

# Final Subsequent Environmental Impact Report Orcutt Union School District Key Site 17 Project

11EIR-00000-00003

(09GPA-00000-00004, 09RZN-00000-000012)



Submitted To:

**Santa Barbara County**  
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March 2012

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**ORCUTT UNION SCHOOL DISTRICT  
KEY SITE 17 PROJECT  
FINAL ENVIRONMENTAL IMPACT REPORT**

09GPA-00000-00004, 09RZN-00000-00012

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# Executive Summary

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# SECTION 1

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## 1.0 EXECUTIVE SUMMARY

### 1.1 INTRODUCTION

The Orcutt Union School District (OUSD) has requested County approval of a General Plan Amendment (GPA) and a Rezone of four parcels within the Orcutt Community Plan (OCP) area. These four parcels comprise the project site. The OUSD is requesting these actions to increase the site's value with the intent to lease it; the selected lessee would ultimately be responsible for development of the site. There currently is no specific development plan for the site. As such, the project assessed in this EIR is a reasonable maximum development that could occur on the site under the proposed General Plan and Zoning designations and standards.

The OCP, a component of the Santa Barbara County Comprehensive Plan (the County's General Plan), plans for growth in the unincorporated area of Orcutt, located in northern Santa Barbara County, south of the City of Santa Maria. An Environmental Impact Report (EIR) for the OCP was completed in December 1995. Key sites are potential development sites that have been examined in more detail in the OCP EIR in order to streamline future environmental review when actual development of a given site is proposed. Key Site 17 is one of 43 key sites identified in the OCP and assessed in the OCP EIR. The project site is a portion of Key Site 17. The OCP includes an action item, Action KS 17-6, which recommends consideration of redesignating and rezoning parcels for a 100 percent senior housing project. The request for a GPA and Rezone is made pursuant to this action item.

This EIR is a Subsequent EIR in accordance with Section 15162 of the California Environmental Quality Act (CEQA) Guidelines, as well as Article V, Section E, 4 of the County of Santa Barbara Guidelines for the Implementation of the California Environmental Quality Act of 1970, as Amended (Last Revised January 8, 2008). The County of Santa Barbara Planning and Development department is the Lead Agency responsible for preparing this EIR.

The purpose of this EIR is to assess the impacts of potential future development that could be permitted at the project site under the proposed GPA/Rezone. Because there is no specific development proposal for the site, the impact analyses in this EIR are programmatic (i.e., general), similar to the level of analysis provided for each of the Key Sites in the OCP EIR. However, this analysis focuses specifically on the proposed project site and the maximum development that could occur on the site under the proposed General Plan and Zoning designations and standards. The analyses identify the OCP EIR impacts that would apply to the proposed project as well as any new or varied impacts. Similarly, mitigation measures include applicable OCP EIR measures, revised as applicable, as well as new measures specific to the proposed project. When a specific development is proposed for the site, that proposal will be assessed in light of the analysis and conclusions in this EIR to determine if further CEQA environmental documentation is required.

Planning and Development circulated a Notice of Preparation (NOP) and EIR Scoping Document on December 15, 2009 for review and comment by the public, agencies, and organizations as required under CEQA. The EIR Scoping Document is provided in **Appendix A**. A Public Scoping Meeting was held on January 7, 2010. Comments relating to the EIR scope were taken into consideration in the preparation of this EIR.

#### 1.1.3 Document Format and Organization

This Executive Summary provides an introduction to the project and summarizes the project description, impact analysis conclusions, and the alternatives analyses. Chapter 2.0, Project Description, provides a detailed description of the proposed project evaluated in the EIR. Chapter 3.0, Related Projects,

identified other proposed projects in the OCP area, which are used for the cumulative impacts analyses, as appropriate. Chapter 4.0, Environmental Setting, Impact Analysis, and Mitigation Measures, addresses each of the issues that were identified in the Initial Study as requiring further analysis in the EIR. The impact analysis for each issue area examined in this EIR is presented in six subsections as described below:

- **Existing Conditions** – This subsection describes the environmental setting.
- **Thresholds of Significance** – This subsection identifies the thresholds used to assess the significance of project impacts. These are based primarily on applicable CEQA criteria and the County’s Environmental Thresholds and Guidelines Manual.
- **Project Impacts** – This subsection describes the nature and extent to which the proposed project would change the existing environment and makes a determination of whether or not these changes would exceed the thresholds of significance.
- **Cumulative Impacts** – This subsection identifies the potential for significant effects to occur as a result of the proposed project in combination with other development anticipated in the vicinity of the project site and buildout of the OCP, as applicable. Where this potential exists, a determination is made as to whether or not the proposed project’s contribution to this impact is cumulatively considerable and therefore significant.
- **Mitigation Measures** – Mitigation measures are identified for each significant impact that would occur as a result of the proposed project. Although not required under CEQA, in some cases mitigation measures are also recommended for impacts that are considered less than significant, in order to further reduce such impacts.
- **Residual Impacts** – This subsection identifies the levels of significance for project impacts following the implementation of mitigation measures, specifically identifying significant unavoidable adverse impacts, i.e., impacts that cannot be mitigated to less than significant levels.

Chapter 5.0 provides a policy consistency analysis; Chapter 6.0 identifies the issues that have been found to be less than significant; Chapter 7.0 describes alternatives to the proposed project and the extent to which each alternative would reduce or avoid the environmental impacts associated with the proposed project; Chapter 8.0 identifies significant irreversible environmental changes associated with the proposed project; Chapter 9.0 discusses whether or not the proposed project would induce further growth in the area; and Chapter 10.0 provides a list of EIR preparers and contacts and reference materials used in preparing this EIR.

## 1.2 PROJECT DESCRIPTION

### 1.2.1 Project Applicant and Landowner

Orcutt Union School District  
Marysia Ochej, Assistant Superintendent, Business Services  
500 Dyer Street  
Orcutt, CA 93455

### 1.2.2 Agent

Oasis Associates, Inc.  
Landscape Architecture + Planning  
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3427 Miguelito Court  
San Luis Obispo, CA 93401



### 1.2.3 Project Site

The proposed project site consists of four parcels (APNs 105-330-005, 105-330-006, 105-134-004, and 105-134-005) that total 9.53 acres. The site is currently undeveloped, with the exception of a 0.28-acre paved parking area that is currently used by the adjacent Oasis Senior Center. The remainder of the site is covered with vegetation, predominantly non-native herbaceous species. Access to the site is available from Soares Avenue to the north and Rice Ranch Road to the south. The site is located just south of Old Town Orcutt and is bounded by Soares Avenue and single-family residences to the north; a partially constructed single-family residential development to the west (referred to as the Stonegate development); Rice Ranch Road, a church, and two single-family homes to the south; and the Oasis Senior Center and OUSD offices and a bus storage/maintenance yard to the east.

The site occupies the central portion of Key Site 17. The partially constructed single-family residential development to the west of the site (on APN 105-330-004) and the OUSD offices and a bus storage/maintenance yard (APN 105-330-016) occupy the remainder of the Key Site 17.

### 1.2.4 Proposed GPA/Rezone

The Orcutt Community Plan includes a policy statement, five development standards, and an action item to guide future development on Key Site 17. [The OUSD's request to amend the OCP and obtain a Rezone is made in consideration of Action KS17-6 (provided below), which states that the County should consider a redesignation and rezone if a 100 percent senior housing project is proposed.]<sup>1</sup> The proposed project includes a request to amend and add to the OCP policy and development standards as follows:

**Policy KS17-1:** Portions of Key Site 17 is are designated Res 8.0 and zoned SLP (e.g., Assessor Parcels 105-330-004 and 105-330-016) and the balance of Key Site 17 (Assessor Parcels 105-134-004, 005; 105-330-005, 006) is designated Res 20 and zoned DR 20 to accommodate a 100 percent senior housing development. Any proposed development on Key Site 17 shall comply with the following development standards.

**DevStd KS17-1:** Any discretionary development shall include a landscape buffer consisting of drought-tolerant trees and shrubs of sufficient density to partially screen the proposed development from Rice Ranch Road, Soares Avenue, and Dyer Street. The buffer along Soares Avenue shall be integrated with the planned park ~~(see Figure KS17-1)~~. A meandering trail, as shown on Figure KS17-1, shall also be developed.

**DevStd KS17-2:** For development located on APN 105-330-004, hHomes located on the periphery of the site and those adjacent to the neighborhood park shall be one-story, except as noted in Action KS17-6. To ensure neighborhood compatibility, development located on Soares Avenue shall be one-story. Any ~~two-story~~ other development on APNs 105-134-004 or 105-134-005 and any development within APNs 105-330-005, 105-330-006, or 105-330-016 shall be visually compatible with, and shall not significantly block long-range southerly views from, Old Town Orcutt.

<sup>1</sup> [ ] This text was added following the Draft EIR public circulation and is differentiated from the underlined text in this Section that denotes the project's changes to the Development Standards.

- DevStd KS17-3:** Any discretionary development shall provide for a dedication and construction of a 1-2 acre public neighborhood park ~~fronting along the western portion of Soares Avenue as conceptually depicted on Figure KS-17-2 located on Key Site 17.~~ Parcels 105-330-004 and 105-134-004 shall each contribute at least 3/4 of an acre to this park and the park shall be a minimum of 100 feet wide where it fronts Soares Avenue. A park at least 3/4 of an acre in size shall be provided within APNs 105-134-004, 105-134-005, 105-330-005, or 105-330-006.
- DevStd KS17-4:** Development on the site shall facilitate pedestrian access to Old Town. The developer(s) shall coordinate with Santa Maria Area Transit (SMAT), and shall provide either a bus turn-out pocket along a public road (e.g., Rice Ranch Road), or a bus stop within the site, if requested by SMAT.
- DevStd KS17-5:** Any access to Rice Ranch Road from this site shall be limited to one point from APN 105-330-06 and shall be coordinated to the greatest degree feasible with access to Site 13.
- Action KS17-6:** A 100% senior housing project on Assessor Parcels 105-134-04, 105-134-05, 105-330-05, or 105-330-05-06 shall comply with California Civil Code §51 et. seq. If an application is filed for a 100% senior housing project, as defined by California Civil Code § 51 et. seq, on Assessors Parcels ~~105-134-04, -05, 105-330-01605, -06 or -08,~~ the County should consider redesignating and rezoning affected parcels to Res. 20 and DR 1420. ~~However, to ensure neighborhood compatibility, the homes fronting Soares Avenue and the homes adjacent to the neighborhood park should be single family on lots at least 6,000 s.f. in size. In addition, buildings on APNs 105-330-05, -06 and -08 may be two stories in height but should be of low profile and screened to the greatest degree feasible.~~
- DevStd KS17-7:** To ensure neighborhood compatibility and maintain visual resources (i.e., long-range southerly hillside views from Old Town Orcutt), buildings shall be of low profile and screened and/or softened with vegetation to the greatest degree [while still meeting the project density objectives].<sup>2</sup> Development shall also follow the Old Town Orcutt Design Guidelines to guide the architectural style and character of the proposed structures and other building elements.

