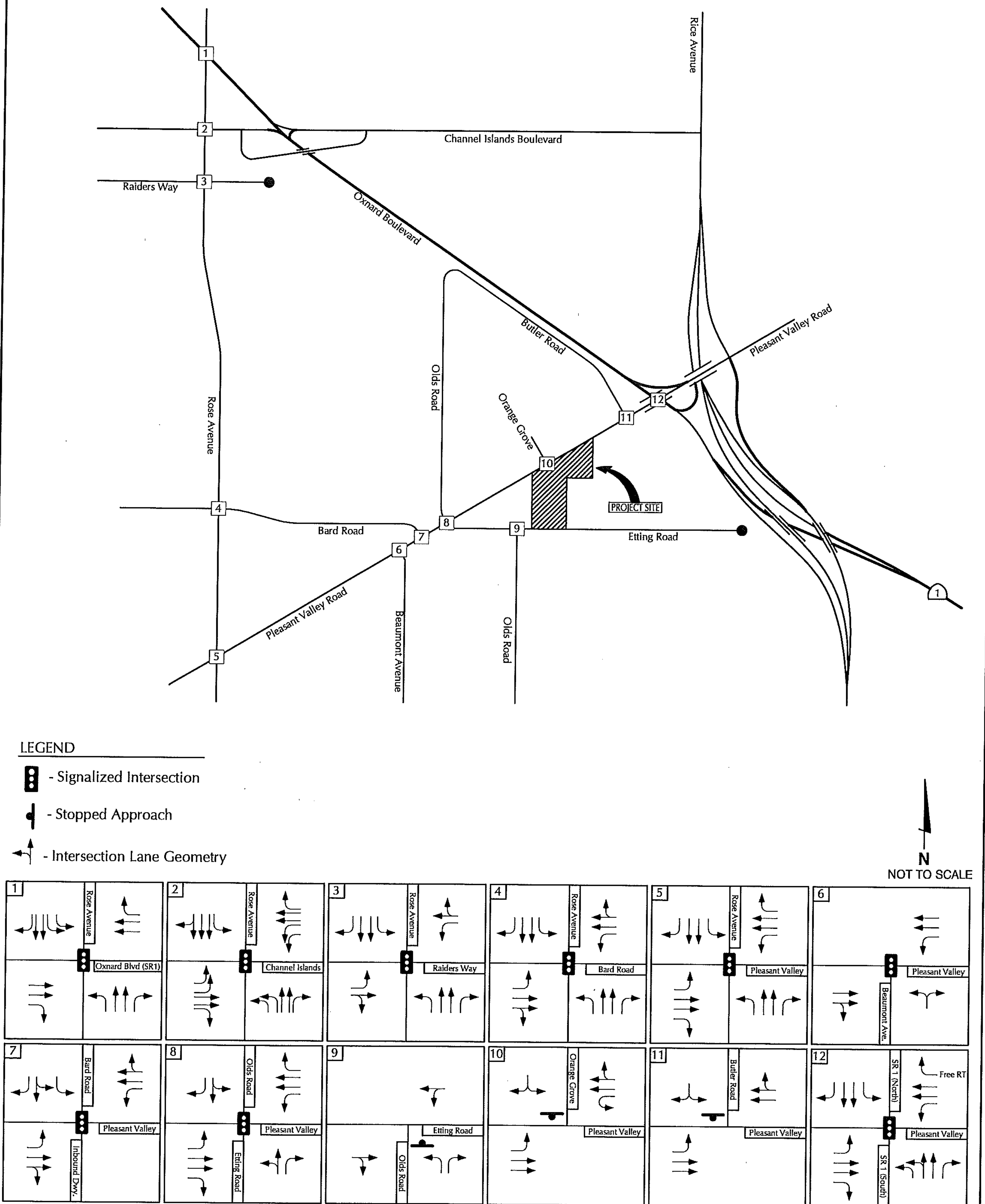

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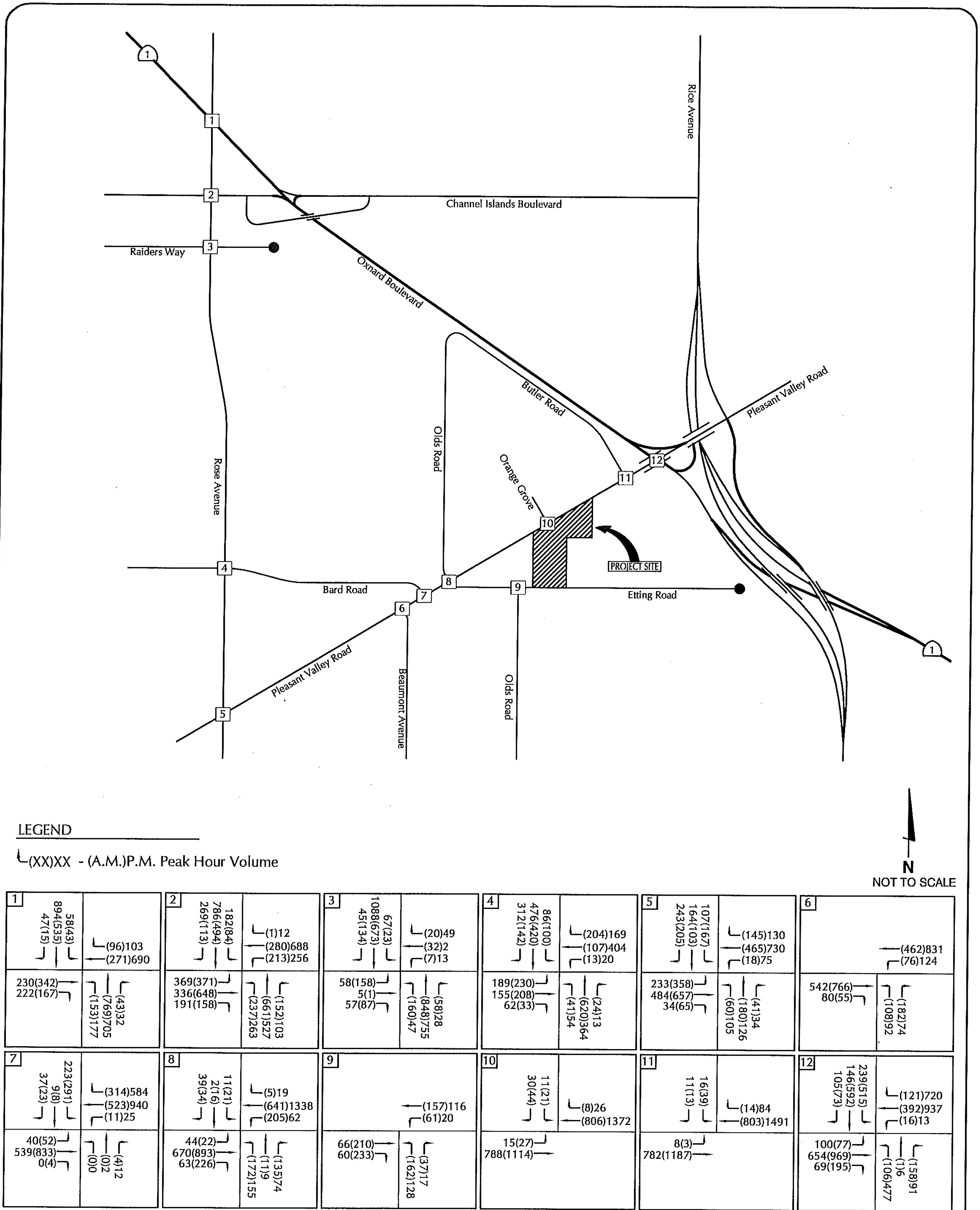
FIGURE 3

INTERSECTION LANE GEOMETRY AND TRAFFIC CONTROLS

MMF - #14017



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EXISTING TRAFFIC VOLUMES

FIGURE 4

MMF - #14017

Table 1
Existing Peak Hour Levels of Service

Intersection	Control Type	A.M. Peak Hour		P.M. Peak Hour	
		ICU/Delay	LOS	ICU/Delay	LOS
Rose Ave./Oxnard Blvd.	Signal	0.62	LOS B	**0.89**	**LOS D**
Rose Ave,/Channel Islands Blvd.	Signal	0.50	LOS A	0.63	LOS B
Rose Ave./Raider Way	Signal	0.44	LOS A	0.44	LOS A
Rose Ave./Bard Rd.	Signal	0.50	LOS A	0.53	LOS A
Rose Ave./Pleasant Valley Rd.	Signal	0.49	LOS A	0.52	LOS A
Pleasant Valley Rd./Beaumont Ave.	Signal	0.49	LOS A	0.38	LOS A
Pleasant Valley Rd./Bard Rd.	Signal	0.39	LOS A	0.57	LOS A
Pleasant Valley Rd./Etting Rd.	Signal	0.54	LOS A	0.57	LOS A
Pleasant Valley Rd./Orange Grove Ave.	STOP-Sign	12.7 sec.	LOS B	17.2 sec.	LOS C
Pleasant Valley Rd./Butler Rd.	STOP-Sign	16.3 sec.	LOS C	23.3 sec.	LOS C
Pleasant Valley Rd./Oxnard Blvd.	Signal	0.73	LOS C	0.65	LOS B
Etting Rd./Olds Rd.	STOP-Sign	15.5 sec.	LOS C	10.5 sec.	LOS B

Bold values exceed the City's LOS C standard.

Most of the study-area intersections operate at LOS C or better during the A.M. and P.M. peak hour periods. The Rose Avenue/Oxnard Boulevard intersection currently operates at LOS D during the P.M. peak hour period.

IMPACT THRESHOLD CRITERIA

The City of Oxnard's criteria for evaluating project impacts at intersections is based upon the change in ICU/LOS attributable to the project. The City of Oxnard has established LOS C as the threshold of significance for determining project impacts at intersections. If the addition of project traffic increases the ICU by 0.02 or more at an intersection operating at LOS C or worse, it should be mitigated to the ICU level identified without the project traffic.

PROJECT GENERATED TRAFFIC VOLUMES

Project Trip Generation

Trip generation estimates were calculated for the Naumann Ranch Project are based on the rates presented in the Institute of Transportation Engineers (ITE), Trip Generation, 9th Edition for Low Rise Apartments (Land-Use Code #221) and Assisted Living (Land-Use Code #254).[1] Table 2 summarizes the average daily, A.M. and P.M. peak hour trip generation estimates for the proposed project.

Table 2
Project Trip Generation

Land Use	Size	ADT		A.M. Peak Hour		P.M. Peak Hour	
		Rate	Trips	Rate	Trips	Rate	Trips
Apartments	101 units	6.59	666	0.46	46 (10/36)	0.58	58 (38/20)
Assisted Living Facility	72 beds	2.74	197	0.18	13 (9/4)	0.29	21 (11/10)
Total Project Trip Generation:			**863**		**59 (19/40)**		**79 (49/30)**

The data presented in Table 2 show that the proposed project would generate a total of 863 average daily trips (ADT), 59 A.M. peak hour trips, and 79 P.M. peak hour trips.

1 Trip Generation, Institute of Transportation Engineers, 9th Edition, 2012.

Project Trip Distribution and Assignment

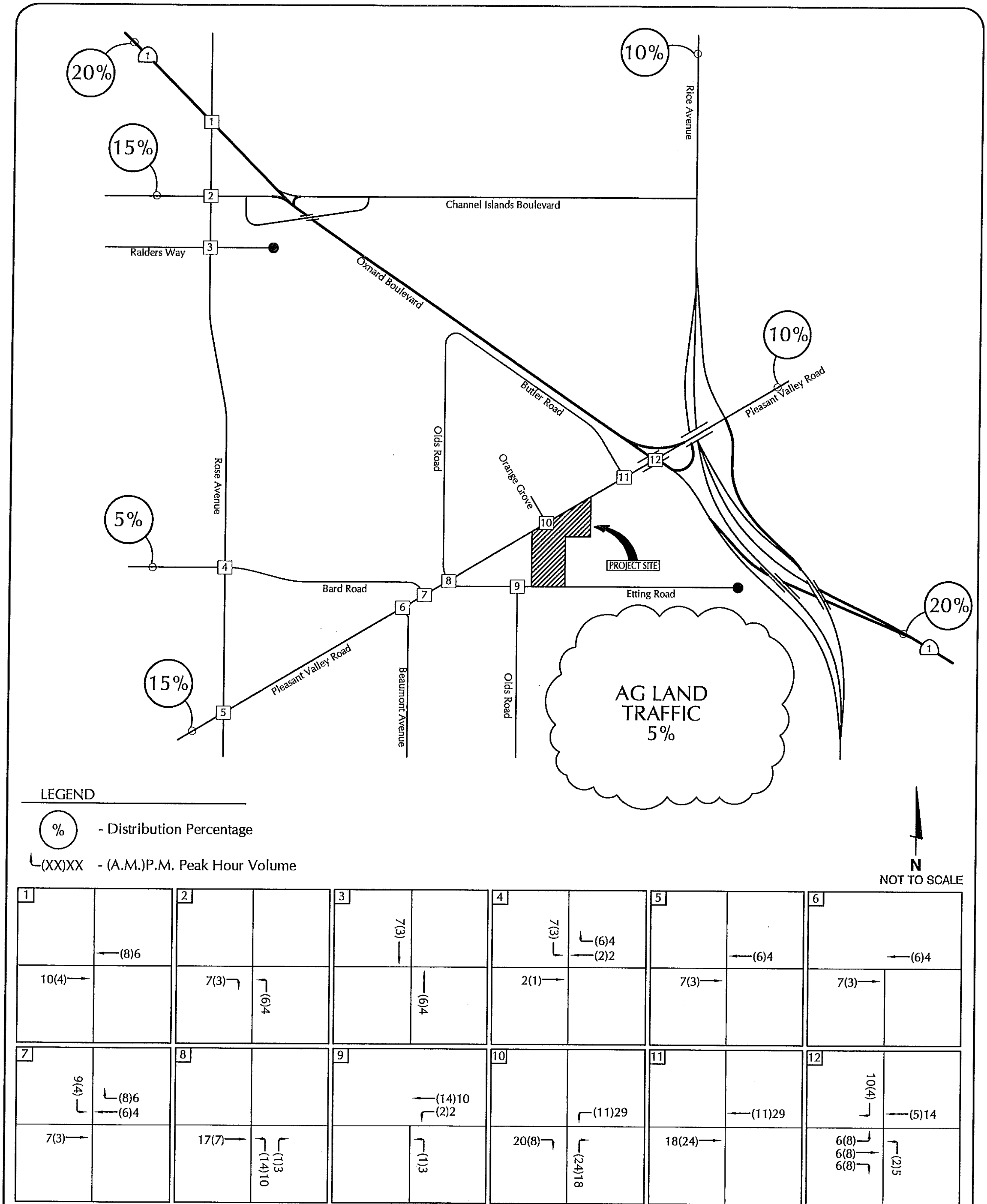
The A.M. and P.M. peak hour trips generated by the project were distributed and assigned to the study-area intersections based on travel data derived from the existing traffic volumes, as well as a general knowledge of the population, employment and commercial centers in the Oxnard/Ventura area. Figure 5 illustrates the trip distribution and assignment for the project-generated trips. Figure 6 illustrates the existing + project A.M. and P.M. peak hour traffic volumes.

Table 3
Project Trip Distribution

Origin/Destination	Direction	Percent
State Route 1 North of Pleasant Valley Road	North	20%
State Route 1 South of Pleasant Valley Road	South	20%
Pleasant Valley Road West of Rose Avenue	West	15%
Pleasant Valley Road East of State Route 1	East	10%
Rice Avenue North of Pleasant Valley Road	North	10%
Bard Road North of Pleasant Valley Road	West	20%
Agricultural Area South of Etting Road	South	5%
	Total	**100%**

PROJECT-SPECIFIC IMPACTS

Levels of service were calculated for the study-area intersections assuming the existing + project volumes. The improvement planned at the Pleasant Valley Road/Rose Avenue is assumed to be in place. Tables 4 and 5 show the results of the calculations and identify the project's impacts based on the City of Oxnard's thresholds.



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PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

FIGURE 5

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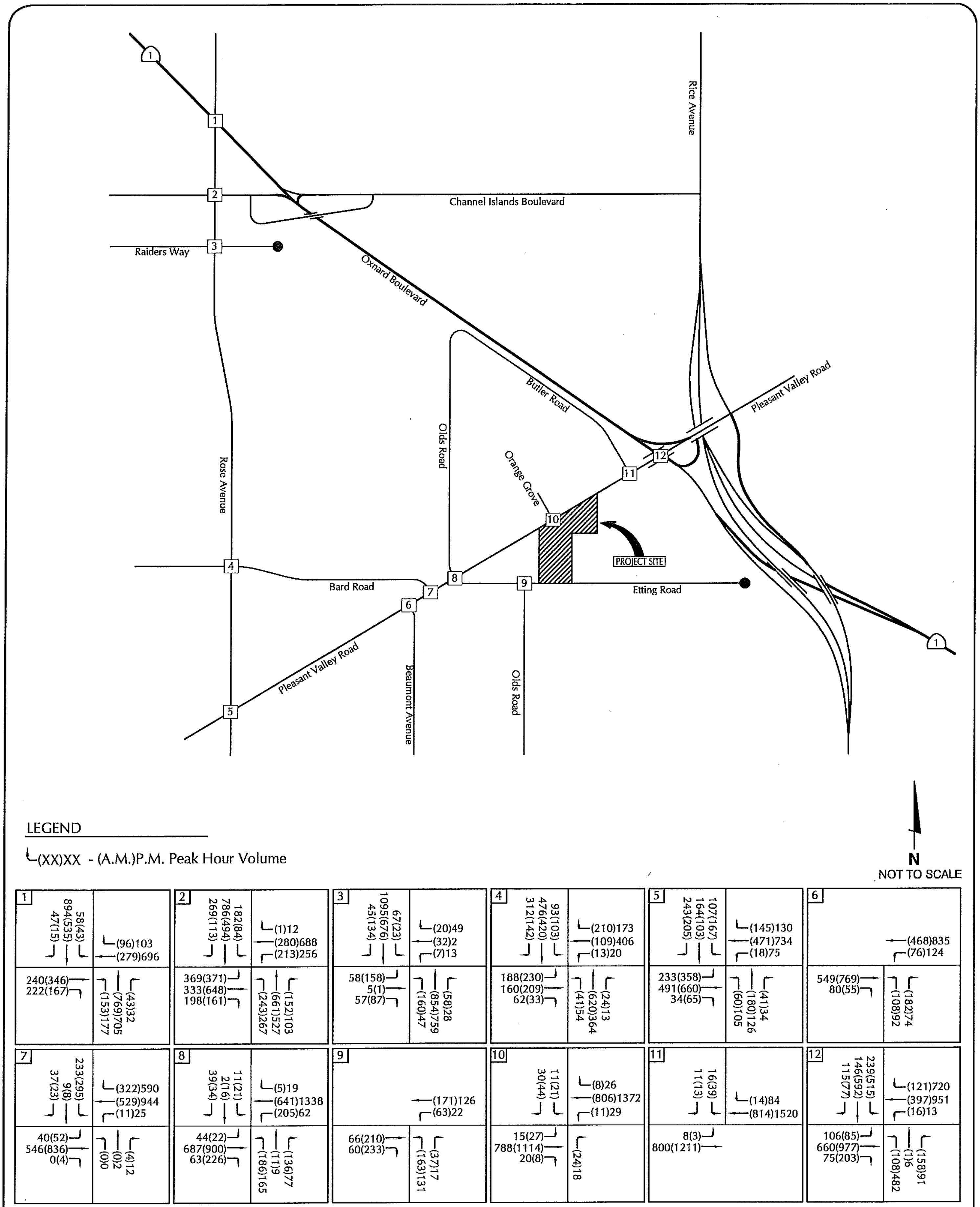

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EXISTING + PROJECT TRAFFIC VOLUMES

FIGURE 6

MMF - #14017

Table 4
Existing + Project A.M. Peak Hour Levels of Service

Intersection	Existing		Existing + Project		Change	Impact?
	ICU/Delay	LOS	ICU/Delay	LOS		
Rose Ave./Oxnard Blvd.	0.62	LOS B	0.62	LOS B	0.00	No
Rose Ave./Channel Islands Blvd.	0.50	LOS A	0.50	LOS A	0.00	No
Rose Ave./Raider Way	0.44	LOS A	0.44	LOS A	0.00	No
Rose Ave./Bard Rd.	0.50	LOS A	0.50	LOS A	0.00	No
Rose Ave./Pleasant Valley Rd.	0.49	LOS A	0.50	LOS A	0.01	No
Pleasant Valley Rd./Beaumont Ave.	0.49	LOS A	0.49	LOS A	0.00	No
Pleasant Valley Rd./Bard Rd.	0.39	LOS A	0.39	LOS A	0.00	No
Pleasant Valley Rd./Etting Rd.	0.54	LOS A	0.56	LOS A	0.02	No
Pleasant Valley Rd./Orange Grove Ave.	12.7 sec.	LOS B	13.3 sec.	LOS B	0.6 sec.	No
Pleasant Valley Rd./Butler Rd.	16.3 sec.	LOS C	16.5 sec.	LOS A	0.2 sec.	No
Pleasant Valley Rd./Oxnard Blvd.	0.73	LOS C	0.74	LOS C	0.01	No
Etting Rd./Olds Rd.	15.5 sec.	LOS C	16.0 sec.	LOS C	0.5 sec.	No

Table 5
Existing + Project P.M. Peak Hour Levels of Service

Intersection	Existing		Existing + Project		Change	Impact?
	ICU/Delay	LOS	ICU/Delay	LOS		
Rose Ave./Oxnard Blvd.	**0.89**	**LOS D**	**0.89**	**LOS D**	0.00	No
Rose Ave./Channel Islands Blvd.	0.63	LOS B	0.63	LOS B	0.00	No
Rose Ave./Raider Way	0.44	LOS A	0.44	LOS A	0.00	No
Rose Ave./Bard Rd.	0.53	LOS A	0.53	LOS A	0.00	No
Rose Ave./Pleasant Valley Rd.	0.52	LOS A	0.52	LOS A	0.00	No
Pleasant Valley Rd./Beaumont Ave.	0.38	LOS A	0.38	LOS A	0.00	No
Pleasant Valley Rd./Bard Rd.	0.57	LOS A	0.58	LOS A	0.01	No
Pleasant Valley Rd./Etting Rd.	0.57	LOS A	0.58	LOS A	0.01	No
Pleasant Valley Rd./Orange Grove Ave.	17.2 sec.	LOS C	15.5 sec.	LOS C	0.00	No
Pleasant Valley Rd./Butler Rd.	23.3 sec.	LOS C	24.1 sec.	LOS C	0.8 sec.	No
Pleasant Valley Rd./Oxnard Blvd.	0.65	LOS B	0.66	LOS B	0.01	No
Etting Rd./Olds Rd.	10.5 sec.	LOS B	10.6 sec.	LOS B	0.1 sec.	No

Bold values exceed the City's LOS C standard.

The data presented in Tables 4 and 5 indicate that the project would not significantly impact most of the study-area intersections based on City of Oxnard impact thresholds. The Rose Avenue/Oxnard Boulevard intersection would continue to operate at LOS D during the P.M. peak hour period with the addition of project traffic, however the project's traffic additions would not exceed the City's thresholds at this location.

CUMULATIVE (EXISTING + APPROVED/PENDING PROJECT) CONDITIONS

The City of Oxnard requires that intersections be analyzed with the addition of traffic generated by projects which have been approved or are pending within the project study-area. ATE and City staff identified one approved project in the vicinity which would impact the study-area intersections. Trip generation estimates were developed for the cumulative development using rates presented in the ITE, Trip Generation, 9th Edition. Table 6 summarizes the average daily, A.M. and P.M. peak hour trip generation estimates for the approved/pending project.

Table 6
Approved/Pending Development Projects Trip Generation

No.	Project	Land Use	Size	ADT	A.M. Peak Hour	P.M. Peak Hour
1.	Cabrillo (CEDC)	Multi-Family Res.	42 units	264	18	23

The data presented in Table 6 indicates that the Cabrillo Project would generate a total of 264 average daily trips, 18 A.M. peak hour trips and 23 peak hour trips. The traffic generated by the Cabrillo development was distributed and assigned to the study-area intersections. The trip assignment for the cumulative development project was developed based on a recent traffic study prepared by ATE[1]. Figure 7 illustrates the cumulative peak hour traffic volumes at the study-area intersections. Cumulative levels of service for the study-area intersections are shown in Table 7.

Table 7
Cumulative Peak Hour Levels of Service

Intersection	Control Type	A.M. Peak Hour		P.M. Peak Hour	
		ICU/Delay	LOS	ICU/Delay	LOS
Rose Ave./Oxnard Blvd.	Signal	0.62	LOS B	**0.89**	**LOS D**
Rose Ave./Channel Islands Blvd.	Signal	0.50	LOS A	0.63	LOS B
Rose Ave./Raider Way	Signal	0.44	LOS A	0.44	LOS A
Rose Ave./Bard Rd.	Signal	0.50	LOS C	0.53	LOS A
Rose Ave./Pleasant Valley Rd.	Signal	0.49	LOS A	0.52	LOS A
Pleasant Valley Rd./Beaumont Ave.	Signal	0.49	LOS A	0.38	LOS A
Pleasant Valley Rd./Bard Rd.	Signal	0.39	LOS A	0.58	LOS A
Pleasant Valley Rd./Etting Rd.	Signal	0.55	LOS A	0.57	LOS A
Pleasant Valley Rd./Orange Grove Ave.	STOP-Sign	12.7 sec.	LOS B	17.3 sec.	LOS C
Pleasant Valley Rd./Butler Rd.	STOP-Sign	16.3 sec.	LOS C	23.4 sec.	LOS C
Pleasant Valley Rd./Oxnard Blvd.	Signal	0.73	LOS C	0.66	LOS B
Etting Rd./Olds Rd.	STOP-Sign	15.6 sec.	LOS C	10.5 sec.	LOS B

Bold values exceed the City's LOS C standard.

1 Trip Generation Analysis for the Etting Road Apartments Project, Associated Transportation Engineers, 2013.

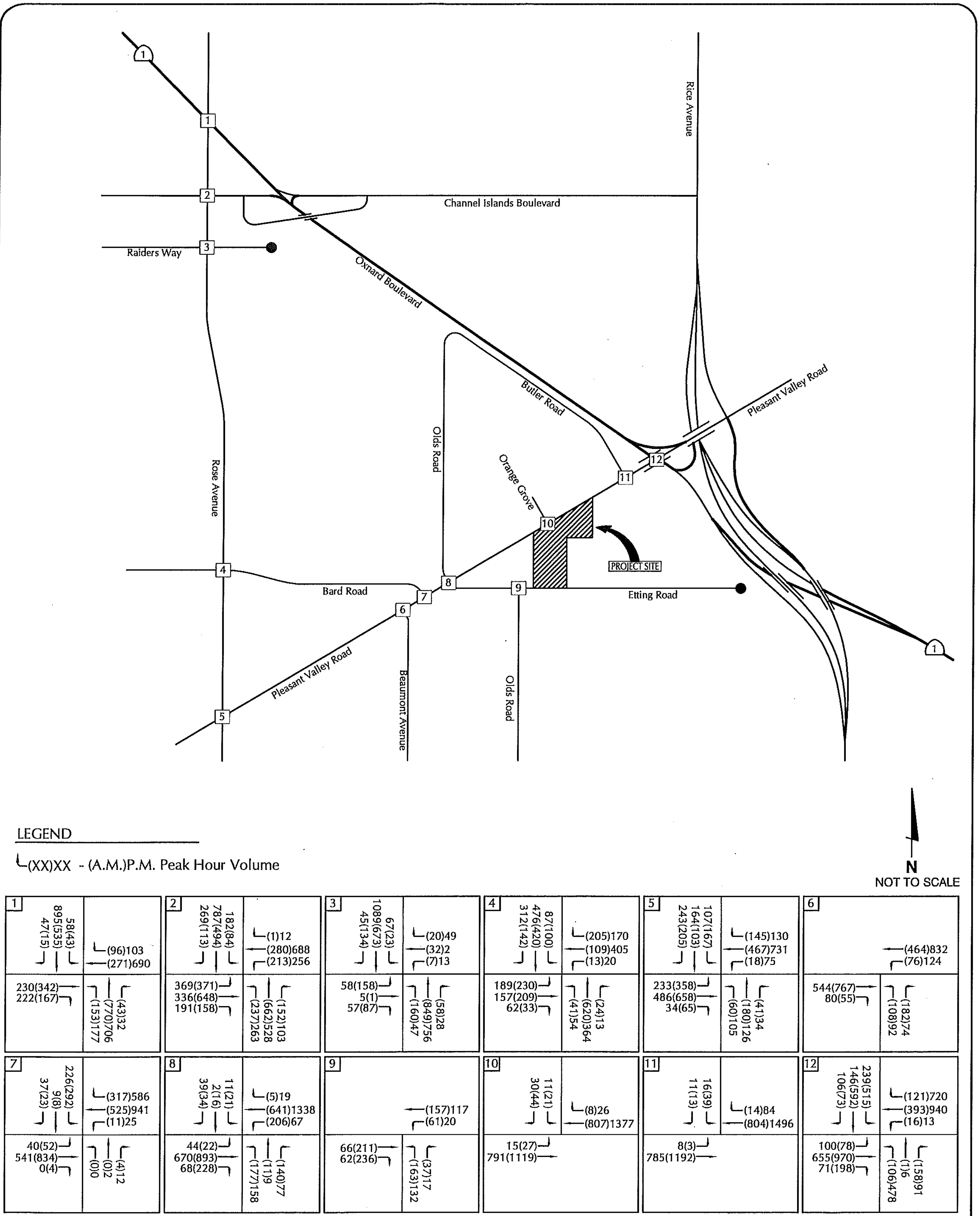

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FIGURE 7

CUMULATIVE TRAFFIC VOLUMES

MMF - #14017

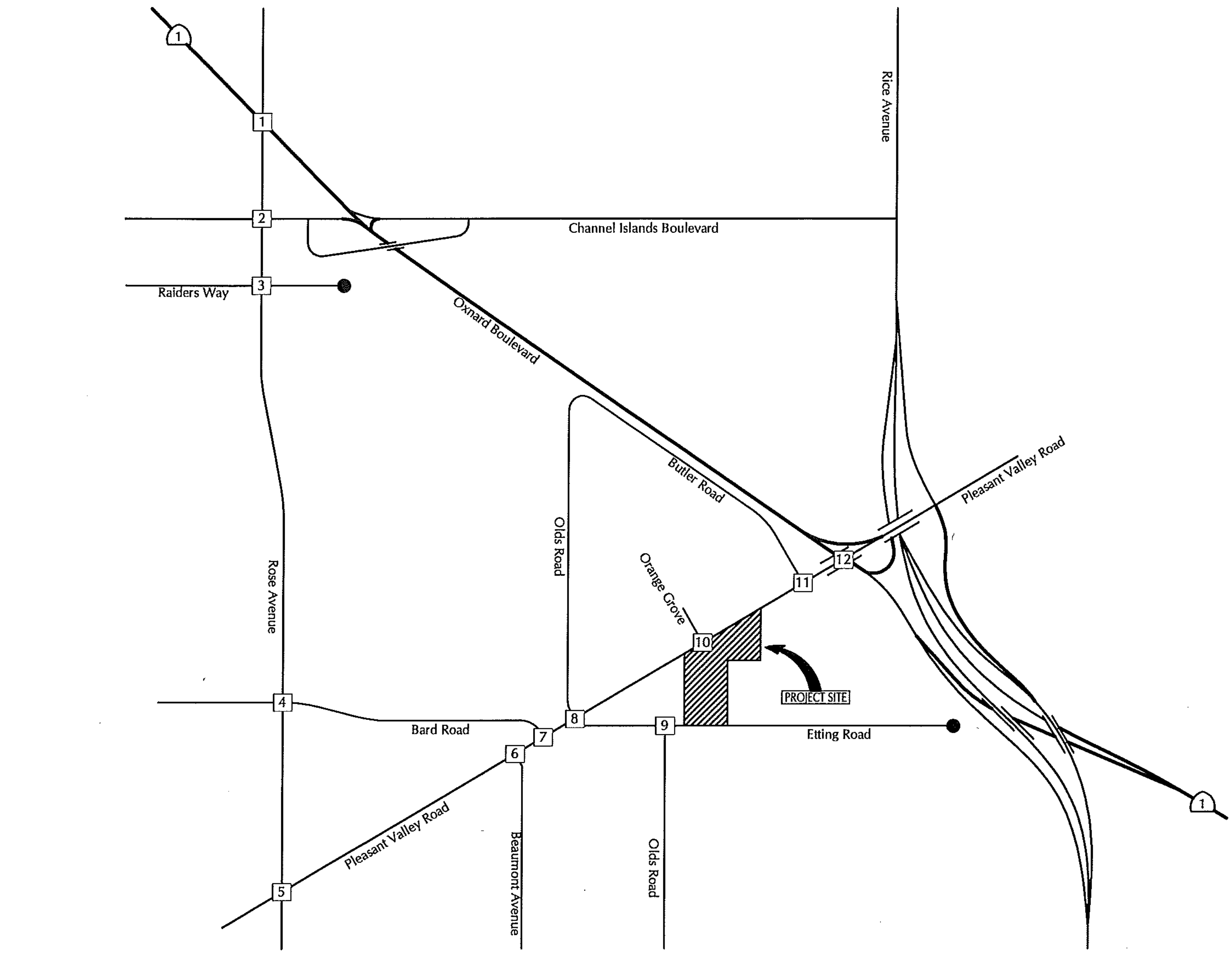
The data presented in Table 7 indicate that most of the study-area intersections would operate at LOS C or better during the A.M. peak hour and P.M. peak hour periods. The Rose Avenue/Oxnard Boulevard intersection would continue to operate at LOS D during the P.M. peak hour period with the addition of cumulative traffic.

CUMULATIVE PROJECT IMPACTS

Level of service were calculated for the study-area intersections assuming the cumulative + project volumes illustrated on Figure 8. Tables 8 and 9 show the results of the calculations and identify the impacts of the project based on City of Oxnard thresholds.