The requested amendment to Policy KS17-1 would change the site's current Comprehensive Plan land use designation from Residential 8.0 units per acre (Res 8) to Residential 20.0 units /acre (Res 20), increasing the density of residential uses allowed at the site. The changes to this policy, along with the requested Rezone of the site, would change the site's zoning from Small Lot Planned (SLP) to Design Residential 20 units per acre (DR-20). SLP zones allow for single-family residences while DR-20 zones allow for single or multiple-family residential uses.

The requested changes to Development Standards KS17-1 and KS17-3 would revise the park requirement such that the park space to be provided by parcel 105-134-004 may be located anywhere within the OUSD project site. This may result in two smaller parks within Key Site 17 rather than one larger park along the south side of Soares Avenue.

<sup>2</sup> [ ] This text was added following the Draft EIR public circulation and is differentiated from the underlined text in this Section that denotes the project's changes to the Development Standards.

The requested revisions to Development Standard KS17-2 would limit the height of buildings to one story along Soares Avenue only, rather than along the entire site perimeter and adjacent to the neighborhood park. However, the requirement that future development be visually compatible with and not block long-range southerly views from Old Town Orcutt would be retained.

The text revisions to Action Item KS17-6 reflect the requested redesignation and rezoning of four parcels comprising the project site (Parcels 105-134-04, 105-134-05, 105-330-05, or 105-330-05-06) to allow for a 100% senior housing project. The action item, however, would still apply to the remaining parcel within Key Site 17 (Parcel 105-330-006).

The proposed inclusion of a new development standard (Dev Std KS 17-7) would provide guidance in the architectural style and character of future development on Key Site 17.

### **1.2.5 Potential Future Development Under the Proposed GPA/Rezoning**

Based on the site's total area (9.53 acres) and a maximum density of 20 units per acre under the proposed land use designation and zoning, 191 units could be developed on the site. To determine the reasonably foreseeable maximum density threshold for the four parcels, a 35% density bonus was applied based upon Government Code §65915-65918 (see below for further discussion of this code). This would allow for up to 257 senior residential units to be constructed on the project site.

Senior housing facilities, or Continuing Care Retirement Communities "CCRC," are typically defined as residential developments that are developed, substantially rehabilitated, or substantially renovated for, senior citizens with at least thirty-five (35) dwelling units (California Civil Code §51.3). Developers of CCRCs have the option to offer one, or a combination of multiple ranges or levels of care required by its residents. These levels of care include the following:

- Independent Living – For healthy seniors who are self-sufficient.
- Assisted Living – For people who do not have severe medical problems, but who require assistance with personal care.
- Skilled Nursing – Facilities with 24-hour medical care for people with chronic ailments.
- Special Alzheimer's Care – Specialized housing and care tailored to people with the disease.
- Continuing Care Community – Complex of residences that contain all of the above, so that seniors can stay in one area as they age.

Government Code §65915-65918 require that local governments provide incentives or concessions for the production of, or donation of land for, certain types of housing, including senior citizen housing and affordable housing. Under this code, senior housing developments may be entitled to a 20% density bonus. Projects that provide affordable housing units or include a land donation are entitled to a density bonus of up to 35%. Concessions or incentives may include reductions in site development standards or modifications to zoning code requirements or architectural design requirements.

As described above, the proposed project evaluated in this EIR is the reasonable maximum development that could occur under the proposed GPA/Rezone. *No specific development proposal is under consideration at this point in time.*

### **1.2.6 Project Objectives**

The OUSD Board of Trustees, as part of the OUSD's asset management program, proposes to rezone the subject properties to accommodate the future development of a 100% senior housing project to increase



their value with the intent to lease the property and initiate a noticing, negotiating, and bid process, consistent with applicable laws. The selected lessee would ultimately be responsible for designing, permitting and constructing the development of the subject properties.

### **1.2.7 Discretionary Actions Required**

The proposed project requires the approval from the County of Santa Barbara for the requested General Plan Amendment and Rezone as described above.

### **1.2.8 Development Previously Evaluated in the OCP EIR**

Future development of Key Sites were evaluated in “mini EIRs” contained in Volume II of the OCP EIR. The project site was evaluated in the OCP EIR as part of the assessment of Key Site 17. With respect to the proposed project site (the central four lots within Key Site 17), the OCP mini-EIR considered a project of approximately 72 residential units. The OCP mini-EIR analysis evaluated several alternatives ranging from the No Project (zoning prior to the OCP EIR) with 111 units, to a “High Buildout” alternative allowing up to 156 units.

## **1.3 SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES**

**Table 1-1** summarizes the proposed project’s environmental impacts and the measures identified to mitigate these impacts. The table also notes the significance of impacts before and after mitigation is implemented. Impacts are classified as follows:

- Class I – Significant impact that cannot be reduced to a less than significant level with implementation of mitigation measures.
- Class II – Significant impacts that can be reduced to a less than significant level with implementation of mitigation measures.
- Class III – Less than significant impacts. Mitigation measures are not required but may be recommended.
- Class IV – Beneficial impacts.

The proposed project would result in Class I impacts related to:

- Aesthetics (incompatibility of project site development with the visual character of Old Town Orcutt, obstruction of southerly views of the Casmalia and Solomon Hills); and
- Recreation (conflict with OCP provisions for neighborhood park facilities to serve the Old Town area).

**Table 1-1**  
**Summary of Impacts and Mitigation Measures**

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
<b>Aesthetics and Visual Resources</b>			
<u>Visual Resources</u> Development of the site may result in the loss of two coast live oak trees located along the northern boundary of the site. Orcutt Community Plan (OCP) Development Standard (DevStd) BIO-O-3.1 assures that future development would be required to (1) avoid damage to these trees to the maximum extent feasible, and (2) replace these trees if removal cannot be avoided.	Less Than Significant	Mitigation measures are not required.	Less Than Significant ( <b>Class III</b> )
<u>Visual Character/Compatibility</u> AES 1. Development of the site would affect its visual character and may be inconsistent with the visual character of Old Town Orcutt. DevStds KS 17-1, KS 17-2, KS 17-7, and VIS-O-4.1, along with required review by the Board of Architectural Review (BAR), would help to reduce the project's potential visual character impacts, but may not reduce these impacts to a less than significant level.	Significant	<b>AES 1-1:</b> The County shall amend the OCP to add a <u>Key Site 17</u> development standard stating that: <ul style="list-style-type: none"> <li>• BAR review of the project shall ensure that buildings are appropriately sized and incorporate design elements to promote visual compatibility with the surrounding neighborhood, particularly along Soares Avenue. Potential design elements may include articulation of outer building facades and roof lines, stepping back upper stories of buildings, and use of building materials common to single-family homes rather than commercial building materials.</li> <li>• Mechanical equipment (such as air conditioner units) and trash storage areas shall be screened from public view. Screening may include a combination of landscaping and/or masonry or lattice walls).</li> <li>• Low maintenance trees, shrubs, and groundcover shall be used in landscape plans for development of the site, particularly within the outer perimeter of the site.</li> <li>• The on-site stormwater basin shall be designed to be visually pleasing from on-site as well as in views from Rice</li> </ul>	Significant ( <b>Class I</b> )

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		<p>Ranch Road. Steep-sided, concrete-lined basins shall be avoided to the maximum extent feasible. The use of natural-appearing contoured basins is preferred. The use of perimeter fencing, in particular chain-link fencing, shall be avoided. Where required, perimeter fencing shall be of a decorative nature.</p> <ul style="list-style-type: none"> <li>The applicant shall improve existing visual resources in the project vicinity to offset the project's impacts on the area's visual character. Options for improving aesthetic/visual resources include, but are not limited to, increased landscaping of undeveloped areas on OUSD-owned property adjacent to public roads.</li> </ul>	
<p><u>View Impacts</u> AES 2. Development on the site could result in a loss of unobstructed views of the Solomon Hills and Casmalia Hills experienced from Soares Avenue. DevStds KS 17-7 and VIS-O-2.1, along with required review by the BAR, would help to reduce the project's view impacts, but may not reduce these impacts to a less than significant level.</p>	Significant	No mitigation measures are available to further limit the potential for impacts on southerly views of the Solomon and Casmalia Hills.	Significant ( <b>Class I</b> )
<p>Development on the site could interfere with views of the Casmalia Hills from Rice Ranch Road. The proposed project has the potential to block a relatively small portion of the more distant hills available in views from along a short distance of Rice Ranch Road, but would not affect existing views of the closer, higher-elevated Casmalia Hills.</p>	Less Than Significant	Mitigation measures are not required.	Less Than Significant ( <b>Class III</b> )
<p>Development on the site may be visible in views from SR 1, which is classified as "moderately scenic" in the OCP and is also eligible for "Scenic Highway" designation by the State of California. At its distances from SR 1, development on the project site would not be highly noticeable and would largely be situated behind the intervening Stonegate residential development that abuts the entire western boundary of the site.</p>	Less Than Significant	Mitigation measures are not required.	Less Than Significant ( <b>Class III</b> )