Table 8
Cumulative + Project A.M. Peak Hour Levels of Service

	Cumulative		Cum. + Project			
Intersection	**ICU/Delay**	**LOS**	**ICU/Delay**	**LOS**	**Change**	**Impact?**
Rose Ave./Oxnard Blvd.	0.62	LOS B	0.62	LOS B	0.00	No
Rose Ave./Channel Islands Blvd.	0.50	LOS A	0.50	LOS A	0.00	No
Rose Ave./Raider Way	0.44	LOS A	0.44	LOS A	0.00	No
Rose Ave./Bard Rd.	0.50	LOS A	0.50	LOS A	0.00	No
Rose Ave./Pleasant Valley Rd.	0.49	LOS A	0.50	LOS A	0.01	No
Pleasant Valley Rd./Beaumont Ave.	0.49	LOS A	0.49	LOS A	0.00	No
Pleasant Valley Rd./Bard Rd.	0.39	LOS A	0.40	LOS A	0.01	No
Pleasant Valley Rd./Etting Rd.	0.55	LOS A	0.56	LOS A	0.01	No
Pleasant Valley Rd./Orange Grove Ave.	12.7 sec.	LOS B	13.3 sec.	LOS B	0.6 sec.	No
Pleasant Valley Rd./Butler Rd.	16.3 sec.	LOS C	16.5 sec.	LOS C	0.2 sec.	No
Pleasant Valley Rd./Oxnard Blvd.	0.73	LOS C	0.74	LOS C	0.01	No
Etting Rd./Olds Rd.	15.7 sec.	LOS C	16.0 sec.	LOS C	0.3 sec.	No

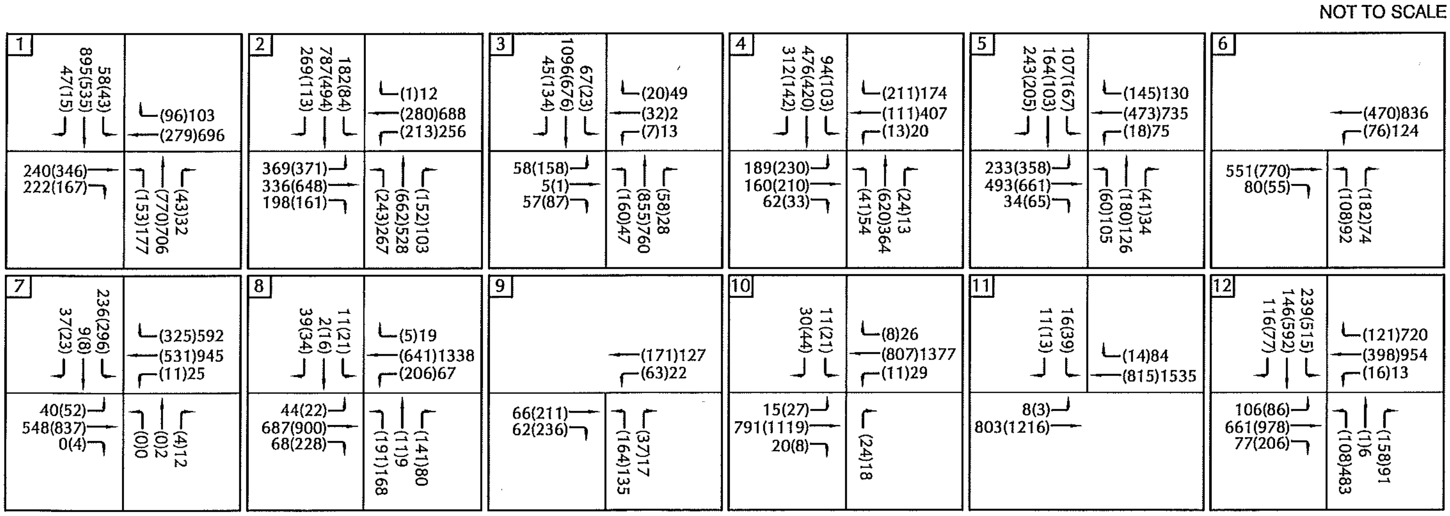


LEGEND

(XX)XX - (A.M.)P.M. Peak Hour Volume

N

NOT TO SCALE



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CUMULATIVE + PROJECT TRAFFIC VOLUMES

FIGURE 8

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Table 9
Cumulative + Project P.M. Peak Hour Levels of Service

Intersection	Cumulative		Cum. + Project		Change	Impact?
	ICU/Delay	LOS	ICU/Delay	LOS		
Rose Ave./Oxnard Blvd.	**0.89**	**LOS D**	**0.89**	**LOS D**	0.00	No
Rose Ave./Channel Islands Blvd.	0.63	LOS B	0.63	LOS B	0.00	No
Rose Ave./Raider Way	0.44	LOS A	0.44	LOS A	0.00	No
Rose Ave./Bard Rd.	0.53	LOS A	0.54	LOS A	0.01	No
Rose Ave./Pleasant Valley Rd.	0.52	LOS A	0.52	LOS A	0.00	No
Pleasant Valley Rd./Beaumont Ave.	0.38	LOS A	0.38	LOS A	0.00	No
Pleasant Valley Rd./Bard Rd.	0.58	LOS A	0.58	LOS A	0.00	No
Pleasant Valley Rd./Etting Rd.	0.57	LOS A	0.58	LOS A	0.01	No
Pleasant Valley Rd./Orange Grove Ave.	17.3 sec.	LOS C	15.6 sec.	LOS C	0.0 sec.	No
Pleasant Valley Rd./Butler Rd.	23.4 sec.	LOS C	24.2 sec.	LOS C	0.8 sec.	No
Pleasant Valley Rd./Oxnard Blvd.	0.66	LOS B	0.66	LOS B	0.00	No
Etting Rd./Olds Rd.	10.5 sec.	LOS B	10.7 sec.	LOS B	0.2 sec.	No

Bold values exceed the City's LOS C standard.

The data presented in Tables 8 and 9 indicate that the project would not contribute to a significant cumulative impact at most of the study-area intersections based on City of Oxnard impact thresholds. The Rose Avenue/Oxnard Boulevard intersection is forecast to operate at LOS D during the P.M. peak hour period with the cumulative + project traffic, however the project's traffic additions would not exceed the City's thresholds at this location.

SITE ACCESS AND CIRCULATION

As shown on Figure 2, primary access to the project would be provided via an internal roadway connection to Pleasant Valley Road opposite the Orange Grove intersection. An emergency vehicle entry/exit only driveway from the senior housing/assisted living portion of the project would also be provided on Pleasant Valley Road. An exit only gated driveway connection is provided on Etting Road. The senior housing/assisted living portion would also be allowed to use the outbound only driveway on Etting Road. The Etting Road driveway would also provide secondary emergency access. The Pleasant Valley Road/Orange Grove intersection would allow inbound right and left-turns and would be restricted to outbound only right-turns from the Naumann Ranch site. The intersection analysis indicates that the Pleasant Valley Road/Orange Grove intersection would operate acceptably (LOS C or better) with cumulative + project traffic volumes and STOP-Sign control. The project will be required to complete roadway improvements (curb, gutter and sidewalk) on Etting Road and Pleasant Valley Road along its frontage.

Signal Warrant Analysis

A signal warrant analysis was conducted for the Pleasant Valley Road/Orange Grove intersection. The Pleasant Valley Road/Orange Grove intersection is controlled by a STOP-signs on the minor street approaches. The traffic signal warrant analysis was completed based on the Manual on Uniform Traffic Control Devices (MUTCD), California Supplement, Peak Hour warrant criteria. The posted speed limit on Pleasant Valley Road is 45 mph, therefore the rural warrants apply. Table 10 summarizes the results of the signal warrant analysis.

Table 10
Signal Warrant Results

Warrant	Type	Warrant Satisfied ?		
		Existing	Existing + Project	Cumulative + Project
1	Peak Hour	No	No	No

The approach volumes on the minor streets at the Pleasant Valley Road/Orange Grove intersection do not satisfy the Peak Hour Vehicular Volume warrant under any scenario. In order to satisfy the peak hour warrant, a minimum of 75 vehicles per hour are necessary on the higher of the two minor street approaches. The traffic volumes generated by the Ocean Aire Mobile Home Estates and the Naumann Ranch development are below 75 vehicles per hour (65 A.M. peak hour vehicles and 41 P.M. peak hour vehicles).

COLLISION ANALYSIS

ATE staff reviewed collision data for the Pleasant Valley Road/Bard Road and Pleasant Valley Road/Etting Road intersections. The collision data covers a five -year period from January 2009 to December 2013. The collision data is contained in the Technical Appendix. At the Pleasant Valley Road/Bard Road intersection, there were a total of 15 collisions with no reported fatalities. The accident rate calculated for the Pleasant Valley Road/Bard Road intersection is 0.34 accidents per million entering vehicles. The statewide average collision rate for similar signalized intersections is 0.55. At the Pleasant Valley Road/Etting Road intersection, there were a total of 6 collisions with no reported fatalities. The accident rate calculated for the Pleasant Valley Road/Etting Road intersection is 0.13 accidents per million entering vehicles. The statewide average collision rate for similar signalized intersections is 0.55. When compared to the statewide average for similar intersections, the accident rate for these two intersections is less than the statewide accident rate. There have been no collisions involving pedestrians or school children reported at the intersections.

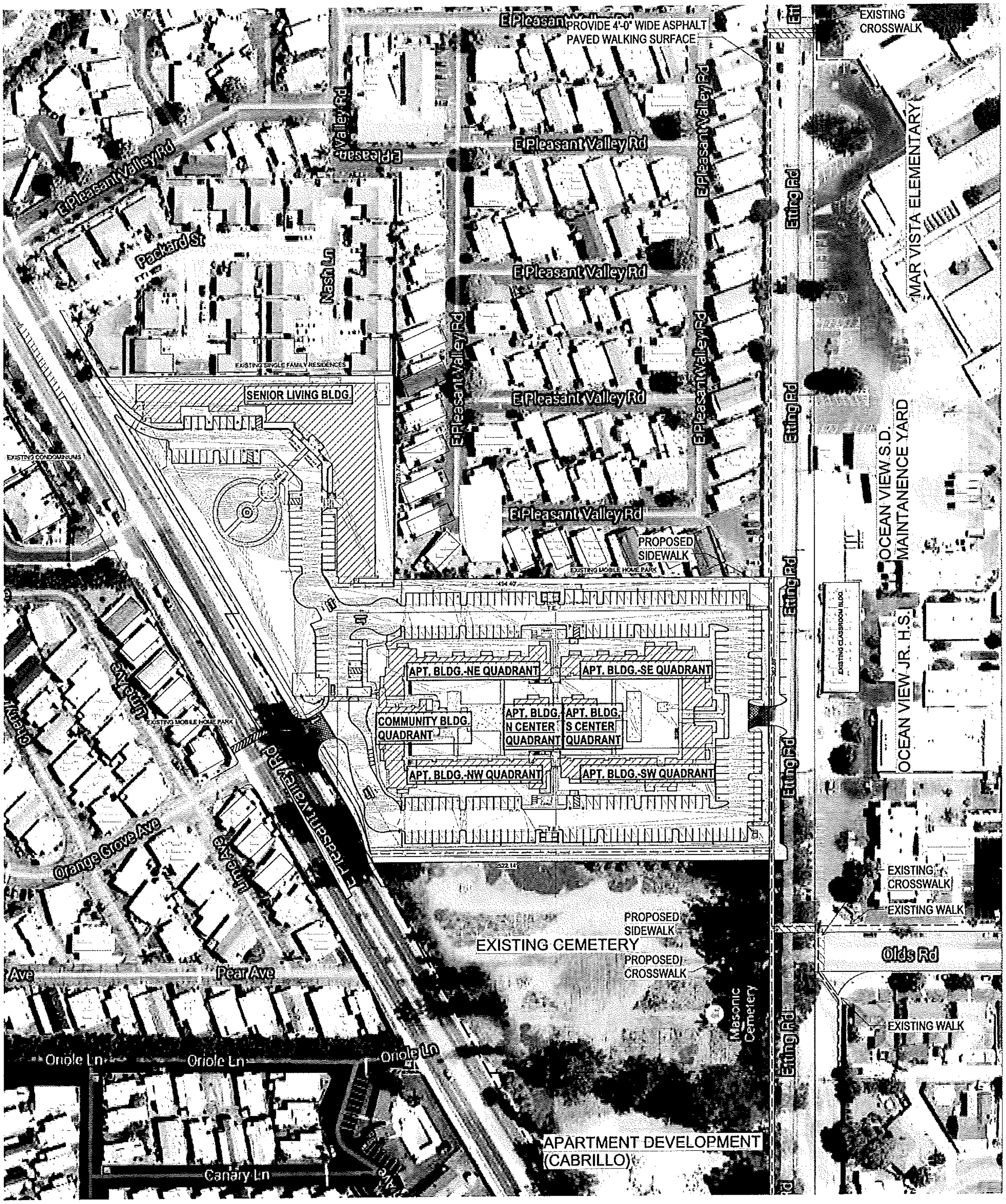
SAFE ROUTES TO SCHOOL

There are two schools located within walking distance of the project site. The Mar Vista Elementary School is located on the south side of Etting Road, east of Olds Avenue. The Ocean View Junior High School is located on the east side of Olds Road, south of Etting Road. The schools have not developed official "Safe Routes To School" Plans.

Students living north of Pleasant Valley Road use the signalized Bard Road and Etting Road intersections to cross to the south side of the street and walk along Etting Road to the schools. On the south side of Etting Road from Pleasant Valley Road to Olds Avenue there is a paved walkway and a dirt easement adjacent to the existing subdivision. On the north side of Etting Road from the Historic Japanese Cemetery to its terminus only a dirt shoulder is provided. Curb, gutter and sidewalk are provided on both sides of Olds Avenue from Etting Road to the Ocean View Junior High School. The curb, gutter and sidewalk extends down to Sanford Street on the west side of Olds Avenue. A pedestrian crosswalk is provided at the intersection of Etting Road/Olds Avenue (northbound approach) and mid-block pedestrian crossings are provided on Etting Road (to/from Trailer Park) and Olds Avenue (to/from the Subdivision).

The Naumann Ranch Project will implement improvements to enhance school access for children in addition to constructing curb, gutter and sidewalk along its Etting Road frontage as required by the City. Those improvements are illustrated on Figure 9. The sidewalk improvements would be extended west to Olds Avenue ending opposite the southeast corner curb return to allow pedestrians to walk to the Etting Road/Olds Avenue intersection. A new crosswalk should be provided on the eastside of the intersection to allow children to cross Etting Road. The project is also proposing to provide an all weather walking surface by extending the asphalt paving on the north side of Etting Road eastbound to the existing crosswalk at the Mar Vista Elementary School.

The pedestrian route to the two schools from the project site is to travel east-west along the north side of Etting Road and cross the street at the Olds Avenue intersection or at the mid-block crossing on Etting Road. It is recommended that a north-south pedestrian crosswalk be installed on the westbound approach of the Etting Road/Olds Avenue intersection in order to enhance the pedestrian route. The recommended route for children to walk to the school from the Naumann Ranch is illustrated on Figure 9.



PROPOSED IMPROVEMENTS TO SAFE ROUTES TO SCHOOL

FIGURE 9

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PROJECT IMPROVEMENTS

ATE has identified an improvement for Etting Road to improve the traffic flow on Etting Road during school drop-off and pick-up and hours. The Naumann Ranch Project would widen Etting Road from Pleasant Valley Road to Olds Road to provide two eastbound travel lanes. At the Etting Road/Olds Road intersection, the two eastbound travel lanes would transition to a through lane and exclusive right-turn lane on the eastbound approach. The improvement will improve traffic flow during school drop-off and pick-up hours. The improved geometrics and peak hour levels of service are shown in Tables 11 and 12.

Table 11
Etting Road/Olds Road
Improved Intersection Geometry

Scenario	Northbound	Eastbound	Westbound
Existing Geometry	L R	TR	LT
Mitigated Geometry	L R	T R	LT

Table 12
Etting Road/Olds Road
Improved A.M. Peak Hour Level of Service

Intersection	Cumulative + Project	
	Existing Geometry	With Improvements
Etting Road/Olds Road	16.0 sec./LOS C	13.7 sec./LOS B

MODIFIED CIRCULATION SYSTEM ANALYSIS

The following section reviews the project impacts assuming a modified circulation system. City staff expressed concerns about the operation of the Pleasant Valley Road/Bard Road and Pleasant Valley Road/Etting Road intersections in addition to the occurrences of extended vehicle queues on Pleasant Valley during peak travel periods. To improve traffic flow and reduce vehicle delays, City staff is proposing to install a raised median on Pleasant Valley Road from Beaumont Avenue to Etting Road. Left-turns to and from Bard Road would be eliminated, and those movements would divert to other routes. The traffic signals at Bard Road would be removed and STOP-signs would control the north-south minor street approaches of Bard Road and the commercial driveway.