<b>Description of Impact</b>	<b>Significance Before Mitigation</b>	<b>Proposed Mitigation Measures</b>	<b>Significance After Mitigation</b>
<u>Light and Glare</u> Development on the site would introduce new sources of night lighting.	Less Than Significant	Mitigation measures are not required.	Less Than Significant ( <b>Class III</b> )
<b>Air Quality</b>			
<u>Construction Period Impacts</u> Temporary construction activity associated with development of the site would result in the generation of air pollutant emissions, including dust and construction equipment exhaust. Given the required implementation of dust control measures, the proposed project's construction-period dust emissions would be less than significant. Peak annual construction equipment emissions are estimated to be below APCD guidelines.	Less Than Significant	Mitigation measures are not required.	Less Than Significant ( <b>Class III</b> )
<u>Operational Impacts</u> Development at the site would result in the generation of area source emissions (e.g., heating, air conditioning) and vehicular emissions associated with daily trip generation. The project's emissions would not exceed any County thresholds.	Less Than Significant	Mitigation measures are not required. It is noted, however, that the measure recommended under Greenhouse Gas Emissions/Climate Change (GHG 1-1), below, would further reduce the project's operational emissions.	Less Than Significant ( <b>Class III</b> )
<b>Biological Resources</b>			
<u>Vegetation and Sensitive Plant Communities</u> Development of the site would result in removal of vegetation consisting of invasive non-native grasses and forbs, with native species poorly represented. Vegetation at the site is classified as California Annual Grassland, which is not a sensitive plant community.	Less Than Significant	Mitigation measures are not required.	Less Than Significant ( <b>Class III</b> )
<u>Sensitive Plant Species</u> Sensitive plant species were not observed during surveys of the site in 1995, 2001, or May 2010 and sensitive plant species are not expected to occur at the site due to its disturbed condition and heavy competition from invasive species.	No Impact	Mitigation measures are not required.	No Impact
<u>Protected Trees</u> Development of the site may result in the damage or removal of two coast live oak trees. The two roadside oak trees do not provide significant habitat. In addition, OCP DevStd BIO-O-3.1 provides for the protection of established native trees in developable areas.	Less Than Significant	Mitigation measures are not required.	Less Than Significant ( <b>Class III</b> )

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
<p><u>Sensitive Wildlife Species</u> Development of the site would remove foraging habitat for sensitive wildlife species. Sensitive wildlife species with potential to occur at the site are limited to some species of birds and bats that may forage over the site, but are not expected to take cover or reproduce thereon. These species would be capable of escaping harm during vegetation removal and grading/construction activities and are not dependent upon habitat or resources at the site for any part of their life cycle or for their survival.</p>	<p>Less Than Significant</p>	<p>Mitigation measures are not required.</p>	<p>Less Than Significant (<b>Class III</b>)</p>
<p><u>Exterior Night Lighting</u> Development of the site would introduce new sources of night lighting in the vicinity of the Pine Canyon Creek open space. However, OCP DevStd VIS-O-6.3 would assure that night lighting impacts would be less than significant.</p>	<p>Less Than Significant</p>	<p>Mitigation measures are not required.</p>	<p>Less Than Significant (<b>Class III</b>)</p>
<p><u>Nesting Birds</u> BIO 1. Construction at the project site may disturb nesting birds and/or remove nests.</p>	<p>Potentially Significant</p>	<p><del><b>BIO 1-1:</b> The County shall amend the OCP to add a development standard requiring that no earlier than 14 days prior to construction or site preparation activities that would occur during the nesting/breeding season of native bird species potentially nesting on the site (typically February 1 through August 31), a field survey shall be conducted by a qualified biologist to determine if active nests of any bird species protected by the state or federal Endangered Species Acts, Migratory Bird Treaty Act, and/or the California Fish and Game Code Sections 3503, 3503.5, or 3511 are present in the construction zone or within 200 feet of the construction zone for songbirds and within 500 feet of the construction zone for raptors. If active nests are found within the survey area, construction activities shall stop within a 200 foot radius for songbirds and a 500 foot radius for raptors until consultation with the County, CDFG, and USFWS (when applicable, i.e. if the nesting birds are listed under the federal</del></p>	<p>Less Than Significant (<b>Class II</b>)</p>

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		<p><del>Endangered Species Act), is conducted and an appropriate setback can be established. A fence barrier shall be erected around the buffer and clearing and construction within the fenced area shall be postponed or halted, at the discretion of a biological monitor, until the nest is vacated and juveniles have fledged, as determined by the biologist, and there is no evidence of a second attempt at nesting.</del></p> <p><b>BIO 1-1:</b> <u>The County shall amend the OCP to add a Key Site 17 development standard requiring that nesting bird surveys be conducted by a qualified biologist prior to site preparation activities to determine if active nests of any special-status bird species are present in the construction disturbance zone. The construction disturbance zone includes areas within 200 feet of the site (for songbirds) and areas within 500 feet of the site (for raptors). If active nests of raptors or other special status species are found within the disturbance zone, construction activities shall be limited, and an appropriate setback shall be established in consultation with the County and CDFG.</u></p>	
<p><u>Invasive Plant Species in Landscaping</u> Development of the site would result in the potential introduction of invasive plant species at the site, which is close to the Pine Canyon Creek open space. However OCP DevStd BIO-O-1.3 would protect open space areas from invasion by non-native species</p>	<p>Less Than Significant</p>	<p>Mitigation measures are not required.</p>	<p>Less Than Significant (<b>Class III</b>)</p>
<p><u>Water Quality Impacts on Pine Canyon Creek and Downstream Waterbodies</u> BIO 2. Development of the site would result in the potential introduction of urban pollutants in stormwater runoff from the site, which drains to Pine Canyon Creek. Pollutants, if present, could degrade water and soil quality and impact sensitive riparian</p>	<p>Potentially Significant</p>	<p>This impact would be mitigated by water quality mitigation measures discussed under Flooding and Water Quality.</p>	<p>Less Than Significant (<b>Class II</b>)</p>

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
and aquatic habitats and communities, as well as known or potentially occurring sensitive wildlife and vascular plant species in Pine Canyon, Graciosa, and Orcutt Creeks.			
<u>Wildlife Movement</u> Development of the site would restrict wildlife movement across the site. However, the project site is not within an important area for wildlife movement and is not part of linkage between large areas of open space.	Less Than Significant	Mitigation measures are not required.	Less Than Significant ( <b>Class III</b> )
<b>Cultural Resources</b>			
While no archaeological sites are known to be present at the project site, there is a possibility that artifacts or deposits could be encountered during site preparation and grading. Development of the site may result in potential impacts to archaeological resources, if present at the site. However, given Santa Barbara County's Standard Conditions of Approval that require work stoppage or redirect work immediately in the event archaeological remains are encountered during grading, construction, landscaping, or other construction-related activity, the proposed project's impacts are considered less than significant.	Less Than Significant	Mitigation measures are not required.	Less Than Significant ( <b>Class III</b> )
<b>Geology/Soils</b>			
<u>Seismic Shaking, Soils, and Groundwater</u> Seismic ground shaking, collapsible soils, and shallow groundwater are considered less than significant due to required regulatory compliance, involving standard geotechnical investigations and site-specific measures.	Less Than Significant	Mitigation measures are not required.	Less Than Significant ( <b>Class III</b> )
<u>Erosion</u> Grading and construction at the site would result in the potential for erosion. However, OCP development standards GEO-O-2.4, GEO-O-2.6, FLD-O-2.1, and FLD-O-3.2 would prevent significant erosion impacts.	Less Than Significant	Mitigation measures are not required.	Less Than Significant ( <b>Class III</b> )
<u>Proximity to a Potentially Active Buried Thrust Fault</u> Development of the site could occur in proximity to the Orcutt Frontal fault. OCP Development Standards GEO-O-1.1 and GEO-O-1.2 would assure	Less Than Significant	Mitigation measures are not required.	Less Than Significant ( <b>Class III</b> )

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
<p>that the location of the Orcutt Frontal relative to the project site is determined through a fault study conducted by a Registered Geologist or Certified Engineering Geologist and that new construction shall be set back a minimum of 50 feet from all known active or potentially active faults.</p>			
<b>Hazards and Hazardous Materials</b>			
<p>HAZ 1. Development of the project site would result in the potential exposure to hazardous materials from on-site dumping/storage, an adjacent OUSD Business Plan site, and/or natural radon gas emissions.</p>	<p>Potentially Significant</p>	<p><b>HAZ 1-1:</b> The County shall amend the OCP to add a <u>Key Site 17</u> development standard stating that: Prior to approval of a senior housing development at the project site, the applicant shall update the Phase I Environmental Site Assessment to ensure that more recent activities on the property have not resulted in deposition of hazardous materials that could result in impacts to future residents at the site. If such materials are found to exist, affected areas will be remediated. Review and approval by County Environmental Health Services Department (EHS) and Santa Barbara County Fire are required.</p> <p><b>HAZ 1-2:</b> The County shall amend the OCP to add a Key Site 17 development standard stating that: Development on the site shall be designed to minimize potential conflicts with the adjacent bus yard operations.</p> <p><b>HAZ 1-3:</b> The County shall amend the OCP to add a Key Site17 development standard stating that: A radon gas survey shall be performed prior to development on this site. Radon-resistant construction techniques shall be implemented where necessary to prevent radon gas accumulation within enclosed areas.</p>	<p>Less Than Significant (<b>Class II</b>)</p>
<b>Flood/Water Quality</b>			
<p><u>Surface Drainage/Flooding</u> Development of the site would result in an increase in stormwater runoff from the site. Adherence to</p>	<p>Less Than Significant</p>	<p>Mitigation measures are not required.</p>	<p>Less Than Significant (<b>Class III</b>)</p>

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
<p>OCP DevStd FLD-O-4.2, which requires development to provide and maintain on-site detention facilities with a sufficient capacity to reduce site runoff to County Flood Control District (FCD) standards, would ensure that impacts are mitigated to a less than significant level.</p>			
<p><u>Surface and Groundwater Quality –Construction Phase</u>            FLD/WQ 1. Construction activity at the site would result in the potential introduction of urban pollutants into surface and ground water. All construction activities disturbing one or more acres are subject to the General Permit for Storm Water Discharge Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ), which require preparation of a Storm Water Pollution Prevention Program (SWPPP) to control the discharge of pollutants, including sediment, into local surface water drainages. The SWPPP is designed to minimize water quality degradation through storm water monitoring, establish BMPs, implement erosion control measures, and implement spill prevention and containment measures. In addition to NPDES permit requirements, construction activities would also be subject to the County’s grading ordinance and applicable OCP development standards, including Dev Std FLD-O-3.1 and FLD-O-3.2. The grading ordinance generally requires a grading permit and an Erosion and Sediment Control Plan for all new grading, excavations, fills, cuts, borrow pits, stockpiling, compaction of fill, and land reclamation projects on privately owned land where the transported amount of materials exceeds 50 cubic yards or the cut or fill exceeds three feet in vertical distance to the natural contour of the land. Nevertheless, due to the potential for erosion and sedimentation into Pine Canyon Creek, impacts would potentially significant.</p>	<p>Potentially Significant</p>	<p><b>FLD/WQ 1-1:</b> The County shall amend the OCP to add a <u>Key Site 17</u> development standard stating that: The Applicant shall submit proof of exemption or a copy of the Notice of Intent to obtain coverage under the Construction General Permit of the National Pollutant Discharge Elimination System issued by the California Regional Water Quality Control Board.</p>	<p>Less Than Significant (<b>Class II</b>)</p>



Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
<p><u>Surface and Ground Water Quality - Operational Phase</u>                      During the operational phase of a development at the site, urban pollutants may be introduced into surface and groundwater.</p>	<p>Potentially Significant</p>	<p><b>FLD/WQ 2-1:</b> The County shall amend the OCP to add a <u>Key Site 17</u> development standard stating that: The development shall incorporate and maintain the following operational erosion control measures:</p> <ol style="list-style-type: none"> <li>1. Erosion control measures, such as plantings or hard surfaces, shall be incorporated into the drainage plan for all project drainages as required by the Flood Control District and P&amp;D.</li> <li>2. Development in areas of high erosion potential shall be sited and designed to minimize increased erosion and may be required to have a site-specific evaluation of erosion-control measures. Project approval shall be conditioned to ensure that erosion will be reduced to acceptable levels.</li> <li>3. Landscaped areas adjacent to structures shall be graded so that drainage is away from structures.</li> <li>4. Irrigation shall be controlled so that overwatering does not occur. An irrigation schedule shall be reviewed and approved by P&amp;D prior to land use clearance for grading.</li> </ol> <p><b>FLD/WQ 2-2:</b> The County shall amend the OCP to add a <u>Key Site 17</u> development standard stating that: The applicant shall submit and implement a Storm Water Quality Management Plan (SWQMP) designed to prevent the entry of pollutants from the project site into the storm drain system after development. The SWQMP shall identify:</p> <ol style="list-style-type: none"> <li>1. A combination of structural and non-structural Best Management Practices (BMPs) from the California Storm Water BMP Handbook for New Development and Redevelopment</li> </ol>	<p>Less Than Significant (Class II)</p>

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		<p>(California Storm Water Quality Association), or other approved methods;</p> <ol style="list-style-type: none"> <li>2. Potential pollutant sources that may affect the quality of the storm water discharges;</li> <li>3. Design and placement of structural and non-structural BMPs to address identified pollutants;</li> <li>4. Inspection and maintenance program; and</li> <li>5. Method for ensuring maintenance of all BMPs over the life of the project.</li> </ol> <p><b>FLD/WQ 2-3:</b> The County shall amend the OCP to add a <u>Key Site 17</u> development standard stating that: LID is an alternative site design strategy that uses natural and engineered infiltration and storage techniques to control stormwater runoff where it is generated to reduce downstream impacts. The Environmental Protection Agency has determined that the following LID measures are highly beneficial. In order to further reduce water quality impacts, the SWQMP and project design shall include the following LID measures:</p> <p><u>Design Measures</u></p> <ul style="list-style-type: none"> <li>• Vegetated swales, buffers and strips throughout the project site;</li> <li>• Use of permeable pavement to the extent feasible;</li> <li>• Two-foot permeable pavement strips located at the base of driveways, spanning the width of the driveway;</li> <li>• Impervious surface reduction and disconnection.</li> </ul> <p><u>Structural Measures</u></p> <ul style="list-style-type: none"> <li>• Tree boxes filters to capture and infiltrate street runoff upstream of detention basins;</li> </ul>	

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		<ul style="list-style-type: none"> <li>• Roof leader flows directed to planter boxes and other vegetated areas and/or vegetated swales and buffers;</li> <li>• Soil amendments to increase infiltration rates; and</li> <li>• Rain gardens, rain barrels, and cisterns.</li> </ul>	
<b>Noise</b>			
<p><u>Construction Period Impacts</u> Construction activity on the project site would generate short-term noise that could affect sensitive receptors in the vicinity of the project site. However, OCP Development Standards NSE-0-2.1 and NSE-0-2.2 would assure that potential impacts are reduced to a less than significant level.</p>	Less Than Significant	Mitigation measures are not required.	Less Than Significant ( <b>Class III</b> )
<p><u>Operational Traffic Noise Impacts</u> Development of the site would add to vehicular traffic on area roadways, which would increase associated noise levels. However, noise from project-generated traffic would not exceed the +3 db CNEL threshold.</p>	Less Than Significant	Mitigation measures are not required.	Less Than Significant ( <b>Class III</b> )
<p><u>Roadway Noise Impacts on Proposed Uses</u> Development of the site may expose residents to noise generated by vehicular traffic on surrounding roadways. However, based on the existing noise environment and construction requirements set forth in the building code and in the OCP, exterior and interior noise levels at the proposed residences are expected to meet the 65 dB and 45 dB noise standards, respectively.</p>	Less Than Significant	Mitigation measures are not required.	Less Than Significant ( <b>Class III</b> )
<p><u>Noise from Adjacent OUSD Facility</u> <b>NSE 1.</b> Development of the site may result in a noise nuisance impact related to the introduction of residential uses in proximity to a bus maintenance/storage yard. Although bus maintenance and storage activities are not expected to cause any quantitative standards to be exceeded, such noise sources have the potential to result in noise nuisance impacts given the nature, timing, and frequency of noise typically generated by these activities. OCP Development Standard NSE-0-1.3 requires that development of the site incorporate</p>	Potentially Significant	<p><b>Mitigation NSE 1-1:</b> The County shall amend the OCP to add a <u>Key Site 17</u> development standard stating that: The noise study required by OCP DevStd NSE-0-1.3 shall address potential noise nuisance issues associated with the adjacent bus maintenance and storage yard. The study shall include measurements of noise levels generated at the bus yard and identify measures to minimize potential noise nuisance impacts to the extent feasible. Such measures may include requiring a site</p>	Less Than Significant ( <b>Class II</b> )

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
<p>design features to reduce noise affecting interior and exterior living spaces and that the developer retain a County-approved noise consultant to conduct a study determining the design and effectiveness of proposed noise reduction measures. However, it is not clear as to whether this development standard was intended to apply to a noise nuisance impact such as the potential issue described above. Therefore, the project's potential noise nuisance impact is considered a potentially significant impact prior to mitigation.</p>		<p>plan design that places less sensitive uses in locations closest to the bus maintenance and storage yard and places buildings housing sensitive uses in locations that would be removed from and/or shielded from the yard by intervening buildings; structural designs to achieve enhanced noise attenuation; and, if necessary, construction of a sound wall.</p>	
<b>Public Services</b>			
<b>Fire Protection</b>			
<p><u>Response Time</u> Development at the site would be within a five-minute response time from the nearest fire station (Station 21).</p>	Less Than Significant	Mitigation measures are not required.	Less Than Significant ( <b>Class III</b> )
<p><u>Fire Protection Staffing</u> Development of the site would generate demand for fire protection staffing. The project's additional population would incrementally decrease the firefighter ratio, causing it to fall further below the County fire protection standard and contributing to the need to increase firefighter-staffing levels. However, future development on Key Site 17 (and all other development under the OCP) would be required to pay the Orcutt Planning Area fire mitigation fees, which were adopted following approval of the OCP. These fees are collected to mitigate impacts to fire services by providing funding for additional firefighters and equipment. With the payment of the required fair share development fees, the project's potential environmental impacts to fire protection would be less than significant.</p>	Less Than Significant	Mitigation measures are not required.	Less Than Significant ( <b>Class III</b> )
<p><u>Other Fire Department Requirements.</u> Development of the site would be subject to fire protection requirements pertaining to building materials, access, fire flow, etc. When a specific development plan for the project site is proposed, it will be reviewed for compliance with applicable SBCFD and Uniform Fire Code requirements for</p>	Less Than Significant	Mitigation measures are not required.	Less Than Significant ( <b>Class III</b> )

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
building design, materials, fire flow, access, etc. Given this required review and approval of project plans, potential impacts related to compliance with fire department requirements would be less than significant.			
<b>Health Care and Emergency Medical Services</b>			
Development of the site would generate demand for health care and emergency medical services. The additional 385 residents generated by the project would add to the demand for AMR ambulance service and SBCFD paramedics, as well as hospital and emergency medical services. However, the proposed project is not expected to result in the need for new physical facilities to accommodate the demands generated at the project site.	Less Than Significant	Mitigation measures are not required.	Less Than Significant ( <b>Class III</b> )
<b>Wastewater</b>			
<b>Class III.</b> The proposed project would generate approximately 34,695 gallons per day of wastewater. It is anticipated that sufficient treatment and conveyance capacity will be available to accommodate the proposed project.	Less Than Significant	Mitigation measures are not required.	Less Than Significant ( <b>Class III</b> )
<b>Water Supply</b>			
The proposed project would generate a water demand of approximately 32.4 AFY. The OCP includes development standards (DevStd Wat-O-2.1 and Wat-O-2.2) that require an applicant for a new development to demonstrate an adequate water supply for the project that will not contribute to long-term overdraft of the Santa Maria Basin. Given these requirements, the proposed project's impacts related to assuring an adequate water supply would be less than significant	Less Than Significant	Mitigation measures are not required. However, the following measure, which was identified in the OCP EIR as Mitigation WAT-4, is recommended to assure that future development at the project site incorporates water conservation measures to the extent feasible.  <b>Mitigation WAT-1:</b> The County shall amend the OCP to add a Key Site 17 development standard stating that: The maximum feasible water conservation measures shall be included in development of the site. Landscaping shall consist of drought-tolerant native and/or Mediterranean type species.	Less Than Significant ( <b>Class III</b> )
<b>Recreation</b>			
<b>Increased Demand for Recreational Facilities</b> Development of the site would increase the demand for recreational facilities in Orcutt. Using the County	Less Than Significant	Mitigation measures are not required.	Less Than Significant ( <b>Class III</b> )