Existing Volumes and Intersection Levels of Service

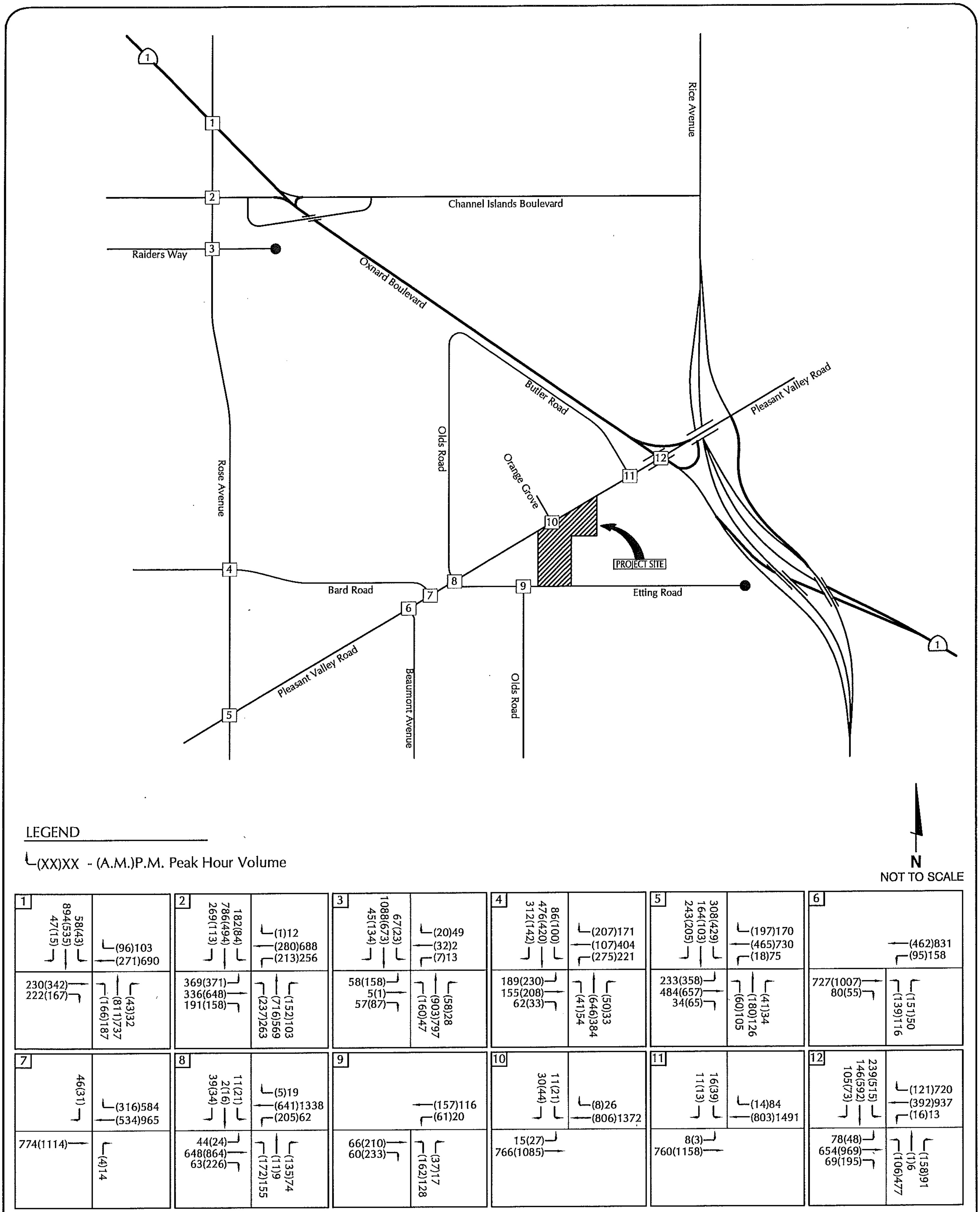
The existing left-turn traffic volumes at the Pleasant Valley Road/Bard Road intersection were reassigned through the study-area intersections. The majority of the eastbound left-turns were reassigned westbound on Bard Road to southbound on Rose Avenue to Pleasant Valley Road via the Rose Avenue/Bard Road intersection. Ten percent of the left-turns were reassigned to westbound on Bard Road to northbound on Rose Avenue via the Rose Avenue/Bard Road intersection. The reassigned existing A.M. and P.M. peak hour period traffic volumes at the study-area intersections are illustrated on Figure 10. Levels of service were calculated for the study-area intersections assuming the existing volumes with the modified circulation system. Worksheets illustrating the level of service calculations are contained in the Technical Appendix for reference. Table 13 lists the level of service for the twelve study-area intersections during the A.M. and P.M. peak hour periods.

Table 13
Existing Peak Hour Levels of Service
Modified Circulation System

Intersection	Control Type	A.M. Peak Hour		P.M. Peak Hour	
		ICU - Delay	LOS	ICU - Delay	LOS
Rose Ave./Oxnard Blvd.	Signal	0.64	LOS B	**0.89**	**LOS D**
Rose Ave,/Channel Islands Blvd.	Signal	0.52	LOS A	0.63	LOS B
Rose Ave./Raider Way	Signal	0.44	LOS A	0.44	LOS A
Rose Ave./Bard Rd.	Signal	0.51	LOS A	0.53	LOS A
Rose Ave./Pleasant Valley Rd.	Signal	0.67	LOS B	0.53	LOS A
Pleasant Valley Rd./Beaumont Ave.	Signal	0.57	LOS A	0.46	LOS A
Pleasant Valley Rd./Bard Rd.	STOP-Sign	11.3 sec.	LOS B	14.6 sec.	LOS B
Pleasant Valley Rd./Etting Rd.	Signal	0.54	LOS A	0.57	LOS A
Pleasant Valley Rd./Orange Grove Ave.	STOP-Sign	12.7 sec.	LOS B	17.2 sec.	LOS C
Pleasant Valley Rd./Butler Rd.	STOP-Sign	16.2 sec.	LOS C	23.3 sec.	LOS C
Pleasant Valley Rd./Oxnard Blvd.	Signal	0.73	LOS C	0.64	LOS B
Etting Rd./Olds Rd.	STOP-Sign	15.5 sec.	LOS C	10.5 sec.	LOS B

Bold values exceed the City's LOS C standard.

Most of the study-area intersections would operate at LOS C or better during the A.M. peak hour and P.M. peak hour periods with the modified circulation system. The Rose Avenue/Oxnard Boulevard intersection would operate at LOS D during the P.M. peak hour period.



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EXISTING TRAFFIC VOLUMES
(MODIFIED CIRCULATION SYSTEM)

FIGURE 10

MMF - #14017

Project-Specific Impacts with Modified Circulation System

Figure 11 illustrates the existing + project A.M. and P.M. peak hour traffic volumes. Levels of service were calculated for the study-area intersections assuming the existing + project volumes with the modified circulation system. Tables 14 and 15 show the results of the calculations and identify the project's impacts based on the City of Oxnard thresholds.

Table 14
Existing + Project A.M. Peak Hour Levels of Service
Modified Circulation System

Intersection	Existing		Existing + Project		Change	Impact?
	ICU/Delay	LOS	ICU/Delay	LOS		
Rose Ave./Oxnard Blvd.	0.64	LOS B	0.64	LOS B	0.00	No
Rose Ave./Channel Islands Blvd.	0.52	LOS A	0.52	LOS A	0.00	No
Rose Ave./Raider Way	0.44	LOS A	0.44	LOS A	0.00	No
Rose Ave./Bard Rd.	0.51	LOS A	0.51	LOS A	0.00	No
Rose Ave./Pleasant Valley Rd.(	0.67	LOS B	0.68	LOS B	0.01	No
Pleasant Valley Rd./Beaumont Ave.	0.57	LOS A	0.57	LOS A	0.00	No
Pleasant Valley Rd./Bard Rd.	11.3 sec.	LOS B	11.3 sec.	LOS B	0.00	No
Pleasant Valley Rd./Etting Rd.	0.54	LOS A	0.55	LOS A	0.01	No
Pleasant Valley Rd./Orange Grove Ave.	12.7 sec.	LOS B	13.2 sec.	LOS B	0.5 sec.	No
Pleasant Valley Rd./Butler Rd.	16.2 sec.	LOS C	16.4 sec.	LOS A	0.2 sec.	No
Pleasant Valley Rd./Oxnard Blvd.	0.73	LOS C	0.74	LOS C	0.01	No
Etting Rd./Olds Rd.	15.5 sec.	LOS C	16.0 sec.	LOS C	0.05 sec.	No

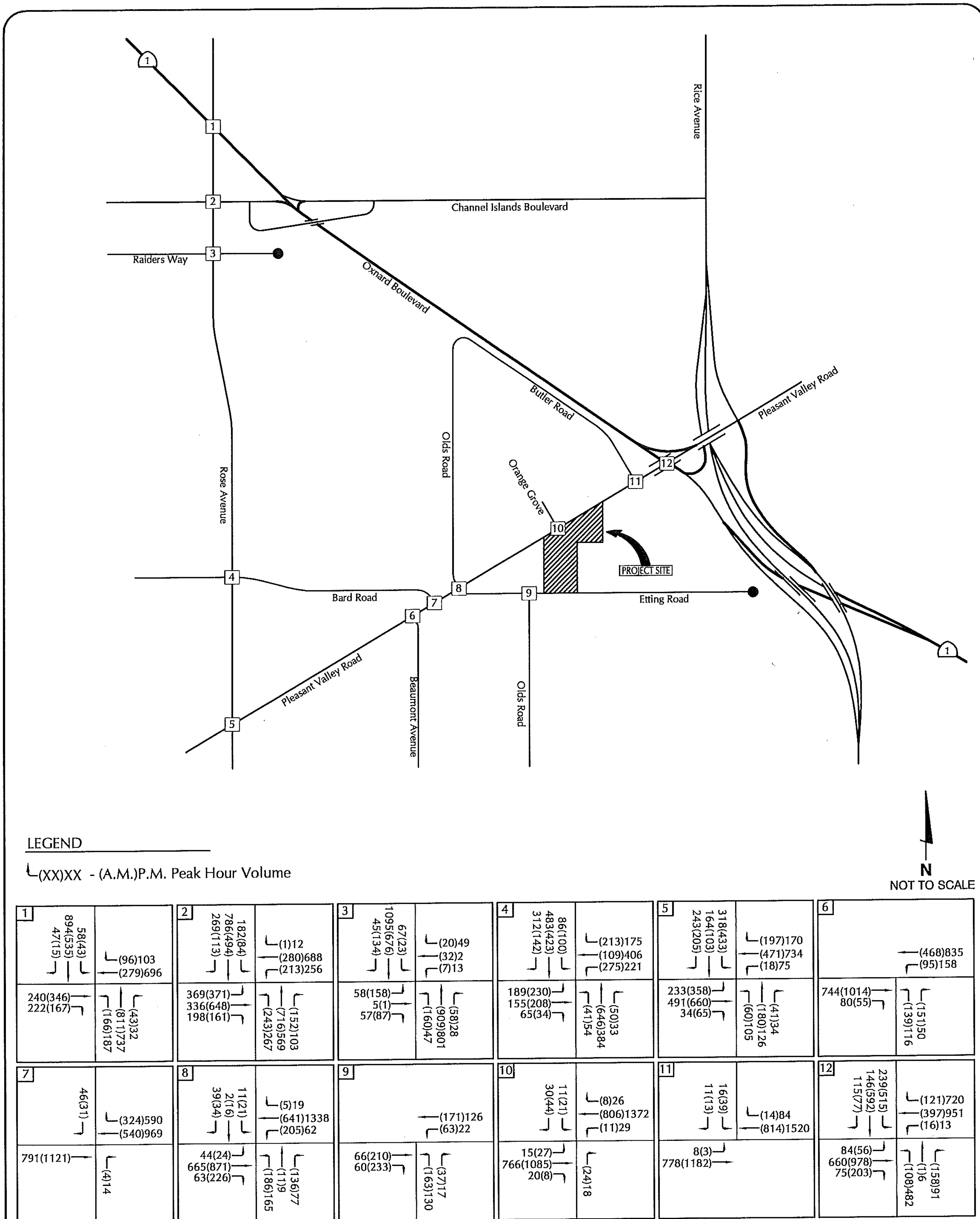

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FIGURE 11

EXISTING + PROJECT TRAFFIC VOLUMES
(MODIFIED CIRCULATION SYSTEM)

MMF - #14017

Table 15
Existing + Project P.M. Peak Hour Levels of Service
Modified Circulation System

Intersection	Existing		Existing + Project		Change	Impact?
	ICU/Delay	LOS	ICU/Delay	LOS		
Rose Ave./Oxnard Blvd.	**0.89**	**LOS D**	**0.89**	**LOS D**	0.00	No
Rose Ave./Channel Islands Blvd.	0.63	LOS B	0.63	LOS B	0.00	No
Rose Ave./Raider Way	0.44	LOS A	0.44	LOS A	0.00	No
Rose Ave./Bard Rd.	0.53	LOS A	0.53	LOS A	0.00	No
Rose Ave./Pleasant Valley Rd.	0.53	LOS A	0.54	LOS A	0.01	No
Pleasant Valley Rd./Beaumont Ave.	0.46	LOS A	0.46	LOS A	0.00	No
Pleasant Valley Rd./Bard Rd.	14.6 sec.	LOS B	14.7 sec.	LOS B	0.1 sec.	No
Pleasant Valley Rd./Etting Rd.	0.57	LOS A	0.58	LOS A	0.01	No
Pleasant Valley Rd./Orange Grove Ave.	17.2 sec.	LOS C	15.5 sec.	LOS C	0.0 sec.	No
Pleasant Valley Rd./Butler Rd.	23.3 sec.	LOS C	24.1 sec.	LOS C	0.8 sec.	No
Pleasant Valley Rd./Oxnard Blvd.	0.64	LOS B	0.65	LOS B	0.01	No
Etting Rd./Olds Rd.	10.5 sec.	LOS B	10.6 sec.	LOS B	0.1 sec.	No

Bold values exceed the City's LOS C standard.

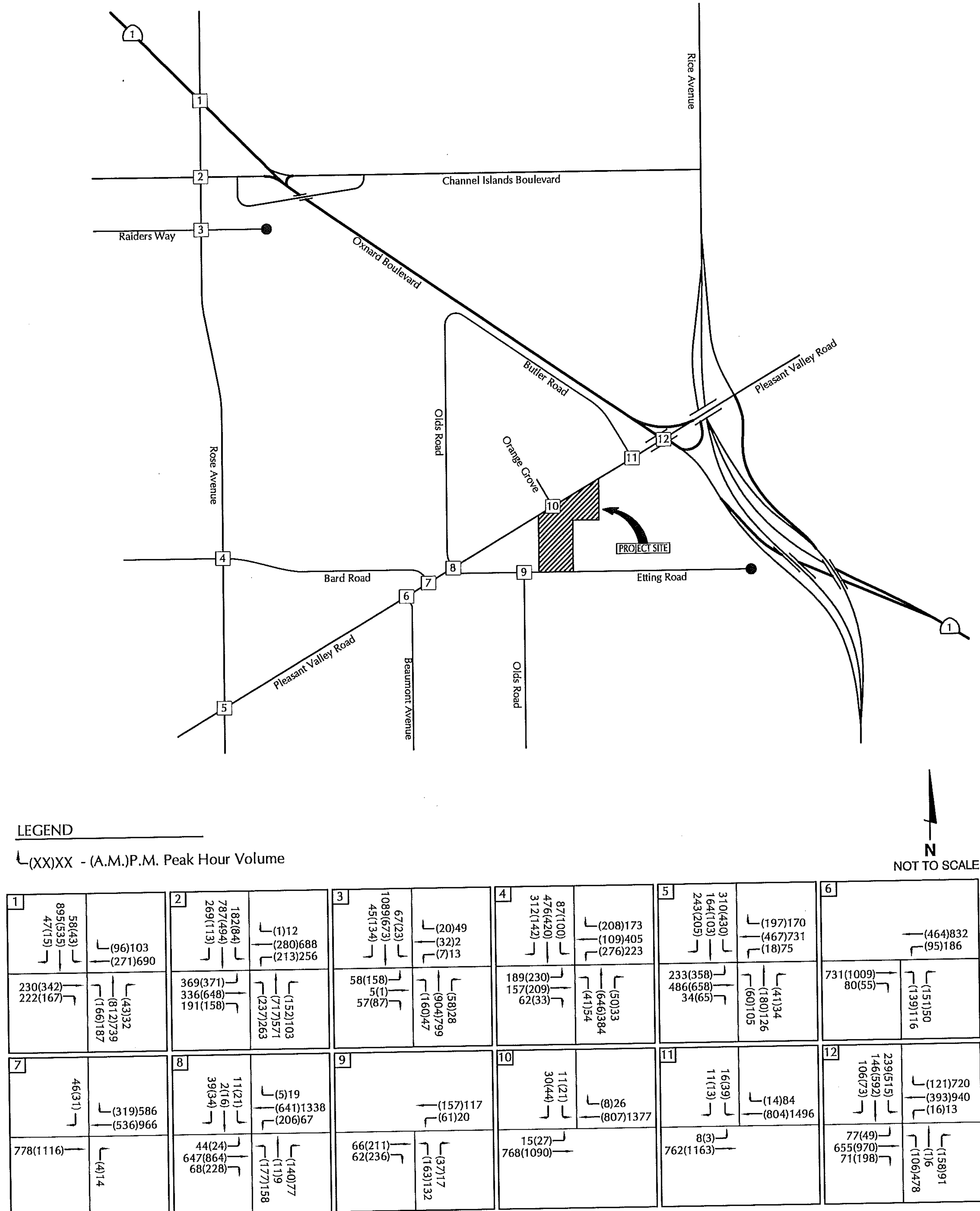
The data presented in Tables 14 and 15 indicate that the project would not significantly impact the study-area intersections based on City of Oxnard impact thresholds assuming the modified circulation system. The Rose Avenue/Oxnard Boulevard intersection would continue to operate at LOS D during the P.M. peak hour period with the addition of project traffic, however the project's traffic additions would not exceed the City's thresholds at this location.

Cumulative Project Impacts with Modified Circulation System

Level of service were calculated for the study-area intersections assuming the reassigned cumulative and cumulative + project volumes illustrated on Figures 12 and 13. Tables 16 and 17 show the results of the calculations and identify the impacts of the project based on City of Oxnard thresholds.

Table 16
Cumulative + Project A.M. Peak Hour Levels of Service
Modified Circulation System

Intersection	Cumulative		Cum. + Project		Change	Impact?
	ICU/Delay	LOS	ICU/Delay	LOS		
Rose Ave./Oxnard Blvd.	0.64	LOS B	0.64	LOS B	0.00	No
Rose Ave./Channel Islands Blvd.	0.52	LOS A	0.52	LOS A	0.00	No
Rose Ave./Raider Way	0.44	LOS A	0.44	LOS A	0.00	No
Rose Ave./Bard Rd.	0.51	LOS A	0.51	LOS A	0.00	No
Rose Ave./Pleasant Valley Rd.	0.68	LOS B	0.68	LOS B	0.00	No
Pleasant Valley Rd./Beaumont Ave.	0.57	LOS A	0.58	LOS A	0.01	No
Pleasant Valley Rd./Bard Rd.	11.3 sec.	LOS B	11.3 sec.	LOS B	0.0 sec.	No
Pleasant Valley Rd./Etting Rd.	0.54	LOS A	0.55	LOS A	0.01	No
Pleasant Valley Rd./Orange Grove Ave.	12.7 sec.	LOS B	13.2 sec.	LOS B	0.5 sec.	No
Pleasant Valley Rd./Butler Rd.	16.2 sec.	LOS C	16.4 sec.	LOS C	0.2 sec.	No
Pleasant Valley Rd./Oxnard Blvd.	0.73	LOS C	0.74	LOS C	0.01	No
Etting Rd./Olds Rd.	15.7 sec.	LOS C	16.0 sec.	LOS C	0.3 sec.	No



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CUMULATIVE TRAFFIC VOLUMES (MODIFIED CIRCULATION SYSTEM)

FIGURE 12

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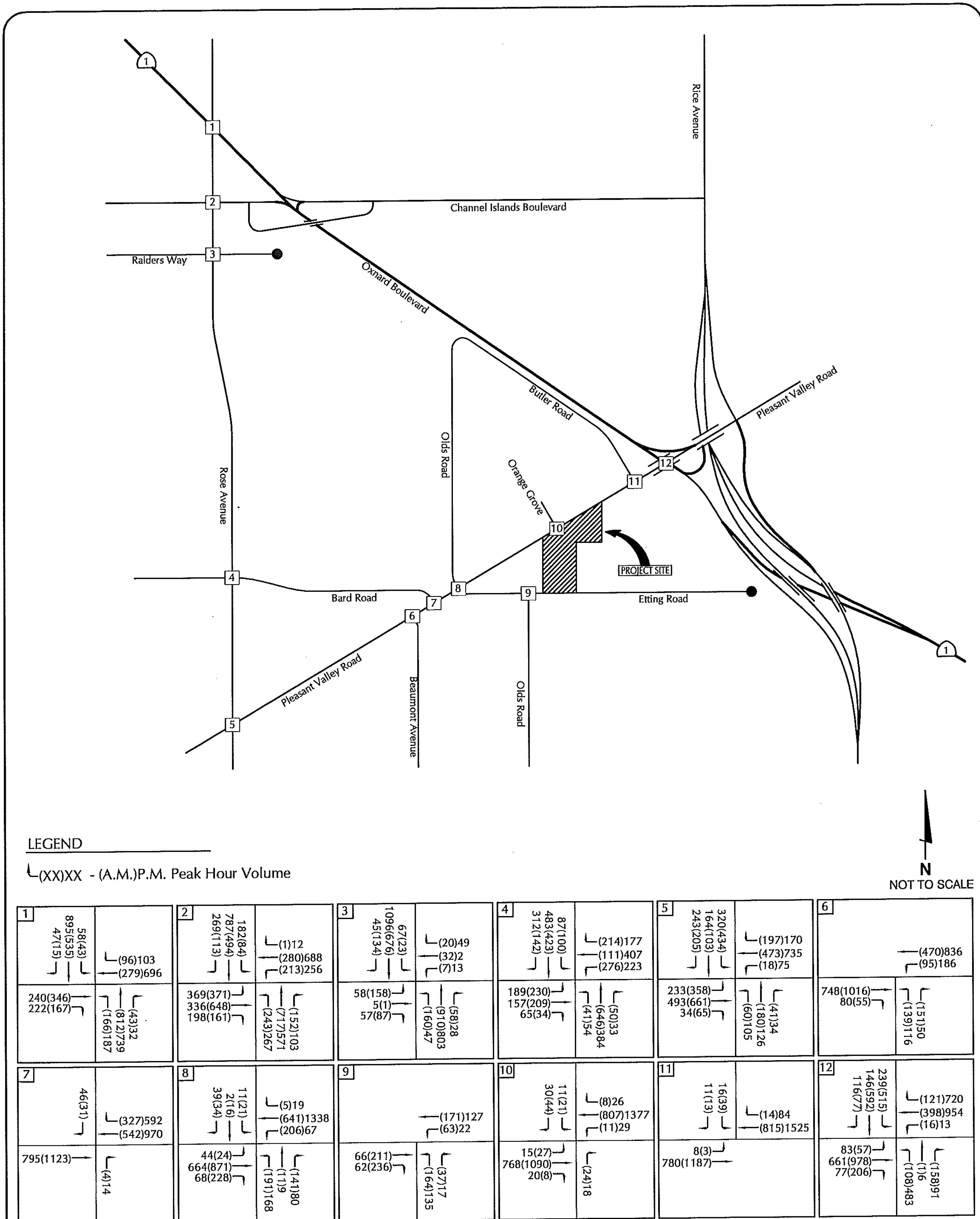

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CUMULATIVE + PROJECT TRAFFIC VOLUMES (MODIFIED CIRCULATION SYSTEM)

FIGURE 13

MMF - #14017

Table 17
Cumulative + Project P.M. Peak Hour Levels of Service
Modified Circulation System

Intersection	Cumulative		Cum. + Project		Change	Impact?
	ICU/Delay	LOS	ICU/Delay	LOS		
Rose Ave./Oxnard Blvd.	**0.89**	**LOS D**	**0.89**	**LOS D**	0.00	No
Rose Ave./Channel Islands Blvd.	0.63	LOS B	0.63	LOS B	0.00	No
Rose Ave./Raider Way	0.44	LOS A	0.44	LOS A	0.00	No
Rose Ave./Bard Rd.	0.53	LOS A	0.54	LOS A	0.01	No
Rose Ave./Pleasant Valley Rd.	0.53	LOS A	0.54	LOS A	0.01	No
Pleasant Valley Rd./Beaumont Ave.	0.47	LOS A	0.48	LOS A	0.01	No
Pleasant Valley Rd./Bard Rd.	14.6 sec.	LOS B	14.8 sec.	LOS B	0.2 sec.	No
Pleasant Valley Rd./Etting Rd.	0.57	LOS A	0.58	LOS A	0.01	No
Pleasant Valley Rd./Orange Grove Ave.	17.3 sec.	LOS C	15.5 sec.	LOS C	0.0 sec.	No
Pleasant Valley Rd./Butler Rd.	23.4 sec.	LOS C	24.2 sec.	LOS C	0.8 sec.	No
Pleasant Valley Rd./Oxnard Blvd.	0.64	LOS B	0.65	LOS B	0.01	No
Etting Rd./Olds Rd.	10.5 sec.	LOS B	10.7 sec.	LOS B	0.2 sec.	No

Bold values exceed the City's LOS C standard.

The data presented in Tables 16 and 17 indicate that the project would not contribute to a significant cumulative impact at the study-area intersections based on City of Oxnard impact thresholds with the modified circulation system. The Rose Avenue/Oxnard Boulevard intersection is forecast to operate at LOS D during the P.M. peak hour period with the cumulative + project traffic, however the project's traffic additions would not exceed the City's thresholds at this location.

Operational Analysis of Modified Circulation System

A more detailed operational analysis was completed using the Synchro software for the Pleasant Valley Road/Rose Avenue, Pleasant Valley Road/Beaumont Avenue, Pleasant Valley Road/Bard Road and Pleasant Valley/Etting Road intersections with the planned median improvement to Pleasant Valley Road. These four intersections would be most effected by the circulation system changes. Synchro worksheets are contained in the Technical Appendix for reference. Tables 18 and 19 compare the existing and the existing + project levels of service for the three intersections.

Table 18
A.M. Peak Hour Levels of Service
Modified Circulation System

Intersection	Existing		Existing + Project with Modification	
	Delay	LOS	Delay	LOS
Pleasant Valley Road/Rose Avenue	35.7 sec.	LOS D	27.7 sec.	LOS C
Pleasant Valley Road/Beaumont Avenue	22.8 sec.	LOS C	27.2 sec.	LOS C
Pleasant Valley Road/Bard Road	29.9 sec.	LOS C	11.3 sec.[a]	LOS B
Pleasant Valley Road/Etting Road	43.0 sec.	LOS D	18.2 sec.	LOS B

(a) Delay based on HCM unsignalized intersection methodology.

Table 19
P.M. Peak Hour Levels of Service
Modified Circulation System

Intersection	Existing		Existing + Project with Modification	
	Delay	LOS	Delay	LOS
Pleasant Valley Road/Rose Avenue	34.5 sec.	LOS C	28.2 sec.	LOS C
Pleasant Valley Road/Beaumont Avenue	17.2 sec.	LOS B	18.5 sec.	LOS B
Pleasant Valley Road/Bard Road	51.1 sec.	LOS D	14.7 sec.[a]	LOS B
Pleasant Valley Road/Etting Road	31.7 sec.	LOS C	11.6 sec.	LOS B

(a) Delay based on HCM unsignalized intersection methodology.

As shown in Tables 18 and 19, the operation of the Pleasant Valley Road intersections from Rose Avenue to Etting Road would improve with the modified circulation system. The eastbound and westbound vehicle queues on Pleasant Valley Road would be within acceptable lengths.

Effects of Modified Circulation System on Local Area Transit

ATE staff contacted Gold Coast Transit and VISTA to determine how each transit provider would be effected by the proposed median improvement on Pleasant Valley Road. Gold Coast Transit and VISTA buses travel through the Pleasant Valley Road/Bard Road intersection making a left-turn from Bard Road onto Pleasant Valley Road. Gold Coast Transit indicated that the Number 7 transit line would be effected should the City move forward with the proposed improvement. There would be 7 bus stops along Bard Street, Olds Road, Butler Road and Pleasant Valley Road that would be removed or relocated. A map of the impacted route and bus stops is included in the Technical Appendix. VISTA stated that the CSUCI Oxnard "C" Street route would be effected. There would be 2 VISTA bus stops along Bard Street that would be removed or relocated.

Gold Coast Transit is examining options, but according to staff each option would add to service times. VISTA staff indicated similar concerns regarding service times in addition to the safety of buses rerouted to the Pleasant Valley Road/Rose Avenue. Bus drivers expressed concerns with having to turn left from Rose Avene onto Pleasant Valley Road. VISTA staff stated that they would also examine options.

VENTURA COUNTY GENERAL PLAN CONSISTENCY

The City of Oxnard and Ventura County have executed a "Reciprocal Traffic Mitigation Agreement" wherein the City and the County agree that a pro-rata share of the cost of mitigations will be collected by each agency for identified traffic impacts in the other jurisdiction. The project would be consistent with the Ventura County General Plan by complying with the terms of the "Reciprocal Traffic Mitigation Agreement" between the City of Oxnard and the County of Ventura approved on February 2, 1993.

VENTURA COUNTY CONGESTION MANAGEMENT PROGRAM

According to the County's Congestion Management Program (CMP), the minimum acceptable standard for traffic operations is LOS "E".[2] However, so that local jurisdictions are not unfairly penalized for existing congestion, CMP locations currently operating in the LOS "F" range are considered acceptable.

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2 Traffic LOS Monitoring for Ventura County Congestion Management Program, Ventura County Transportation Commission, 2009.

Intersection Operation

The study-area intersections along Pleasant Valley Road and Rose Avenue are contained in the County's CMP. The intersections are all expected to operate at LOS D or better with the addition of cumulative + project peak hour volumes, and thus would not exceed the CMP LOS E standard.

■ ■ ■

REFERENCES AND PERSONS CONTACTED

Associated Transportation Engineers

Scott A. Schell, AICP, PTP, Principal Planner
Darryl F. Nelson, PTP, Senior Transportation Planner
Matthew Farrington, Transportation Planner

Persons Contacted

Earnel Bihis, City of Oxnard

References

Highway Capacity Manual, National Research Council, 2010.

Trip Generation, Institute of Transportation Engineers, 9th Edition, 2012.

Traffic LOS Monitoring for the Ventura County Congestion Management Program, Ventura County Transportation Commission, 2009.

Appendix K

Responses to Comments

RESPONSES to COMMENTS on the DRAFT IS-MND

This section includes the comments received during circulation of the Draft Initial Study and Mitigated Negative Declaration (IS-MND) prepared for Coastal Apartment Homes Project and Coastal Senior/ Assisted Living Project and responses to those comments. None of comments or responses to comments introduce significant new information or affect the conclusions of the IS-MND.

The IS-MND was circulated for a 20-day public review period that began on June 4, 2015 and concluded on June 20, 2015. The City received five comment letters on the Draft IS-MND. The commenter and the page number on which each commenter's letter appears are listed below.

Letter No. and Commenter	Page No.
1. Nicole Doner, Oxnard Cultural Heritage Board staff	2
2. Cy Johnson, Development Projects Administrator, Calleguas Municipal Water District	8
3. Whitney Wilkinson, Ventura County Planning Division	10
4. County of Ventura Public Works Agency Transportation Department	16
5. Alicia Stratton, Ventura County Air Pollution Control District	19

The comment letters and responses follow. Each comment letter has been numbered sequentially and each separate issue raised by the commenter has been assigned a number. The responses to each comment identify first the number of the comment letter, and then the number assigned to each issue (Response 1.1, for example, indicates that the response is for the first issue raised in comment Letter 1). Where necessary, revisions to specific text are illustrated in a strikethrough (deletions) and underline (additions) format.

Letter No. 1

Oxnard Cultural Heritage Board Memorandum

c/o County of Ventura • Resource Management Agency • Planning Division
800 S. Victoria Avenue, Ventura, CA 93009-1740 • (805) 654-2478 • ventura.org/rma/planning

DATE: June 24, 2015

TO: Kathleen Mallory, City of Oxnard Planning Staff

FROM: Nicole Doner, Oxnard Cultural Heritage Board staff

SUBJECT: Review of Draft MND No. 2015-01/Oxnard Coastal Apartment Homes Project and Coastal Senior/Assisted Living Project, RMA Project Ref. No. 15-012

Oxnard Cultural Heritage Board (OCHB) staff has reviewed the Draft MND (mentioned above) and recommends the revised changes (additions are shown in *italics* and deletions are crossed out) to the Mitigation Measures identified in the Draft MND for Cultural Resources: 1.1

CR-1 *Prior to the issuance of a grading or building permit,* the applicant shall develop a Tree Protection Plan *prepared by a certified arborist* for review and approval by the Planning Division *and the Oxnard Cultural Heritage Board (OCHB)*. The Tree Protection Plan shall incorporate the recommendations from Addendums II and III, prepared by LA Johnny and Jordan Gilbert and Bain Landscape Architects, Inc. and dated October 18, 2014 and January 26, 2015, respectively, *except where the arborist's recommendations are in conflict with the adopted mitigation measures. The Tree Protection Plan shall also incorporate the OCHB recommendations which address the protection of all 14 onsite protected trees and the 5 off-site protected trees located on the Hueneme Masonic Cemetery property.*

The Tree Protection Plan shall require protection *of the protected trees* (*Landmark 15)* during project grading and construction *and shall incorporate off-sets or mitigation values for replacement of protected trees that are damaged or felled during and after construction*. Pruning specifications for each tree as well as ongoing monitoring *of the tree health for a period of no less than five years after final construction shall* occur *unless a certified arborist recommends additional monitoring beyond the five years* ~~until a certified arborist deems the pruning and/or monitoring infeasible~~. Monitoring shall include the 14 onsite trees as well as offsite *5* Blue Gum Eucalyptus, including tree #73 or any other trees determined by the arborist to need preservation within immediate proximity of the site, which are identified to be a safety risk by a certified arborist. The applicant shall submit a final arborist report for review and approval by City staff *and OCHB* prior to issuance of grading permit.