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
<p>standard of 4.7 acres of parkland per 1,000 residents, the project's 385 residents would generate a need for approximately 1.81 acres of parkland. While the proposed project would construct a 0.75-acre park within the project site, per DevStd KS 17-3, there would remain a deficit of approximately 1.06 acres of parkland to service the increased demand. There is no proposal to construct a park at this time, however, development impact mitigation fees would be assessed on any new residential development, and these fees would be used to develop new parklands elsewhere in the Orcutt area. With payment of these fees, the project's impact on parks and recreational facilities is considered less than significant.</p>			
<p><u>Proposed Revisions to the On-site Park Requirement</u>  The OCP identified Key Site 17 as a location for new parkland. The proposed project would change DevStd KS 17-3 to eliminate the provisions for a contiguous park along Soares Avenue. The proposed project would allow the 0.75-acre parkland to be provided anywhere on the project site, which could result in two separate smaller parks (0.5-acre on the adjacent Stonegate property and 0.75-acre within the project site), as opposed to one contiguous park. Development of two smaller parks would not meet the intentions of DevStd KS 17-3 as it would not create a 1-2 acre contiguous neighborhood park to serve the Old Town area and provide complementary recreational uses. Under the proposed project, the additional 0.75-acre park could be located anywhere within the project site. Should the park be located further south (i.e. not along Soares Avenue) and behind future senior living structures or along Rice Ranch Road, it would be less accessible from the Old Town area. Although the development of a senior housing project may change the type of recreational facilities demanded by the population at the project site, the neighborhood park was intended to meet the general needs of the Old Town community. County Parks Department staff believes that the development of two smaller park areas on Key Site 17 would lessen the opportunity for viable recreational facilities to be developed in this portion of Orcutt.</p>	Significant	No mitigation measures are available.	Significant ( <b>Class I</b> )

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
<b>Transportation/Circulation</b>			
<u>Intersection Impacts</u> Trips generated by the proposed project would generate less than significant impacts to the study-area intersections based on County and Congestion Management Plan impact thresholds.	Less Than Significant	Mitigation measures are not required.	Less Than Significant ( <b>Class III</b> )
<u>Site Access</u> Development of the site would create new access points to local roadways. Access to the project site is available from Soares Avenue to the north and Rice Ranch Road to the south. Providing an access point along Rice Ranch Road in accordance with DevStd KS17-5 (i.e., limited to one point from APN 105-330-006 and coordinated to the greatest degree feasible with access to Site 13) is expected to align with the eastern driveway that serves the parking lot within Site 13, south of APN 105-330-006). This would assure adequate site distance given the speeds along Rice Ranch Road and the horizontal curve to the west of the site. Given the relatively low volumes on the neighborhood streets north of the site, providing one or two connections to Soares Avenue would not generate significant impacts since the neighborhood streets would carry volumes within their capacities.	Less Than Significant	Mitigation measures are not required.	Less Than Significant ( <b>Class III</b> )
<u>Parking Demands</u> A future development at the proposed project site would be required to meet County parking requirements on-site, or if a modification to these requirements is requested, demonstrate the adequacy of proposed parking facilities. Parking facilities would be required to accommodate residents, employees, and visitors. As such, the proposed project is not expected to result in off-site parking demands or otherwise result in significant parking impacts.	Less Than Significant	Mitigation measures are not required.	Less Than Significant ( <b>Class III</b> )
<u>Transit</u> Development of senior housing with up to 257 units would generate additional demands for transit. Given the small size of the proposed development, the additional transit demands would not generate the need for new routes or transit service in the area.	Less Than Significant	Mitigation measures are not required.	Less Than Significant ( <b>Class III</b> )

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
<p><b>Cumulative Traffic Impacts</b>                      The project would result in less than significant contributions to cumulative impacts at the study-area intersections based on County and Congestion Management Plan thresholds.</p>	<p>Less Than Significant</p>	<p>Mitigation measures are not required.</p>	<p>Less Than Significant (Class III)</p>
<p><b>Greenhouse Gas Emissions</b></p>			
<p>Conservatively assuming two residents per dwelling unit, the project's annual operational emissions would be 3.53 million tons (MT) carbon dioxide equivalent (CO<sub>2</sub>e) per resident per year. This is below the County's interim significance threshold for GHG of 4.6 MT CO<sub>2</sub>e per person per year.</p>	<p>Less Than Significant</p>	<p><b>Mitigation Measure GHG-1 (Recommended):</b> Future development plans for the site shall incorporate the following to the extent practicable:</p> <ul style="list-style-type: none"> <li>• Construct the new residential buildings to exceed minimum California Title 24 energy efficiency requirements.</li> <li>• Utilize green buildings and roofs.</li> <li>• Use water conserving landscaping in residential and common areas</li> <li>• Promote solid waste recycling and minimization.</li> <li>• Create a pedestrian and bicycle-friendly community.</li> </ul>	<p>Less Than Significant (Class III)</p>



## 1.4 ALTERNATIVES

The following alternatives were selected for analysis in this EIR:

- Alternative 1: No Project Alternative (Development of the Site Under the Existing General Plan Designation and Zoning)
- Alternative 2: Revised Park Location and Reduced Building Height Alternative (Proposed GPA/Rezoning without Modifications to Development Standards)
- Alternative 3: Reduced Density Alternative (GPA/Rezoning to Res 12.3/DR-12.3 without Modifications to Development Standards)

A summary of the alternatives analysis including identification of the environmentally superior alternative is provided below.

### 1.4.1 Alternative 1: No Project Alternative (Development of the Site Under the Existing General Plan Designation and Zoning)

CEQA Guidelines Section 15126.6(e)(3)(A) state, “When the project is the revision of an existing land use or regulatory plan, policy or ongoing operation, the “no project” alternative will be the continuation of the existing plan, policy or operation into the future. Typically this is a situation where other projects initiated under the existing plan will continue while the new plan is developed. Thus, the projected impacts of the proposed plan or alternative plans would be compared to the impacts that would occur under the existing plan.” Accordingly, the No Project Alternative assumes that the project site is developed in accordance with the site’s existing General Plan land use designation, Res 8.0, and its existing SLP zoning. A land use designation of Res 8.0 allows for the development of 8 single-family residential units per acre. As such, under this alternative the maximum number of units that could be built on the site (9.53 acres) is 77.

This alternative would result in reduced impacts as compared to the proposed project in the areas of aesthetics, air quality, biological resources (night lighting), cultural resources, geology/soils, hazards and hazardous materials, construction-period noise, public services, and recreation. The No Project Alternative would reduce the project’s significant impacts, but not to less than significant levels, with the exception of recreation. Keeping the requirement for a park along Soares Avenue adjacent to the Stonegate park would avoid the project’s significant unmitigable impact related to neighborhood park provision. This alternative would increase traffic impacts because it would generate a greater number of trips during peak traffic periods. However, traffic impacts would remain less than significant.

### 1.4.2 Alternative 2: Proposed GPA/Rezoning Without Modifications to Development Standards

The proposed project includes a request to modify certain development standards pertaining to the project site (OCP DevStd KS17-1, DevStd KS17-2, and DevStd KS17-3) in addition to the requested amendment to the site’s General Plan land use designation and rezoning. Under this alternative, the project site’s land use designation would be amended to Res 20 and it would be rezoned to DR 20, consistent with the proposed project. However, the OCP development standards would remain in effect without revision. This would retain: the requirement to locate the on-site public park along the ~~north~~south side of Soares Avenue; the limitation of homes adjacent to the park, along Soares Avenue, and along Rice Ranch Road to one-story; and a maximum of two stories at other buildings on the site.

This alternative would result in reduced impacts as compared to the proposed project in the areas of aesthetics and recreation. It would reduce aesthetic impacts but not to a less than significant level.

Keeping the requirement for a park along Soares Avenue adjacent to the Stonegate park would avoid the project's significant unmitigable impact related to neighborhood park provision.

### **1.4.3 Alternative 3: Reduced Density Alternative (GPA/Rezoning to Res 12.3/DR-12.3 Without Modifications to Development Standards)**

Under this alternative, the site's General Plan land use designation would be changed to Res 12.3 and its zoning would be changed to DR-12.3. The site would be developed with a 100 percent senior housing project. With this General Plan designation/zoning and a 35 percent density bonus, up to 158 residential units could be built at the site (9.53 acres x 12.3 units per acre x 1.35). In addition, the OCP development standards would remain in effect without revision, as described above for Alternative 2.

This alternative would result in reduced impacts as compared to the proposed project in the areas of aesthetics, air quality, geology/soils, hazards and hazardous materials, surface drainage/flooding, noise, public services, recreation, traffic, and greenhouse gas emissions. It would reduce the project's significant impacts, but not to less than significant levels, with the exception of recreation. Keeping the requirement for a park along Soares Avenue adjacent to the Stonegate park would avoid the project's significant unmitigable impact related to neighborhood park provision.

### **1.4.4 Environmentally Superior Alternative**

Alternative 1 (the No Project Alternative) is identified as the environmentally superior alternative. In accordance with CEQA Guidelines Section 15126 (e)(2), if the environmentally superior alternative is the No Project Alternative, then an environmentally superior alternative among the other alternatives must be identified. The environmentally superior alternative among the other alternatives is Alternative 3 (Reduced Density Alternative).

## **1.5 AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED**

The areas of public concern regarding the project as expressed at the EIR scoping meeting are traffic and compatibility with the character of Old Town Orcutt. Issues that need to be resolved include selection among the various alternatives. In addition, when a specific development is proposed, further, more detailed analysis of that project will be required.

**Project  
Description**

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# SECTION 2

## **2.0 PROJECT DESCRIPTION**

### **2.1 INTRODUCTION**

The Orcutt Community Plan (OCP), a component of the Santa Barbara County Comprehensive Plan (the County's General Plan), plans for growth in the unincorporated area of Orcutt, located in northern Santa Barbara County, south of the City of Santa Maria. An Environmental Impact Report (EIR) for the OCP was completed in December 1995. Key sites are potential development sites that have been examined in more detail in the OCP EIR in order to streamline future environmental review when actual development of a given site is proposed. Key Site 17 is one of 43 key sites identified in the OCP and assessed in the OCP EIR.

The OCP includes an action item, Action KS 17-6, which recommends consideration of redesignating and rezoning parcels for a 100 percent senior housing project. In accordance with this provision, the Orcutt Union School District (OUSD, also referred to herein as the applicant) has requested a General Plan Amendment (GPA) and Rezone of four parcels located within Key Site 17. The OUSD is also requesting modifications to OCP development standards pertaining to the project site, as described in detail below.

Currently, there is no specific development plan for the site. As such, the project described below and assessed in this EIR is a reasonable maximum development that could occur on the site under the proposed General Plan and Zoning designations and standards.

### **2.2 PROJECT APPLICANT AND LANDOWNER**

Orcutt Union School District  
Marysia Ochej, Assistant Superintendent, Business Services  
500 Dyer Street  
Orcutt, CA 93455

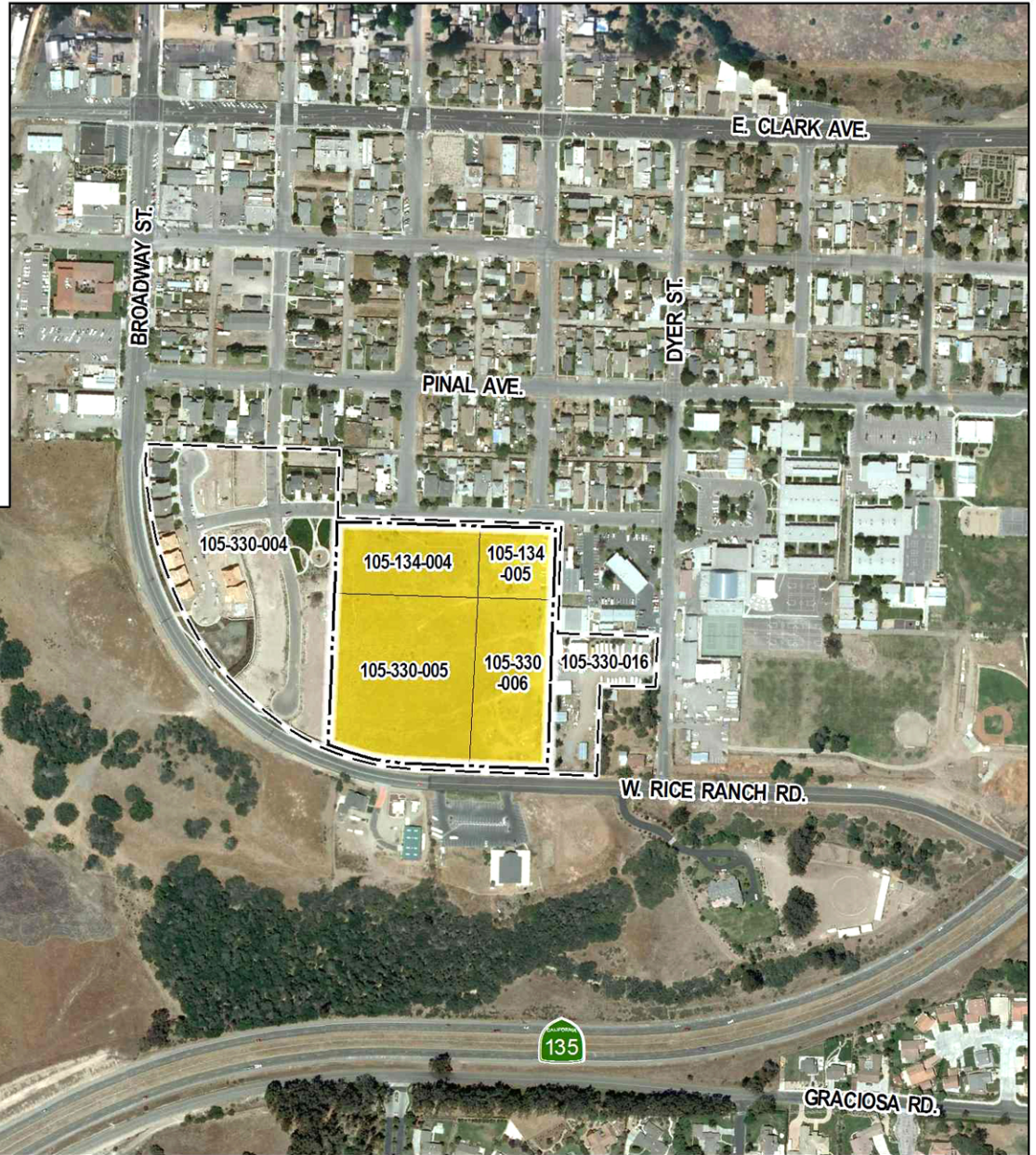
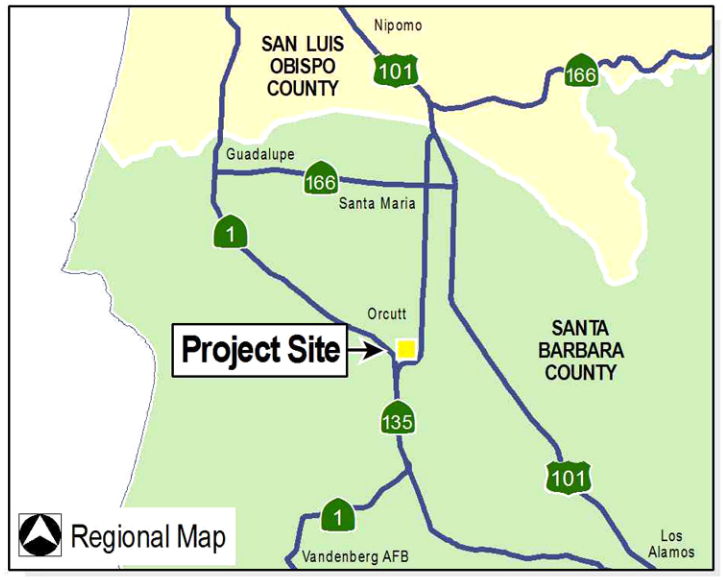
### **2.3 AGENT**

Oasis Associates, Inc.  
Landscape Architecture + Planning  
C. M. Florence, AICP  
3427 Miguelito Court  
San Luis Obispo, CA 93401

### **2.4 PROJECT SITE**

As shown in **Figure 2-1**, the proposed project site consists of four parcels (APNs 105-330-005, 105-330-006, 105-134-004, and 105-134-005) that total 9.53 acres. The site is currently undeveloped, with the exception of a 0.28-acre paved parking area that is currently used by the adjacent Oasis Senior Center. The remainder of the site is covered with vegetation, predominantly non-native herbaceous species. Access to the site is available from Soares Avenue to the north and Rice Ranch Road to the south. The site is located just south of Old Town Orcutt and is bounded by Soares Avenue and single-family residences to the north; a partially constructed single-family residential development to the west (referred to as the Stonegate development); Rice Ranch Road, a church, and two single-family homes to the south; and the Oasis Senior Center and OUSD offices and bus storage/maintenance yard to the east.





Aerial Source: County of Santa Barbara, August 2008.

ORCUTT UNION SCHOOL DISTRICT KEY SITE 17

# Project Location Map

ENVICOM CORPORATION

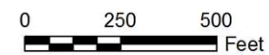


FIGURE 2-1

The site occupies the central portion of Key Site 17 (see Figure 2-1). The partially constructed single-family residential development to the west of the site (on APN 105-330-004) and the OUSD offices and bus storage/maintenance yard (APN 105-330-016) occupy the remainder of the Key Site 17.

## 2.5 PROPOSED GPA/REZONE

The OCP includes a policy statement, five development standards, and an action item to guide future development on Key Site 17. The proposed project includes a request to amend and add to the OCP policy and development standards as follows:

- Policy KS17-1:** Portions of Key Site 17 is are designated Res 8.0 and zoned SLP (e.g., Assessor Parcels 105-330-004 and 105-330-016) and the balance of Key Site 17 (Assessor Parcels 105-134-004, 005; 105-330-005, 006) is designated Res 20 and zoned DR 20 to accommodate a 100 percent senior housing development. Any proposed development on Key Site 17 shall comply with the following development standards.
- DevStd KS17-1:** Any discretionary development shall include a landscape buffer consisting of drought-tolerant trees and shrubs of sufficient density to partially screen the proposed development from Rice Ranch Road, Soares Avenue, and Dyer Street. The buffer along Soares Avenue shall be integrated with the planned park (~~see Figure KS17-1~~). A meandering trail, as shown on Figure KS17-1, shall also be developed.
- DevStd KS17-2:** For development located on APN 105-330-004, hHomes located on the periphery of the site and those adjacent to the neighborhood park shall be one-story, except as noted in Action KS17-6. To ensure neighborhood compatibility, development located on Soares Avenue shall be one-story. Any two story other development on APNs 105-134-004 or 105-134-005 and any development within APNs 105-330-005, 105-330-006, or 105-330-016 shall be visually compatible with, and shall not significantly block long-range southerly views from, Old Town Orcutt.
- DevStd KS17-3:** Any discretionary development shall provide for a dedication and construction of a 1-2 acre public neighborhood park ~~fronting along the western portion of Soares Avenue as conceptually depicted on Figure KS-17-2~~ located on Key Site 17. Parcels 105-330-004 and 105-134-004 shall each contribute at least 3/4 of an acre to this park and the park shall be a minimum of 100 feet wide where it fronts Soares Avenue. A park at least 3/4 of an acre in size shall be provided within APNs 105-134-004, 105-134-005, 105-330-005, or 105-330-006.
- DevStd KS17-4:** Development on the site shall facilitate pedestrian access to Old Town. The developer(s) shall coordinate with Santa Maria Area Transit (SMAT), and shall provide either a bus turn-out pocket along a public road (e.g., Rice Ranch Road), or a bus stop within the site, if requested by SMAT.
- DevStd KS17-5:** Any access to Rice Ranch Road from this site shall be limited to one point from APN 105-330-06 and shall be coordinated to the greatest degree feasible with access to Site 13.

**Action KS17-6:** A 100% senior housing project on Assessor Parcels 105-134-04, 105-134-05, 105-330-05, or 105-330-05-06 shall comply with California Civil Code §51 et. seq. If an application is filed for a 100% senior housing project, as defined by California Civil Code § 51 et. seq, on Assessors Parcels ~~105-134-04, -05; 105-330-01605, -06 or -08~~, the County should consider redesignating and rezoning affected parcels to Res. 20 and DR 1420. However, to ensure neighborhood compatibility, the homes fronting Soares Avenue and the homes adjacent to the neighborhood park should be single family on lots at least 6,000 s.f. in size. In addition, buildings on APNs ~~105-330-05, -06 and -08~~ may be two stories in height but should be of low profile and screened to the greatest degree feasible.

**DevStd KS17-7:** To ensure neighborhood compatibility and maintain visual resources (i.e., long-range southerly hillside views from Old Town Orcutt), buildings shall be of low profile and screened and/or softened with vegetation to the greatest degree [while still meeting the project density objectives]<sup>1</sup>. Development shall also follow the Old Town Orcutt Design Guidelines to guide the architectural style and character of the proposed structures and other building elements.