If protected trees are felled/damaged and require offsets/mitigation, the applicant shall plant new trees onsite as the offset/mitigation measure at a ratio of 4:1 and the applicant shall:

a. *post a financial assurance to cover the costs of planting and maintaining the offset trees; and*
b. *reimburse the City for OCHB and City staff and/or consultant costs to monitor compliance. City staff time and consultant costs to monitor compliance will be billed to the applicant.*

In addition, the OCHB staff recommends implementation of the following new mitigation measures into the Draft MND for Cultural Resources: 1.2

<u>Recommended Mitigation Measure CR-2</u>

<u>Tree Health Monitoring and Reporting</u>
The applicant shall submit to the City, annual monitoring reports to be prepared by a certified arborist which address the success of the tree protection measures and the overall condition of encroached-upon trees relative to their condition prior to project construction. If any trees are found to be in serious decline ("D" or "F" status), the arborist's report must include a Damaged Tree Report Addendum to the TPP which recommends offsets and any associated additional monitoring. The applicant shall implement any recommendations made by the arborist's Damaged Tree Report Addendum to the satisfaction of the Planning Director. The applicant shall submit annual monitoring reports for a period of no less than five years to start after all buildings have been issued a Certificate of Occupancy.

<u>Recommended Mitigation Measure CR-3:</u>

<u>Temporary Fencing</u>
Prior to issuance of a building permit, the applicant shall ensure that temporary fencing is installed to maintain a minimum protective buffer around the critical root area of all 19 protected trees (referred to herein as the tree protection zone) from construction and grading activities prior to the start of construction activities around work and staging areas, where necessary, to prevent inadvertent encroachment into Landmark No. 15. The tree protection zone shall be identified and the location marked onsite by a qualified arborist. The temporary fence should be at least three feet high, clearly visible and supported by steel T-bar or similar stakes and warning signs shall be prominently displayed. The fencing shall remain in place until all proposed buildings have been issued a Certificate of Occupancy.

<u>Recommended Mitigation Measure CR-4:</u>

<u>Unanticipated Discovery Plan</u>
To address the potential that unmarked burials and funerary objects associated with the Hueneme Masonic Cemetery may extend into the subject property (identified as Assessor Parcel Nos. 225-0-014-160 and -190), the applicant shall prepare an Unanticipated Discovery Plan prior to issuance of a building or grading permit.

The Unanticipated Discovery Plan would describe the procedures to be followed in the event that previously unidentified unmarked burials and/or funerary objects are discovered during construction of the proposed project. If previously unidentified burials and/or objects are discovered during construction, all construction and grading activities would be suspended in the vicinity of the find. The resource would then be evaluated for listing in the California Register of Historic Resources (CRHR) by a qualified archaeologist, and, if the resource is determined to be eligible for listing in the CRHR, either the resource would be avoided or mitigated. If human skeletal remains are uncovered during construction of the proposed project, the applicant and/or its contractors shall immediately halt all work in the immediate area, contact the applicable County Coroner to evaluate the remains, and follow the procedures and protocols set forth in Section 15064.5 (e)(1) of the CEQA Guidelines. Per California Health and Safety Code Section 7050.5, upon the discovery of human remains, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains.

<u>Recommended Mitigation Measure CR-5</u>**:**

<u>Cultural Resources Monitoring</u>
To address the potential that unmarked burials and funerary objects associated with the Hueneme Masonic Cemetery may extend into the subject property (identified as Assessor Parcel Nos. 225-0-014-160 and -190), Prior to issuance of a building or grading permit, the applicant will retain the services of a qualified professional cultural resources consultant who meets or exceeds the U.S. Secretary of the Interior's Qualification standards and has knowledge of the cultural history of the proposed project area to monitor all grading activities on the subject property.

The consultant shall monitor for purposes of inspecting all grading activities within five feet of the surface associated with project construction. If the monitor suspects that potentially significant cultural resources have been encountered, the piece of equipment that encounters the suspected deposit will be stopped and the excavation will be inspected by the monitoring cultural resource consultant. If the suspected remains prove to be not significant or not cultural in origin, work may recommence immediately.

Please contact Nicole Doner at 805-654-5042 or nicole.doner@ventura.org if you have any questions regarding the recommendations.

Letter 1

COMMENTER: Nicole Doner, Oxnard Cultural Heritage Board staff

DATE: June 24, 2015

Response 1.1

The commenter recommends the revised changes (additions are shown in italics and deletions are crossed out) to the Mitigation Measures identified in the Draft MND for Cultural Resources:

> **CR-1** *Prior to the issuance of a grading or building permit,* the applicant shall develop a Tree Protection Plan *prepared by a certified arborist* for review and approval by the Planning Division *and the Oxnard Cultural Heritage Board (OCHB)*. The Tree Protection Plan shall incorporate the recommendations from Addendums II and III, prepared by LA Johnny and Jordan Gilbert and Bain Landscape Architects, Inc. and dated October 18, 2014 and January 26, 2015, respectively, *and recommendations from the OCHB which addresses the protection of all 14 onsite protected trees and the 5 off-site protected trees (located on the Hueneme Masonic Cemetery property).*
>
> The Tree Protection Plan shall require protection during project grading and construction. Pruning specifications for each tree as well as ongoing monitoring *of the tree health for a period of no less than three years after final construction shall* occur *unless a certified arborist recommends additional monitoring beyond the three years* ~~until a certified arborist deems the pruning and/or monitoring infeasible~~. Monitoring shall include the 14 onsite trees as well as offsite *5* Blue Gum Eucalyptus, including tree #73 or any other trees determined by the arborist to need preservation within immediate proximity of the site, which are identified to be a safety risk by a certified arborist. The applicant shall submit a final arborist report for review and approval by City staff *and OCHB* prior to issuance of grading permit.
>
> *The applicant shall avoid impacting Landmark 15 (referred to herein as 'protected trees') to the extent feasible during construction and grading, and shall offset or mitigate any damage to protected trees or associated impacts from such damage. If protected trees are felled/damaged and require offsets/mitigation, the applicant shall plant new trees onsite as the offset/mitigation measure and the applicant shall:*
>
> a. *Post a financial assurance to cover the costs of planting and maintaining the offset trees; and*
> b. *Reimburse the City for staff and/or consultant costs to monitor compliance. City staff time and consultant costs to monitor compliance will be billed to the Permittee.*

The mitigation measure has been revised as suggested with the exception of requiring protection of the five off-site protected trees located on the neighboring property, which is the Hueneme Masonic Cemetery. The proposed project would not create any significant impacts to the trees located off-site; therefore, mitigation to protect these trees is not warranted or required. If development is proposed at a future date on the Hueneme Masonic Cemetery property, the City would evaluate potential impacts to the five off-site protected trees at that time. Mitigation Measure CR-1 is further amended as discussed in Response 3.5, below. The complete and revised measure reads as follows:

CR-1 Prior to the issuance of a grading or building permit, the applicant shall develop a Tree Protection Plan prepared by a certified arborist for review and approval by the Planning Division and the Oxnard Cultural Heritage Board (OCHB). The Tree Protection Plan shall incorporate the recommendations from Addendums II and III, prepared by LA Johnny and Jordan Gilbert and Bain Landscape Architects, Inc. and dated October 18, 2014 and January 26, 2015, respectively, except where the arborist's recommendations are in conflict with adopted mitigation measures or conditions of approval. The Tree Protection Plan shall also incorporate the OCHB recommendations which address the protection of all 14 onsite protected trees.

The Tree Protection Plan shall require protection of the protected trees (Landmark 15) during project grading and construction and shall incorporate off-sets or mitigation values for replacement of protected trees that are damaged or felled during and after construction. Pruning specifications for each tree as well as ongoing monitoring of the tree health for a period of no less than five years after final construction shall occur unless a certified arborist recommends additional monitoring beyond the five years ~~until a certified arborist deems the pruning and/or monitoring infeasible~~. Monitoring shall include the 14 onsite trees as well as offsite Blue Gum Eucalyptus, including tree #73 or any other trees determined by the arborist to need preservation within immediate proximity of the site, which are identified to be a safety risk by a certified arborist. The applicant shall submit a final arborist report for review and approval by City staff and OCHB prior to issuance of grading permit.

If protected trees are felled/damaged and require offsets/mitigation, the applicant shall plant new trees onsite as the offset/mitigation measure at a ratio of 4:1 and the applicant shall:

a. Post a financial assurance to cover the costs of planting and maintaining the offset trees; and
b. Reimburse the City for OCHB and City staff and/or consultant costs to monitor compliance. City staff time and consultant costs to monitor compliance will be billed to the applicant.

Response 1.2

The commenter recommends incorporation of the following new mitigation measures into the Draft MND for Cultural Resources:

***CR-2** Tree Health Monitoring and Reporting*

The applicant shall submit to the City, annual monitoring reports to be prepared by a certified arborist which address the success of the tree protection measures and the overall condition of encroached-upon trees relative to their condition prior to project construction. If any trees are found to be in serious decline ("D" or "F" status), the arborist's report must include a Damaged Tree Report Addendum to the TPP which recommends offsets and any associated additional monitoring. The applicant shall implement any recommendations made by the arborist's

Damaged Tree Report Addendum to the satisfaction of the Planning Director. The applicant shall submit annual monitoring reports for a period of no less than three years to start after all buildings have been issued a Certificate of Occupancy.

CR-3 *Temporary Fencing*
Prior to issuance of a building permit, the applicant shall ensure that temporary fencing is installed to maintain a minimum protective buffer around the critical root area of all of the 19 protected trees (referred to as the tree protection zone) from construction and grading activities prior to the start of construction activities around work and staging areas, where necessary, to prevent inadvertent encroachment into Landmark No. 15. The tree protection zone shall be identified and the location marked onsite by a qualified arborist. The temporary fence should be at least three feet high, clearly visible and supported by steel T-bar or similar stakes and warning signs shall be prominently displayed. The fencing shall remain in place until all proposed buildings have been issued a Certificate of Occupancy.

CR-4 *Unanticipated Discovery Plan*
Prior to the issuance of a building permit, the applicant shall prepare an Unanticipated Discovery Plan which would describe the procedures to be followed in the event that previously unidentified cultural resources are discovered during construction of the proposed project. If previously unidentified cultural resources are discovered during construction, all construction and grading activities would be suspended in the vicinity of the find. The resource would then be evaluated for listing in the California Register of Historic Resources (CRHR) by a qualified archaeologist, and, if the resource is determined to be eligible for listing in the CRHR, either the resource would be avoided or mitigated. If human skeletal remains are uncovered during construction of the proposed project, the applicant and/or its contractors shall immediately halt all work in the immediate area, contact the applicable County Coroner to evaluate the remains, and follow the procedures and protocols set forth in Section 15064.5 (e)(1) of the CEQA Guidelines. Per California Health and Safety Code Section 7050.5, upon the discovery of human remains, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains.

CR-5 *Cultural Resources Monitoring*
Prior to issuance of a building or grading permit, the applicant will retain the services of a qualified professional cultural resources consultant who meets or exceeds the U.S. Secretary of the Interior's Qualification standards and has knowledge of the cultural history of the proposed project area to monitor all grading activities on the subject property (identified as Assessor Parcel Nos. 225-0-014-160 and -190).

The consultant shall monitor for purposes of inspecting all grading activities within five feet of the surface associated with project construction. If the monitor suspects that potentially significant cultural resources have been encountered, the piece of equipment that encounters the suspected deposit will be stopped and the excavation will be inspected by the monitoring cultural resource consultant. If the suspected remains prove to be not significant or not cultural in origin, work may recommence immediately.

The suggested mitigation measures have been added to the MND.

Letter No. 2

SCOTT H. QUADY, PRESIDENT
DIVISION 2

ANDRES SANTAMARIA, SECRETARY
DIVISION 4

STEVE BLOIS, DIRECTOR
DIVISION 5

CALLEGUAS

THOMAS L. SLOSSON, VICE PRESIDENT
DIVISION 1

ANDY WATERS, TREASURER
DIVISION 3

SUSAN B. MULLIGAN
GENERAL MANAGER

web site: www.calleguas.com

2100 OLSEN ROAD • THOUSAND OAKS, CALIFORNIA 91360-6800 805/526-9323 • FAX: 805/522-5730 • FAX: 805/526-3675

June 4, 2015

RECEIVED

JUN 08 2015

PLANNING DIVISION
CITY OF OXNARD

Kathleen Mallory
Project Planner
City of Oxnard, Planning Division
214 South C Street, Oxnard, CA 93030

RE: MITIGATED NEGATIVE DECLARATION MND 2015-01

Dear Kathleen,

Thank you for sending Calleguas Municipal Water District a copy of the Notice of Intent to Adopt a Mitigated Negative Declaration MND 2-15-01. The purpose of this letter is to advise the City of Oxnard that the two parcels under consideration, APN 225-0-014-160 and APN 225-0-014-190 are not within the service area of Calleguas. They make up slightly more than half of a window that also comprises three other parcels between Pleasant Valley Road and Etting Road. 2.1

Until annexation of these parcels to Calleguas is completed, no water will-serve letter or building permit may be issued for the proposed projects and no municipal water may be supplied to them. Please refer the project applicant to Calleguas for information on annexation to the District.

You are welcome to call me any time with questions at 805-579-7129.

Sincerely,

Cy Johnson

Cy Johnson
Development Projects Administrator

cc: Eric Bergh, CMWD

Letter 2

COMMENTER: Cy Johnson, Development Projects Administrator, Calleguas Municipal Water District

DATE: June 8, 2015

<u>Response 2.1</u>
The commenter notes that the two parcels under consideration, APN 225-0-014-160 and APN 225-0-014-190, are not within the service area of Calleguas Water District. The commenter also notes that these parcels make up slightly more than half of a windrow that also comprises three other parcels between Pleasant Valley Road and Etting Road. The commenter notes that no water will-serve letter or building permit may be issued for and no municipal water may be supplied to the proposed projects until annexation of the aforementioned parcels to Calleguas is complete.

Sections IX, *Hydrology and Water Quality*, and Section XIV, *Public Services,* of the IS-MND have been updated to clarify that water supply to the project site is provided by the City of Oxnard.

Letter No. 3

Memorandum

County of Ventura • Resource Management Agency • Planning Division
800 S. Victoria Avenue, Ventura, CA 93009-1740 • (805) 654-2478 • ventura.org/rma/planning

DATE: June 24, 2015

TO: Laura Hocking, Ventura County Planning Division

FROM: Whitney Wilkinson, Ventura County Planning Division

SUBJECT: Coastal Apartment Homes and Coastal Senior/Assisted Living Notice of Intent to Adopt a Mitigated Negative Declaration (RMA 15-0012)

I have reviewed the City of Oxnard's Notice of Intent (NOI) to adopt a Mitigated Negative Declaration (MND) for the Coastal Apartment Homes and Coastal Senior/Assisted Living Project (RMA 15-0012). The subject property is located in the City of Oxnard.

1. Nesting Birds

The MND states that the Blue Gum Eucalyptus (*Eucalyptus globulus*) Grove, located on the south, west, and north perimeters of the project site, is a historical landmark (Ventura County Historical Landmark #12) and will remain in place. The Biological Resources Assessment (BRA) prepared for the proposed project noted a raptor nest located 180 feet west of the project site during surveys conducted in March of 2014.[1] Many bird species can be especially sensitive to noise, vibration, and other disturbance associated with construction activities and increased traffic during nesting.[2,3] Thus, even though many trees on or adjacent to the subject property that could support nesting activity will not be removed as a result of the project, indirect impacts associated with construction activities could occur and should be addressed in the MND. As a result of the raptor nest observation and nesting habitat present, the BRA concluded that the project could impact protected birds and recommends nesting bird mitigation measures. These measures consist of avoidance of construction activities during the nesting bird season. If the nesting season cannot be avoided, the BRA recommends surveys prior to construction activities and establishment of a suitable buffer if active nesting is found to

3.1

[1] Rincon Consultants, March 2014. *Biological Resources Assessment Pleasant Valley Apartments*, page 3.
[2] Francis, C. D., Paritsis, J., Ortega, C. P., and Cruz, A. 2011. "Landscape Patterns of Avian Habitat use and Nest Success are Affected by Chronic Gas Well Compressor Noise," *Landscape Ecology.* DOI 10.1007/s10980-011-9609-z
[3] McClure CJW, Ware HE, Carlisle J, Kaltenecker G, Barber JR. 2013 An experimental investigation into the effects of traffic noise on distributions of birds: avoiding the phantom road. Proc R Soc B 280: 20132290. http://dx.doi.org/10.1098/rspb.2013.2290

occur, or monitoring of nesting individuals prior to construction activities to ensure nesting individuals are not disturbed.

The California Department of Fish and Wildlife (CDFW) recommends[4] that nesting bird season surveys be conducted if construction is to commence between January 1st and September 1st when raptors and other protected birds have the potential to nest. If nests are found, CDFW also recommends a buffer distance of 500 feet for raptors and 300 feet for all other protected birds.

However, the MND neither acknowledged potential impacts to nesting birds nor
incorporated the recommended nesting bird survey mitigation measure contained in the
BRA. It is recommended that the MND be revised to consider potential impacts to
nesting birds and include the suggested mitigation measures from the BRA regarding 3.2
avoidance of nesting season, pre-construction surveys and establishment of appropriate
buffers, and/or monitoring. However, the measure should note the expanded nesting
bird season survey dates set forth by CDFW referenced above.

2. Monarch Butterflies

Neither the biological resources section of the MND nor the BRA prepared for the
project considered potential impacts to monarch butterfly (*Danaus plexippus*)
overwintering populations. Monarch butterflies are given global and state element
rankings by NatureServe and the California Natural Diversity Database (CNDDB) to
describe their conservation status. Monarchs have been given a global rank of G5,
indicating they are globally secure (common; widespread and abundant) and a State
rank of S3, indicating they are vulnerable at the State level (at moderate risk of 3.3
extinction due to a restricted range, relatively few populations, recent and widespread
declines, and other factors). CNDDB tracks overwintering roost sites, in part, to inform
local land use decision making. In addition, the US Fish and Wildlife Service found that
a petition to list a subspecies of monarch butterfly (*Danaus plexippus plexippus*)
presents substantial information that may warrant listing under the Federal Endangered
Species Act.

A CNDDB record of a monarch butterfly overwintering population is described as being
located at a "'Blue Gum Grove' site, W end of Etting Rd. at Olds Rd, just E of Pleasant
Valley Rd, Oxnard." Due to past observations of this species and the presence of
suitable overwintering habitat on and adjacent to the site, potential impacts to
overwintering monarch butterflies should be analyzed in the MND. Because 3.4
overwintering monarchs have the potential to occur, mitigation measures to avoid
potential impacts should be incorporated into the MND. These measures should include

[4] CDFW comment letter "Initial Study and Mitigated Negative Declaration for the VC Fire Station #20, City of Ojai, Ventura County, SCH # 201471052." The comment letter sets forth guidance on expansion of the nesting season to include February 1 – September 1 for most protected birds and January 1- June 30th for raptors.

avoidance of construction activity during monarch overwintering season (October 1st –
March 1st) or include pre-construction surveys performed by a qualified biologist with 3.4
authority to establish avoidance buffers should an overwintering population occur in the vicinity of construction activities.

Finally, the MND sets forth Mitigation Measure CR-1 to account for potential impacts to historical resources including the Blue Gum Eucalyptus Grove. The measure requires a Tree Protection Plan that contains measures to monitor and protect the trees during
construction activities. Measures to protect potentially occurring Monarch butterflies and 3.5
nesting birds should coincide and be consistent with the protective measures set forth in the Tree Protection Plan.

Thank you for the opportunity to comment on the NOI. If you have questions regarding this submittal, please contact Whitney Wilkinson at 805-654-2462 or whitney.wilkinson@ventura.org.

Letter 3

COMMENTER: Whitney Wilkinson, Ventura County Planning Division

DATE: June 24, 2015

Response 3.1

The commenter notes that indirect impacts to nesting birds associated with construction activities could occur during construction of the projects and recommends addressing these impacts in the IS-MND.

Recommended Biological Resource Condition of Approval 1 was added to address potential impacts to nesting birds based on the recommendation of the Biological Resource Assessment (BRA) which can be found in Appendix B. The project will be conditioned by the City to require nesting bird surveys specified under recommended Biological Resource Condition of Approval 1 for consistency with the City of Oxnard's 2030 General Plan Environmental Resource Policies 3.2 and 4.1.

Response 3.2

The commenter recommends that the IS-MND be revised to include the suggested mitigation measures from the Biological Resources Assessment (BRA) consistent with the recommendations of the California Department of Fish and Wildlife (CDFW) to require avoidance of nesting season, pre-construction surveys, establishment of appropriate buffers, and/or monitoring.

Recommended Biological Resource Condition of Approval 1 includes specific timing for nesting bird surveys, which was developed in consultation directly with the CDFW. The condition also addresses buffer requirements and monitoring if nesting birds are discovered during the nesting bird surveys.

Response 3.3

The commenter notes that the Biological Resources section of the MND and the BRA prepared for the project do not consider potential impacts to monarch butterfly (*Danaus plexippus*) overwintering populations. The commenter suggests that potential impacts to overwintering monarch butterflies should be analyzed in the IS-MND due to past observations of this species and the presence of suitable overwintering habitat on and adjacent to the project site.

The Final MND has been revised to include an analysis of potential impacts to the protected monarch butterfly overwintering roosts, and no impact would occur with implementation of recommended Biological Resource Condition of Approval 2.

Response 3.4

The commenter recommends the following measures, to avoid potential impacts to monarch butterfly overwintering populations, be incorporated into the mitigation measures in the IS-MND:

- *avoidance of construction activity during monarch overwintering season (October 1st – March 1st) or;*
- *inclusion of pre-construction surveys performed by a qualified biologist with authority to establish avoidance buffers should an overwintering population occur in the vicinity of construction activities.*

The project will be conditioned by the City to require pre-construction surveys for protected monarch butterfly overwintering roost under Recommended Biological Resource Condition of Approval 2 for consistency with the City of Oxnard's 2030 General Plan Environmental Resource Policies 3.2 and 4.1. The condition also includes buffer requirements, fencing, and monitoring if overwintering roosts are detected.

Response 3.5

The commenter notes that the IS-MND sets forth Mitigation Measure CR-1 to account for potential impacts to historical resources, including the Blue Gum Eucalyptus Grove. The commenter also notes that measure CR-1 requires a Tree Protection Plan that contains measures to monitor and protect the trees during construction activities. The commenter recommends that measures to protect potentially occurring Monarch butterflies and nesting birds should coincide and be consistent with the protective measures set forth in the Tree Protection Plan.

Mitigation Measure CR-1 has been amended as follows: The Tree Protection Plan shall incorporate the recommendations from Addendums II and III, prepared by LA Johnny and Jordan Gilbert and Bain Landscape Architects, Inc. and dated October 18, 2014 and January 26, 2015, respectively, except where the arborist's recommendations are in conflict with adopted mitigation measures or conditions of approval. Mitigation Measure CR-1 is further amended as described in responses to Letter 1. The complete and revised measure reads as follows:

CR-1 Prior to the issuance of a grading or building permit, the applicant shall develop a Tree Protection Plan prepared by a certified arborist for review and approval by the Planning Division and the Oxnard Cultural Heritage Board (OCHB). The Tree Protection Plan shall incorporate the recommendations from Addendums II and III, prepared by LA Johnny and Jordan Gilbert and Bain Landscape Architects, Inc. and dated October 18, 2014 and January 26, 2015, respectively, except where the arborist's recommendations are in conflict with adopted mitigation measures or conditions of approval. The Tree Protection Plan shall also incorporate the OCHB recommendations which address the protection of all 14 onsite protected trees.

The Tree Protection Plan shall require protection of the protected trees (Landmark 15) during project grading and construction and shall incorporate off-sets or mitigation values for replacement of protected trees that are damaged or felled during and after construction. Pruning specifications for each tree as well as ongoing monitoring of the tree health for a period of no less than five years after final construction shall occur unless a certified arborist recommends additional monitoring beyond the five years ~~until a certified arborist deems the pruning and/or monitoring infeasible~~. Monitoring shall include the 14 onsite trees as well as offsite Blue Gum Eucalyptus, including tree #73 or any other trees determined by the arborist to need preservation within immediate proximity of the site, which are identified to be a safety risk by a certified arborist. The applicant shall submit a final arborist report for review and approval by City staff and OCHB prior to issuance of grading permit.

If protected trees are felled/damaged and require offsets/mitigation, the applicant shall plant new trees onsite as the offset/mitigation measure at a ratio of 4:1 and the applicant shall:

a. Post a financial assurance to cover the costs of planting and maintaining the offset trees; and
b. Reimburse the City for OCHB and City staff and/or consultant costs to monitor compliance. City staff time and consultant costs to monitor compliance will be billed to the applicant.

Letter No. 4

PUBLIC WORKS AGENCY
TRANSPORTATION DEPARTMENT
Traffic, Advance Planning & Permits Division
MEMORANDUM

DATE: June 15, 2015

TO: RMA – Planning Division
Attention: Laura Hocking

FROM: Transportation Department GB for BE

SUBJECT: REVIEW OF DOCUMENT 15-012 Notice of Intent (NOI) to adopt Mitigated Negative Declaration and Initial Study (MND/IS)
Project: **Coastal Apartment Homes and Coastal Senior / Assisted Living** Zone Change, Density Bonus, and Planned Development Permit for 101-unit apartment homes and 70-unit senior assisted living suites located on 7.28 acres of two parcels with frontage on Pleasant Valley Road and Etting Road in the City of Oxnard.
Lead Agency: **City of Oxnard Planning Division** (city)

Pursuant to your request, the Public Works Agency Transportation Department has completed its review of the MND/IS for the Coastal Apartment Homes and Coastal Senior / Assisted Living Projects (Projects).

The Mitigated Negative Declaration (MND) is for two projects by the same developer to construct 101 apartment homes and 70 senior assisted living suites on two adjacent parcels with frontage on Pleasant Valley Road and Etting Road in the City of Oxnard. A Zone Change (from Community Reserve (C-R) to Multiple-Family Residential (R-2-PD)) and Density Bonus (from 12 to 17 units per acre) are required to bring the property into compliance with the 2030 General Plan and allow the 35 % increase in density. The 83,121 SF 101-unit apartment homes will consist of 23 one-bedroom, 70 two-bedroom, and 8 three-bedroom units with 15 % of the units designated for low income households. The 51,589 SF 70-unit "senior" project will consist of 17 memory care units, 44 studios, and 9 one-bedroom units. The projects will provide 229 and 16 parking spaces respectively.

According the Traffic Study by ATE dated May 8, 2015, the two projects would generate 863 average daily trips, 59 morning peak-hour trips (19/40 in/out), and 79 afternoon/evening peak-hour trips (49/30 in/out). The nearest county-maintained roadways are the county portion of Olds Road approximately 680 feet south of Etting Road (city) and the county portion of Etting Road approximately 1,040 feet east of the southeasterly corner of the development. The county portion of Pleasant Valley Road is approximately 1,870 feet northeast of the northeasterly corner of the development. The project(s) are addressed as 2295 Etting Road.

We offer the following comment:

The cumulative impacts of the development of this project, when considered with the cumulative impact of all other approved (or anticipated) development projects in the County, will be potentially significant. To address the cumulative adverse impacts of traffic on the County Regional Road Network, the appropriate Traffic Impact Mitigation Fee (TIMF) should be paid to the County when development occurs. Based on the information provided in the SMND, and the reciprocal agreement between the City of Oxnard and the County of Ventura, the fee due to the County would be: 4.1

$57,242.79 = 863 ADT** x $66.33^^/ADT

<u>Notes</u>

1) ** Trip generation per Traffic Study by ATE dated May 8, 2015.

2) ^^ TIMF Rate for Oxnard Traffic District #8

3) The above estimated fee may be subject to adjustment at the time of deposit, due to provisions in the TIMF Ordinance allowing the fee to be adjusted for inflation based on the Engineering News Record Construction Cost Index. The above is an estimate only based on information provided in the MND/IS.

Our review is limited to the impacts this project may have on the County's Regional Road Network.

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Letter 4

COMMENTER: County of Ventura Public Works Agency Transportation Department

DATE: June 15, 2015

Response 4.1
The commenter notes that the cumulative impacts of the development of the project, when considered with the cumulative impact of all other approved (or anticipated) development projects in the County, will be potentially significant. The commenter suggests payment of the appropriate Traffic lmpact Mitigation Fee (TIMF) to the County, when development occurs, to address the cumulative adverse impacts of traffic on the County Regional Road Network.

As discussed in Section XVI, Transportation /Traffic, Tables 12 and 13, and the Traffic and Circulation Study prepared by Associated Transportation Engineers and included as Appendix J of the IS-MND, the proposed project would not create any potentially significant impacts. Nevertheless, the project would be conditioned by the City to require the applicant to pay applicable fees including a Traffic Impact Mitigation Fee based on a reciprocal agreement between the City of Oxnard and the County of Ventura

Letter No. 5

VENTURA COUNTY
AIR POLLUTION CONTROL DISTRICT
Memorandum

TO: Laura Hocking, Planning DATE: June 23, 2015

FROM: Alicia Stratton

SUBJECT: Request for Review of Mitigated Negative Declaration for the Coastal Apartment Homes and Coastal Senior/Assisted Living project, MND 2015-01, City of Oxnard (Reference No. 15-012)

Air Pollution Control District staff has reviewed the subject mitigated negative declaration, which is a proposal for a planned development permit for 83,121 sq. ft. two- and three-story multi-family structure with 23 one-bedroom units, 70 two-bedroom units, and 8 three-bedroom units on a 6.23 acre site. A zone change for compliance with the 2030 General Plan designation and 35% Density Bonus requiring 15 affordable units; a senior/assisted living project involving 51,589 sq. ft. two- and three-story residential structure with 70 suites, 17 memory care units, 44 studio units and 9 one-bedroom units. The project location is 2295 Etting Road in the Southeast Community of the City of Oxnard.

Section III of the mitigated negative declaration addresses air quality issues. We concur with the findings of this discussion that significant air quality impacts are not expected to result from the project. Table 1, *Estimated Daily Construction Emissions*, indicates that 98.21 lbs/day ROG and 105.87 lbs/day NOx would result from the project. Although these emissions exceed APCD's 25 lbs/day thresholds for these pollutants as described in the Ventura County Air Quality Assessment Guidelines, they are not counted toward long-term project emissions because they are temporary. Table 2, *Project Daily Operation Emissions*, indicates that 10.9 lbs/day ROG and 10.5 lbs/day NOx would result from the project. These emissions are below the significance threshold described above; therefore, the project will not have a significant impact on regional air quality. Construction-related techniques to reduce short-term emissions are described on Page 24. Implementation of these measures as well as the mitigation measures described on Pages 25-26 will reduce potential short-term air quality impacts. No further air quality mitigation is needed.

If you have any questions, please call me at (805) 645-1426.

Letter 5

COMMENTER: Alicia Stratton, Ventura County Air Pollution Control District

DATE: June 23, 2015

Response 5.1
The commenter agrees with the findings of the air quality analysis that significant air quality impacts are not expected to result from the project and suggests that no further air quality mitigation is needed.

No response is necessary.

Appendix L

Mitigation Monitoring and Reporting Program

Mitigation Monitoring and Reporting Program

This document is the Mitigation Monitoring and Reporting Program (MMRP) for the Oxnard Coastal Apartment Homes Project and Coastal Senior/Assisted Living Project, proposed in the City of Oxnard, California. Public Resources Code Section 21081.6(a)(1) requires that a Lead Agency adopt an MMRP before approving a project in order to mitigate or avoid significant impacts that have been identified in Mitigated Negative Declaration (IS-MND). The purpose of the MMRP is to ensure that the required mitigation measures identified in the IS-MND are implemented as part of the overall project implementation. In addition to ensuring implementation of mitigation measures, the MMRP provides feedback to agency staff and decision-makers during project implementation, and identifies the need for enforcement action before irreversible environmental damage occurs.

The following table summarizes the mitigation measures for each issue area identified in the IS-MND for the Oxnard Coastal Apartment Homes Project and Coastal Senior/Assisted Living Project. The table identifies each mitigation measure; the action required for the measure to be implemented; the time at which the monitoring is to occur; the monitoring frequency; and the agency or party responsible for ensuring that the monitoring is performed. In addition, the table includes columns for compliance verification. Where an impact was identified to be less than significant, no mitigation measures were required.