The requested amendment to Policy KS17-1 would change the site's current Comprehensive Plan land use designation from Residential 8.0 units per acre (Res 8) to Residential 20.0 units /acre (Res 20), increasing the density of residential uses allowed at the site. The changes to this policy, along with the requested Rezone of the site, would change the site's zoning from Small Lot Planned (SLP) to Design Residential 20 units per acre (DR-20). SLP zones allow for single-family residences while DR-20 zones allow for single or multiple-family residential uses. Zoning code standards for the existing and proposed zones are compared in **Table 2-1**.

**Table 2-1**  
**Comparison of Existing and Proposed Zone Standards**

<b>Zoning Standard</b>	<b>Existing Zoning (SLP)</b>	<b>Proposed Zoning (DR 20)</b>
Residential Density (maximum density)	1 single-family dwelling per lot; 7 dwelling units per acre	20 units per acre
Setbacks (perimeter lot)		
Front (from road right-of-way)	20 feet	20 feet
Side	15 feet	10 feet
Rear	15 feet	10 feet
Site Coverage (maximum coverage)	60% (for single-family dwelling)	30%
Height Limit (maximum height)	25 feet	35 feet
Common Open Space	15%	40%
Source: Santa Barbara County Code, Chapter 35, County Land Use and Development Code, Section 35.23.050, Table 2-11, and 35.23.110.		

<sup>1</sup> This text was added following the Draft EIR public circulation and is differentiated from the underlined text in this Section that denotes the project's changes to the Development Standards.



The requested changes to Development Standards KS17-1 and KS17-3 would revise the park requirement such that the park space to be provided by parcel 105-134-004 may be located anywhere within the OUSD project site. This may result in two smaller parks within Key Site 17 rather than one larger park along the south side of Soares Avenue.

The requested revisions to Development Standard KS17-2 would limit the height of buildings to one story along Soares Avenue only, rather than along the entire site perimeter and adjacent to the neighborhood park. However, the requirement for future development to be visually compatible with and not block long-range southerly views from Old Town Orcutt would be retained.

The text revisions to Action Item KS17-6 reflect the requested redesignation and rezoning of four parcels comprising the project site (Parcels 105-134-04, 105-134-05, 105-330-05, or 105-330-05-06) to allow for a 100% senior housing project. The action item, however, would still apply to the remaining parcel within Key Site 17 (Parcel 105-330-006).

The proposed inclusion of a new development standard (Dev Std KS 17-7) would provide guidance in the architectural style and character of future development on Key Site 17.

## **2.6 POTENTIAL FUTURE DEVELOPMENT UNDER THE PROPOSED GPA/REZONING**

Based on the site's total area (9.53 acres) and a maximum density of 20 units per acre under the proposed land use designation and zoning, 191 units could be developed on the site. To determine the reasonably foreseeable maximum density threshold for the four parcels, a 35% density bonus was applied based upon Government Code §65915-65918 (see below for further discussion of this code). This would allow for up to 257 senior residential units to be constructed on the project site.

Senior housing facilities, or Continuing Care Retirement Communities "CCRC," are typically defined as a residential development developed, substantially rehabilitated, or substantially renovated for, senior citizens that has at least thirty-five (35) dwelling units (California Civil Code §51.3). Developers of CCRCs have the option to offer one, or a combination of multiple ranges or levels of care required by its residents. These levels of care include the following:

- Independent Living – For healthy seniors who are self-sufficient.
- Assisted Living – For people who do not have severe medical problems, but who require assistance with personal care.
- Skilled Nursing – Facilities with 24-hour medical care for people with chronic ailments.
- Special Alzheimer's Care – Specialized housing and care tailored to people with the disease.
- Continuing Care Community – Complex of residences that contain all of the above, so that seniors can stay in one area as they age.

Government Code §65915-65918 require that local governments provide incentives or concessions for the production of, or donation of land for, certain types of housing, including senior citizen housing and affordable housing. Under this code, senior housing developments may be entitled to a 20% density bonus. Projects that provide affordable housing units or include a land donation are entitled to a density bonus of up to 35%. Concessions or incentives may include reductions in site development standards or modifications to zoning code requirements or architectural design requirements.



As described above, the proposed project evaluated in this EIR is the reasonable maximum development that could occur under the proposed GPA/Rezone. *No specific development proposal is under consideration at this point in time.* However, for illustrative purposes only and in order to assist the public and decision-makers in understanding the potential future development of the site that could occur under the requested GPA/Rezone, the applicant has prepared conceptual plans for two possible examples of potential developments. These example conceptual plans are provided on **Figures 2-2 and 2-3**.

## **2.7 DEVELOPMENT PREVIOUSLY EVALUATED IN THE OCP EIR**

As described in Section 1.0, the evaluation in this EIR builds upon, updates, and amends the OCP EIR (Program Environmental Impact Report 95-EIR-01) in order to identify potential environmental impacts that could occur under the proposed GPA/Rezone. Future development of Key Sites were evaluated in “mini EIRs” contained in Volume II of the OCP EIR. The project site was evaluated in the OCP EIR as part of the assessment of Key Site 17. With respect to the proposed project site (the central four lots within Key Site 17), the OCP mini-EIR considered a project of approximately 72 residential units. The OCP mini-EIR analysis evaluated several alternatives ranging from the No Project (zoning prior to the OCP EIR) with 111 units, to a “High Buildout” alternative allowing up to 156 units.

## **2.8 PROJECT OBJECTIVES**

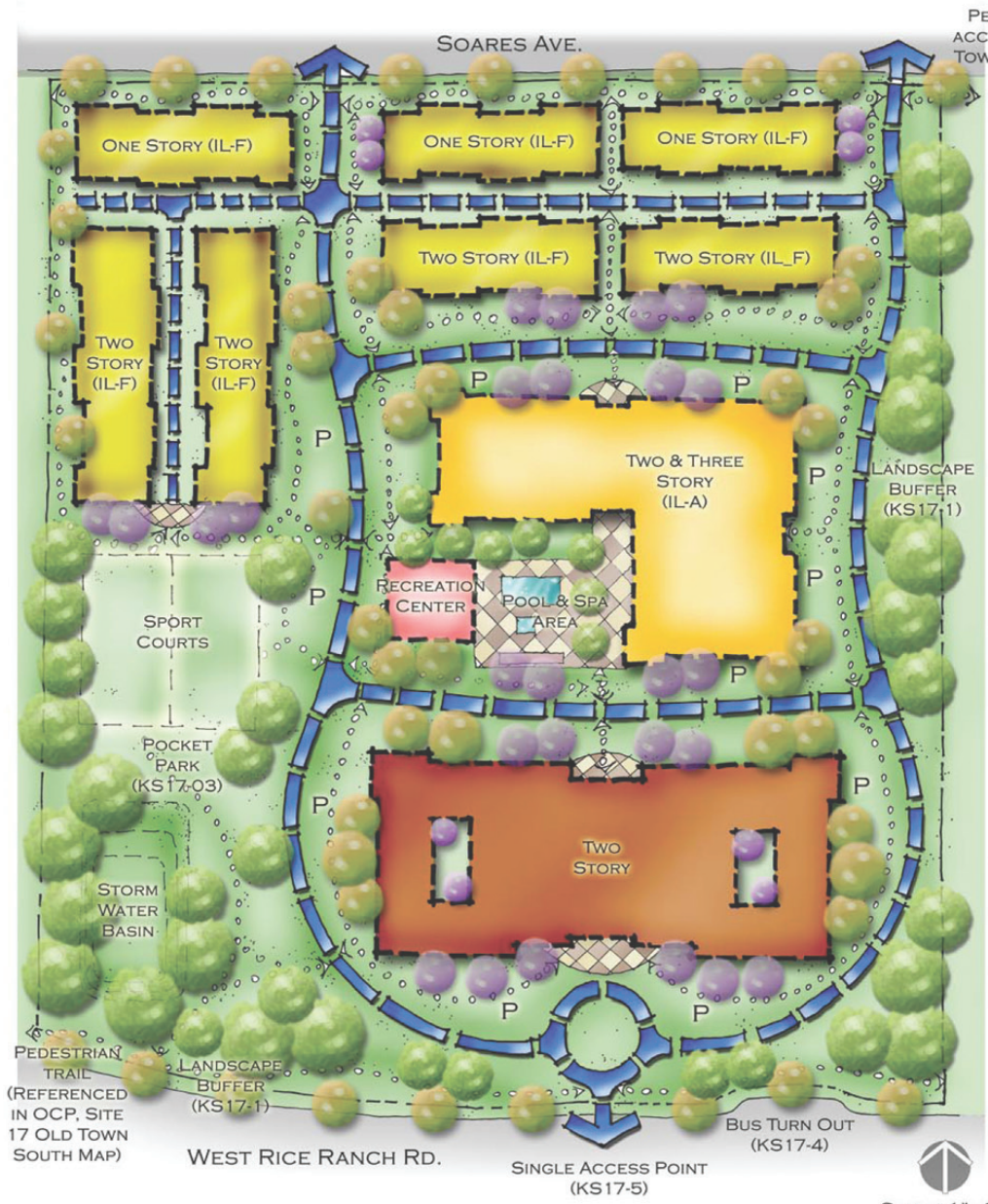
The OUSD Board of Trustees, as part of the OUSD’s asset management program, proposes to rezone the subject properties to accommodate the future development of an 100% senior housing project to increase their value with the intent to lease the property and initiate a noticing, negotiating, and bid process, consistent with applicable laws. The selected lessee would ultimately be responsible for designing, permitting, and constructing the development of the subject properties. The Board also proposes to rezone the parcels in accordance with, and in reliance on, Action KS17-6 of the OCP, which establishes the OCP’s consideration for 100% senior housing on these parcels.

## **2.9 DISCRETIONARY ACTIONS REQUIRED**

The proposed project requires the approval from the County of Santa Barbara for the requested General Plan Amendment and Rezone as described above.