Mitigation Measure/Condition of Approval	Applicable Project	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
						Initial	Date	Comments
AIR QUALITY								
AQ-1 All construction equipment shall be maintained and tuned to meet applicable California Environmental Protection Agency (Cal/EPA) and the California Air Resources Board (CARB) emissions requirements. At such time as new emission control devices or operational modifications are found to be effective, such devices or operational modifications shall be required on all construction equipment operating pursuant to City permits.	Apartment Homes and Senior Living	The City shall verify that requirements are included on all grading plans.	Prior to issuance of grading permits.	Ongoing throughout construction.	City of Oxnard Development Services Department			
AQ-2 The following dust suppression measures shall be incorporated into each project: a. Watering all excavated material to prevent wind erosion while it is on-site or being moved; b. Periodic watering of construction sites or use of APCD approved dust suppression compounds that bind with the surface layers of soil and prevent soil particles from being eroded; c. Controlling the number and activity of vehicles on site at any given time; d. Seeding areas to be left inactive for a long enough period to secure the soil, limiting the area excavated at any given time; e. Limiting on-site vehicle traffic to 15 miles per hour; and f. Sweeping streets adjacent to the construction site to remove dust caused by the construction activities.	Apartment Homes and Senior Living	The City shall verify that requirements are included on all grading plans.	Prior to issuance of grading permits.	Ongoing throughout construction.	City of Oxnard Development Services Department			
AQ-3 All clearing, grading, earth moving, or excavation activities shall cease during periods of high winds (i.e., greater than 15 miles per hour averaged over one hour) to	Apartment Homes and Senior Living	The City shall verify that requirements are included on all grading plans.	Prior to issuance of grading permits.	Ongoing throughout grading and excavation.	City of Oxnard Development Services Department			

Mitigation Measure/Condition of Approval	Applicable Project	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
						Initial	Date	Comments
prevent excessive amounts of fugitive dust.								
AQ-4 All trucks hauling excavated or graded material off-site shall comply with State Vehicle Code Section 23114, with special attention to Sections 23114(b)(F), (e)(2), and (e)(4) as amended, regarding the prevention of such material spilling onto public streets and roads.	Apartment Homes and Senior Living	The City shall verify that requirements are included on all grading plans.	Prior to issuance of grading permits.	Ongoing throughout grading and excavation.	City of Oxnard Development Services Department			
AQ-5 Prior to issuance of a grading permit, the applicant and/or contractors shall contact the VCAPCD for more specific guidelines as applicable to the project construction activities, and provide the Planning Manager or designee, with a memorandum as to the date, contact person, and applicable provisions of Rule 55, which may include (but are not limited to) the following provisions: 1) visible dust from an applicable source is prohibited or limited, 2) Measures must be taken to reduce or prevent track-out onto paved public roadways, 3) track-out must be removed from roadways, 4) visible dust exceeding 100 feet in length from earth-moving equipment is prohibited, 5) outbound trucks with soil must either be tarped or a 6-inch freeboard below the truck rim, or be wetted to minimize loss of material due to wind or spillage.	Apartment Homes and Senior Living	The City shall verify that requirements are included on all grading plans.	Prior to issuance of grading permits.	Ongoing throughout construction.	City of Oxnard Development Services Department			
AQ-6 Signs displaying the APCD Compliant Line Telephone number for public complaints shall be posted in a prominent location visible off-site.	Apartment Homes and Senior Living	The City shall verify that requirements are included on all grading plans.	Prior to issuance of grading permits.	Ongoing throughout construction.	City of Oxnard Development Services Department			
BIOLOGICAL RESOURCES								
Recommended Biological Resources Condition of Approval 1: Nesting Bird and Raptor Survey. To avoid indirect construction impacts to nesting birds and raptors, consistent with Oxnard General Plan	Apartment Homes and Senior Living	The City shall review a report on the nesting bird and raptor survey. If active raptor or protected bird nests are found, a buffer shall be	Prior to issuance of grading or building permit (whichever is first).	Once before each phase of construction.	City of Oxnard Development Services Department			

Mitigation Measure/Condition of Approval	Applicable Project	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
						Initial	Date	Comments
(Environmental Resource Policies 3.2 and ER 4.1) and the CFG Code and MTBA, vegetation removal and initial ground disturbance must occur outside the bird and raptor breeding season, which is typically February 1 through August 31 (as early as January 1 for some raptors). If construction and ground disturbance must begin within this breeding season, then not more than one week before ground disturbance and/or vegetation removal commences, a nesting bird and raptor pre-construction survey must be conducted by a City-approved biologist (biologist) within the disturbance footprint plus a 300-foot buffer, as feasible. If the project is phased, a subsequent pre-construction nesting bird and raptor survey is required before each phase of construction within the project site and suitable habitat within 300 feet. If no raptor or other bird nests are observed no further mitigation is required.		established.						
Recommended Biological Resources Condition of Approval 2: Conduct Overwintering Monarch Butterfly Surveys and Avoidance. To avoid impacts to protected overwintering butterfly roost consistent with the Oxnard General Plan (Environmental Resource Policies ER 3.2 and ER 4.1), if an active overwintering roost (defined as an aggregation of 10 or more butterflies, present in the same tree or area for one week or more) is present within 100 feet of the project site, all construction, grading, or noise-generating work associated with this project must be seasonally timed to avoid noise- and human activity-related impacts to active overwintering roosts. If work must occur during the overwintering season (generally between October and March), before work, a	Apartment Homes and Senior Living	The City shall review a report on finding of preconstruction survey for overwintering roosts if construction occurs during the roosting season (generally October to March). If roosts are found, must verify buffers are in place.	Prior to issuance of grading or building permit (whichever is first).	Once before each phase of construction.	City of Oxnard Development Services Department			

Mitigation Measure/Condition of Approval	Applicable Project	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
						Initial	Date	Comments
City-approved biologist (biologist) must survey all habitat trees (e.g., eucalyptus) within 100 feet of the development envelope to determine use by monarchs. If eucalyptus trees within 100 feet of the development envelope are found to serve as monarch butterfly overwintering roost, indirect impacts must be minimized to the extent practicable. Construction and grading within 100 feet of an aggregation may be monitored by a biologist, and construction within 50 feet of an active overwintering roost must be delayed until the butterflies abandon the aggregation. With Planning Division approval, construction and grading may occur within 50 feet of aggregations under the direction of a biological monitor ensure project activities are not indirectly impacting protected aggregations. Surveys must be conducted in favorable conditions to identify any active overwintering roosts within 100 feet of the development envelope, at least seven days before construction activities commence. If active overwintering roosts are not observed, no further mitigation is required. If active overwintering roosts are detected, a temporary fence must be installed along the outer boundary of the buffer zone prior to and during any grading and construction activities on the site.								
CULTURAL RESOURCES								
CR-1 Prior to the issuance of a grading or building permit, the applicant shall develop a Tree Protection Plan prepared by a certified arborist for review and approval by the Planning Division and the Oxnard Cultural Heritage Board (OCHB). The Tree Protection Plan shall incorporate the	Apartment Homes	City shall review and approve the Tree Protection Plan.	Prior to issuance of a grading permit.	Once for plan review; ongoing monitoring of compliance during project grading and construction	City of Oxnard Planning Division; City's Landscape Architect			

Mitigation Measure/Condition of Approval	Applicable Project	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
						Initial	Date	Comments
recommendations from Addendums II and III, prepared by LA Johnny and Jordan Gilbert and Bain Landscape Architects, Inc. and dated October 18, 2014 and January 26, 2015, respectively, except where the arborist's recommendations are in conflict with adopted mitigation measures or conditions of approval. The Tree Protection Plan shall also incorporate the OCHB recommendations which address the protection of all 14 onsite protected trees. The Tree Protection Plan shall require protection of the protected trees (Landmark 15) during project grading and construction and shall incorporate off-sets or mitigation values for replacement of protected trees that are damaged or felled during and after construction. Pruning specifications for each tree as well as ongoing monitoring of the tree health for a period of no less than five years after final construction shall occur unless a certified arborist recommends additional monitoring beyond the five years. Monitoring shall include the 14 onsite trees as well as offsite Blue Gum Eucalyptus, including tree #73 or any other trees determined by the arborist to need preservation within immediate proximity of the site, which are identified to be a safety risk by a certified arborist. The applicant shall submit a final arborist report for review and approval by City staff and OCHB prior to issuance of grading permit. If protected trees are felled/damaged and require offsets/mitigation, the applicant shall plant new trees onsite as the offset/mitigation measure at a ratio of 4:1 and the applicant shall:				and for a period of no less than five years after final construction.				

Mitigation Measure/Condition of Approval	Applicable Project	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
						Initial	Date	Comments
a. post a financial assurance to cover the costs of planting and maintaining the offset trees; and b. reimburse the City for OCHB and City staff and/or consultant costs to monitor compliance. City staff time and consultant costs to monitor compliance will be billed to the applicant.								
CR-2 Tree Health Monitoring and Reporting. The applicant shall submit to the City annual monitoring reports to be prepared by a certified arborist which address the success of the tree protection measures and the overall condition of encroached-upon trees relative to their condition prior to project construction. If any trees are found to be in serious decline (“D” or “F” status), the arborist’s report must include a Damaged Tree Report Addendum to the TPP which recommends offsets and any associated additional monitoring. The applicant shall implement any recommendations made by the arborist’s Damaged Tree Report Addendum to the satisfaction of the Planning Director. The applicant shall submit annual monitoring reports for a period of no less than five years to start after all buildings have been issued a Certificate of Occupancy.	Apartment Homes	The City shall review the annual monitoring reports and verify that recommendations in the arborist’s Damaged Tree Report Addendum are implemented to a satisfactory level.	For five years following issuance of a Certificate of Occupancy.	Annually for a period of no less than five years.	City of Oxnard Planning Division			
CR-3 Temporary Fencing Prior to issuance of a grading permit, the applicant shall ensure that temporary fencing is installed to maintain a minimum protective buffer around the critical root area of all 19 protected trees (referred to herein as the tree protection zone) from construction and grading activities prior to the start of construction activities around work and	Apartment Homes	The City shall review grading and construction plans to ensure that fencing information is included.	Prior to issuance of a grading permit.	Once for review of grading and construction plans; continuous monitoring of compliance until issuance of a Certificate	City of Oxnard Planning Division			

Mitigation Measure/Condition of Approval	Applicable Project	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
						Initial	Date	Comments
staging areas, where necessary, to prevent inadvertent encroachment into Landmark No. 15. The tree protection zone shall be identified and the location marked onsite by a qualified arborist. The temporary fence should be at least three feet high, clearly visible and supported by steel T-bar or similar stakes, and warning signs shall be prominently displayed. The fencing shall remain in place until all proposed buildings have been issued a Certificate of Occupancy.				of Occupancy.				
CR-4 Unanticipated Discovery Plan To address the potential that unmarked burials and funerary objects associated with the Hueneme Masonic Cemetery may extend into the subject property (identified as Assessor Parcel Nos. 225-0-014-160 and -190), the applicant shall prepare an Unanticipated Discovery Plan prior to issuance of a building or grading permit. The Unanticipated Discovery Plan would describe the procedures to be followed in the event that previously unidentified unmarked burials and/or funerary objects are discovered during construction of the proposed project. If previously unidentified burials and/or objects are discovered during construction, all construction and grading activities would be suspended in the vicinity of the find. The resource would then be evaluated for listing in the California Register of Historical; Resources (CRHR) by a qualified archaeologist, and, if the resource is determined to be eligible for listing in the CRHR, either the resource would be avoided or mitigated. If human skeletal remains are uncovered during construction of the proposed project, the applicant and/or its contractors shall	Apartment Homes and Senior Living	The City shall ensure that an Unanticipated Discovery Plan is included on grading and construction plans.	Prior to issuance of a building or grading permit.	Once for plan review; ongoing monitoring of compliance throughout construction.	City of Oxnard Planning Division; project construction contractor			

Mitigation Measure/Condition of Approval	Applicable Project	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
						Initial	Date	Comments
immediately halt all work in the immediate area, contact the applicable County Coroner to evaluate the remains, and follow the procedures and protocols set forth in Section 15064.5 (e)(1) of the CEQA Guidelines. Per California Health and Safety Code Section 7050.5, upon the discovery of human remains, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains.								
CR-5 Cultural Resources Monitoring To address the potential that unmarked burials and funerary objects associated with the Hueneme Masonic Cemetery may extend into the subject property (identified as Assessor Parcel Nos. 225-0-014-160 and -190), prior to issuance of a building or grading permit, the applicant will retain the services of a qualified professional cultural resources consultant who meets or exceeds the U.S. Secretary of the Interior's Qualification standards and has knowledge of the cultural history of the proposed project area to monitor all grading activities on the subject property. The consultant shall monitor for purposes of inspecting all grading activities within five feet of the surface associated with project construction. If the monitor suspects that potentially significant cultural resources have been encountered, the piece of equipment that encounters the suspected deposit will be stopped and the excavation will be inspected by the monitoring cultural resource consultant. If the suspected remains prove to be not significant or not cultural in origin, work may recommence immediately.	Apartment Homes and Senior Living	Grading activities shall be monitoring on an ongoing basis during grading.	Prior to issuance of a grading permit.	Ongoing throughout site grading.	City of Oxnard Planning Division			

Mitigation Measure/Condition of Approval	Applicable Project	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
						Initial	Date	Comments
GEOLOGY AND SOILS								
GEO-1 Geotechnical Engineering Study Recommendations The project design, site preparation, and construction shall incorporate and implement all of the recommendations, as outlined in Section 5 of the Geotechnical Engineering Study prepared by Advanced Geotechnical Services, Inc., dated April 25, 2014. These include but are not limited to: a. Upper site soils shall be removed and recompacted for support of the proposed structures as listed in Section 5.2 Geotechnical Engineering Study, Site Preparation, of the geotechnical report. b. Based on the potential for liquefaction-induced settlement, it is recommended that a mat foundation be utilized for support of the proposed structures. The mat foundation should be underlain by a minimum of three feet of newly placed compacted fill. c. All surface runoff must be carefully controlled, and surface runoff control must remain a crucial element of site maintenance. Final grading should provide positive drainage away from footings. All underground plumbing fixtures shall be leak-free and maintained. Trees and large shrubbery shall not be planted so that roots grow under foundations and flatwork when they reach maturity. Irrigation should be carefully planned to ensure that watering is adequate but not excessive. All other recommendations made in the Geotechnical Engineering Study, prepared by Advanced Geotechnical Services, Inc., dated April 25, 2014, shall be incorporated into the	Apartment Homes and Senior Living	The City shall review plans and reports as part of the grading and building permit process and ensure that the recommendations are implemented through project design and constructions.	Prior to issuance of a grading or building permit.	Once for plan review; ongoing monitoring of compliance throughout construction.	City of Oxnard Development Services Department			

Mitigation Measure/Condition of Approval	Applicable Project	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
						Initial	Date	Comments
project as conditions of approval. The report shall be submitted concurrently with plans submitted for review by the Building Official. The Geotechnical Engineering Study is included in the Initial Study-Mitigated Negative Declaration as Appendix F.								
Hydrology and Water Quality								
HYD-1 Water Supply Additional water demand above the amount of potable water demand estimated within the 2010 UWMP for the project site shall be provided by the applicant to offset the net additional water demand associated with the project. This shall be accomplished through a Water Neutrality Plan to be reviewed and approved by the city prior to issuance of any building permit. The Water Neutrality Plan shall contain any combination of the following measures, or other measures suggested by the Applicant, that are quantifiable, permanent offsets of existing potable water use elsewhere in the City, or bring new water supply to the City, that match or exceed 5.53 AFY: a. Transfer of existing FCGMA groundwater allocations to the City. b. Contribute to expansion of the City's water conservation program, such as but not limited to offsets available through programs such as toilet exchange and showerhead replacements. c. Provide to the City financial contributions towards City programs which generate in-City water conservation or recycled water capacity or conveyance not otherwise required by another State or local water conservation program. d. Participate in other similar programs	Apartment Homes and Senior Living	The Utilities Director, in cooperation with the Development Services Director, shall review and approve the Water Neutrality Plan.	Prior to issuance of a building permit.	Once prior to issuance of a building permit.	City of Oxnard Development Services Department			

Mitigation Measure/Condition of Approval	Applicable Project	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
						Initial	Date	Comments
which cumulatively result in an adequate water supply contribution. e. Provide to the City water supplies equal to the shortage amount.								
Noise								
N-1 Acoustical Analysis and Design Mitigation The applicant shall retain a professional acoustical consultant to conduct an acoustical analysis. The recommendations of the acoustical analysis shall be incorporated into project design in order to ensure that interior City noise level standards are achieved. Noise reduction measures that can be incorporated into site design include (but are not limited to): • Air conditioning or a mechanical ventilation system that will allow doors and windows to remain closed; • Double-paned glass on all windows; • Windows and sliding doors mounted in low air infiltration rate frames; • Solid core exterior doors with perimeter weather stripping and threshold seals; and • Acoustically insulated building wall construction Incorporation of these and other similar design requirements would achieve an exterior-to-interior interior noise level reduction of 30 dBA or greater and would attenuate exterior noise levels to acceptable levels.	Apartment Homes and Senior Living	The City shall review building plans to ensure that design requirements are included.	Prior to issuance of building permit.	Once prior to issuance of building permit.	City of Oxnard Development Services Department			
N-2 During all excavation and grading on site, the project contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards.	Apartment Homes and Senior Living	The City shall verify that information is included on all grading and building plans and monitoring activities in the field.	During excavation and grading.	Ongoing throughout excavation and grading.	City of Oxnard Development Services Department			

Mitigation Measure/Condition of Approval	Applicable Project	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
						Initial	Date	Comments
N-3 Construction times shall be limited to 7 a.m. to 7 p.m. daily or in accordance with City Ordinances restricting construction times at the time of construction, whichever is more restrictive.	Apartment Homes and Senior Living	The City shall verify that construction times are included on all grading and building plans.	During all construction activities.	Ongoing throughout construction.	City of Oxnard Development Services Department			
Transportation and Traffic								
T-1 Widen Etting Road from Pleasant Valley Road to Olds Road to provide two eastbound travel lanes. At the Etting Road/Olds Road intersection, the two eastbound travel lanes shall transition to a through lane and exclusive right-turn lane on the eastbound approach. Install a north-south pedestrian crosswalk on the westbound approach of the Etting Road/Olds Avenue intersection in order to enhance the pedestrian route. This shall be completed prior to issuance of Certificate of Occupancy for the Apartment Homes.	Apartment Homes	The City shall verify that Etting Road has been widened.	Prior to issuance of a Certificate of Occupancy for the Apartment Homes.	Once prior to issuance of Certificate of Occupancy of Apartment Homes.	City of Oxnard Development Services Department			
T-2 Install a No Left-Turn sign at the westbound approach of the proposed primary access along Pleasant Valley Road. This shall be completed prior to issuance of Certificate of Occupancy for the Apartment Homes or Senior Project.	Apartment Homes and Senior Living	The City shall verify that a No Left-Turn sign has been installed.	Prior to issuance of a Certificate of Occupancy for the Apartment Homes or Senior Living Project.	Once prior to issuance of Certificate of Occupancy for the Apartment Homes or Senior Project.	City of Oxnard Development Services Department			
T-3 Install a No Entry sign at the proposed gated driveway connection at Etting Road. This shall be completed prior to issuance of Certificate of Occupancy for the Apartment Homes.	Apartment Homes	The City shall verify that a No Entry sign has been installed.	Prior to issuance of Certificate of Occupancy for the Apartment Homes.	Once prior to issuance of Certificate of Occupancy for the Apartment Homes.	City of Oxnard Development Services Department			