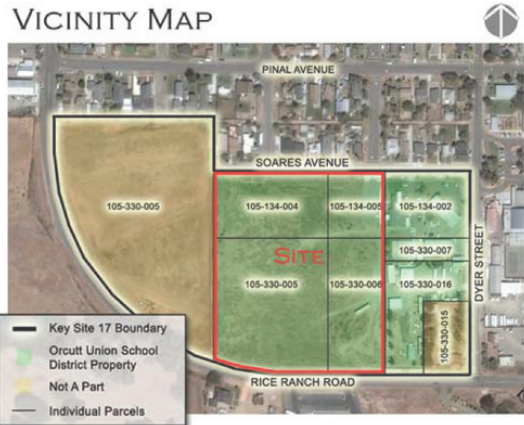






**LEGEND**

- VEHICULAR ACCESS
- PEDESTRIAN ACCESS
- P** PARKING AREA
- (KS17-xx) REFERENCES ORCUTT COMMUNITY PLAN (OCP) KEYSITE 17 DEVELOPMENT STANDARDS.



SCALE: 1"=60'

Source: Oasis Landscape Architecture, June 11, 2008.

ORCUTT UNION SCHOOL DISTRICT KEY SITE 17 PROJECT



Conceptual Site Plan – Example 2

**Related  
Projects**

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# SECTION 3

### 3.0 RELATED PROJECTS

The list of projects identified in **Table 3-1** and mapped in **Figure 3-1** includes developments in the Orcutt Community Plan Area that are currently planned, under construction, or recently completed. These related projects are considered in the assessment of potential cumulative impacts to which the proposed project would contribute. The cumulative impact analysis for each environmental issue (provided in Chapter 4.0, Environmental Setting and Impact Analysis) takes into consideration these projects as well as the growth anticipated in the OCP EIR, as appropriate.

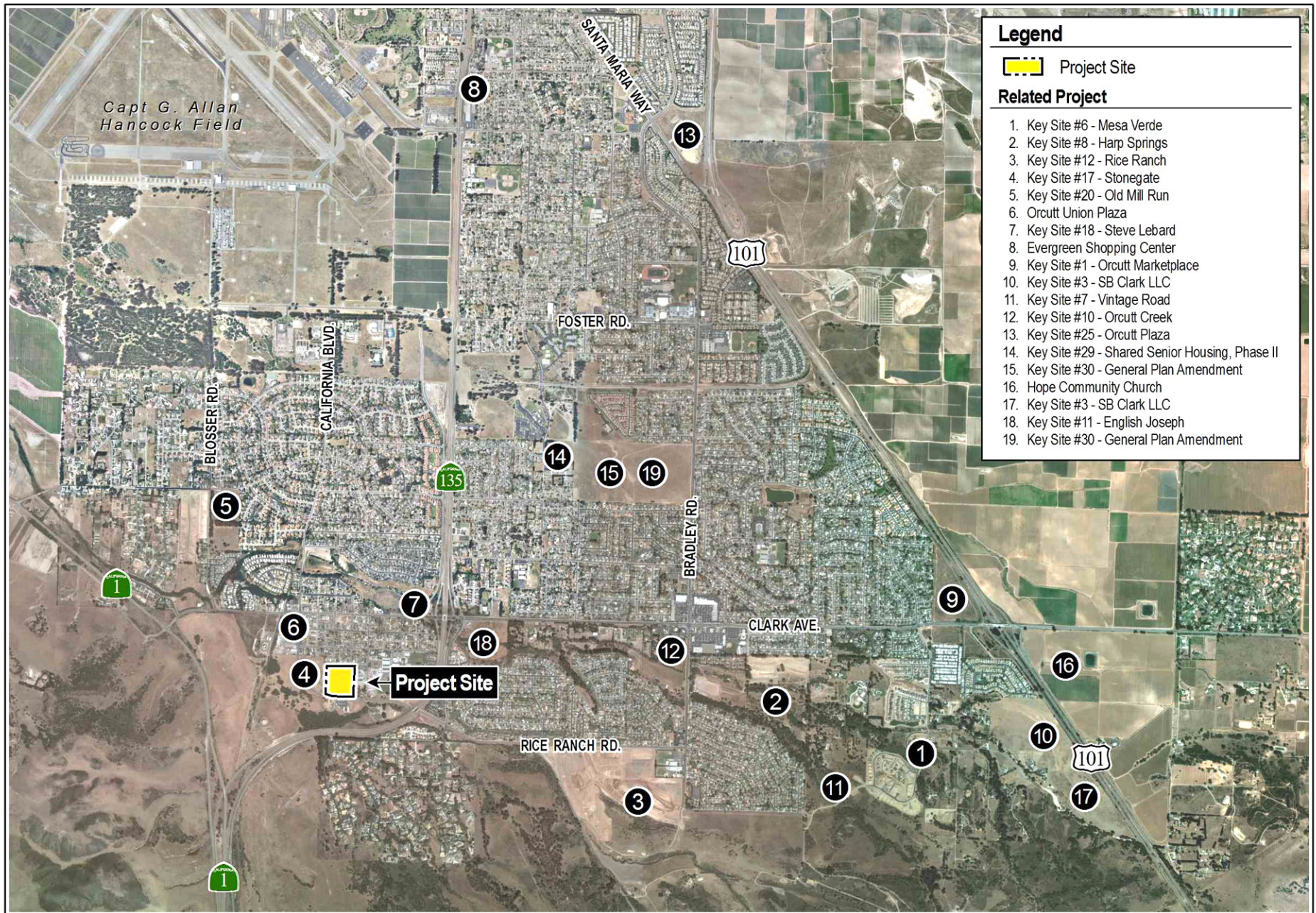
**Table 3-1**  
**List of Related Projects <sup>a</sup>**

Map No.	Project	Location	Land Use	Size / Description	Status
<b>Under Construction</b>					
1	Keysite #6 Mesa Verde	Southwest of the southerly terminus of Stillwell Rd.	Residential	45.21 acres 64 units	34 occupancy clearances of 64 lots.
2	Keysite #8 Harp Springs	South of Clark Ave. at the terminus of Harp Rd.	Residential	20.43 acres 44 units	Grading Permit issued. 19 occupancy clearances issued of 44 lots.
3	Keysite #12 Rice Ranch	South side of Stubblefield and Rice Ranch Roads	Residential	626 acres 725 units 1.2 du/acre	Master Tract Map recorded. Tract map for Pine Creek and Oaks neighborhoods recorded. 15 occupancy clearances issued of 200 lots.
4	Keysite #17 Stonegate	Rice Ranch Road area	Residential	7.91 acres 44 units 5.56 units/acre	Recorded. 11 occupancy clearances issued of 44 lots.
5	Keysite #20 Old Mill Run	Corner of Blosser and Old Mill Roads	Residential	19.2 acres 60 units 3.13 units/acre	Recorded. 14 occupancy clearances issued of 60 lots.
6	Orcutt Union Plaza	801 S. Broadway	Mixed use	7.8 acres 66,831 s.f. mixed use (retail, office, restaurant, residential) 97,404 s.f. total including existing buildings; 6 dwelling units	Land Use Permit issued for Phase I (31,041 s.f. of commercial development) under construction.


Map No.	Project	Location	Land Use	Size / Description	Status
<b>Planning Entitlement Permits</b>					
7	Keysite #18 Steve Lebard	Intersection of Clark Ave. and Foxenwood Ln.	Commercial	1.25 acres 7,771 s.f. restaurant and office	Land Use Permit issued.
8	Evergreen Shopping Center	3400, 3450, 3496, 3500 Orcutt Rd.	Commercial	4.37 acres 61,598 s.f. retail and office space	Approved by Planning Commission; Land Use Permit issued for grading.
<b>Discretionary Approval Process</b>					
9	Keysite #1 Orcutt Marketplace	Near junction of Clark Ave. and US101	Commercial	23.9 acres 306,100 s.f. proposed	Approved by Planning Commission.
10	Keysite #3 SB Clark LLC	Near Clark Ave. and Hwy 101	Residential	8 acres 160 clustered units approved under the MR-O Housing Element Rezone	Approved by Board of Supervisors.
11	Keysite #7 Vintage Ranch	Approximately 0.5 mile south of Clark Ave. at the terminus of Stubblefield Rd.	Residential	31.52 acres 52 units	Approved. Tentative map is unrecorded.
12	Keysite #10 Orcutt Creek	Bradley Rd.	Residential	9.28 acres 16 residential lots 1.7 du/acre	Approved 10/11/05. Map Time Extension approved 11/18/09.
13	Keysite #25 Orcutt Plaza	Intersection of Santa Maria Way and College Dr.	Commercial	22.23 acres 220,779 s.f.	No longer in unincorporated area. Approved by County Planning Commission and subsequently annexed into the City of Santa Maria.
14	Keysite #29 Shared Senior Housing, Phase II	East of Hummel Dr, at 4454 Hummel Dr.	Residential	5.21 acres 20 condominiums for seniors 1.04 units /acre	Approved; near completion.
15	Keysite #30 General Plan Amendment	Approximately 1,600feet southwest of the intersection of Union Valley Pkwy. and Bradley Rd.	Residential	10.6 acres 212 clustered units approved under the MR-O housing Element Rezone	Approved by Board of Supervisors.
16	Hope Community Church	3920 Highway 101	Church	10.43 acres 29373 s.f. church.	Approved by Planning Commission.

Map No.	Project	Location	Land Use	Size / Description	Status
<b>Projects Undergoing Environmental Review</b>					
17	Keysite #3 SB Clark LLC	Near Clark Ave. and Hwy 101, south of Keysite #2	Residential	147 acres Rezone to PRD Residential 156 units total, (96 Cluster detached SFD's, 49 Creekside SFD's, and 11 Ranchette lots for sale). 160 clustered units approved under the MR-O Housing Element Rezone.	EIR in preparation.
18	Keysite #11 English Joseph	Near junction of Clark Ave. and State Route 135	Mixed use	21.43 acres 56,806 s.f. of commercial development and 42,000 s.f. of residential (30 2- and 3-bedroom apartments.)	Environmental review in process.
19	Keysite #30 General Plan Amendment	Approximately 1,600 feet southwest of the intersection of Union Valley Parkway and Bradley Rd.	Residential	78.73 acres Rezoned and construction of 81 single-family homes. (212 clustered units approved under the MR-O Housing Element Rezone.)	Scoping document in preparation.
<sup>a</sup> Source: County of Santa Barbara Planning and Development Cumulative Projects List, Orcutt Community Plan Discretionary Development, April 2010.					





**Legend**

 Project Site

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**Related Project**

1. Key Site #6 - Mesa Verde
2. Key Site #8 - Harp Springs
3. Key Site #12 - Rice Ranch
4. Key Site #17 - Stonegate
5. Key Site #20 - Old Mill Run
6. Orcutt Union Plaza
7. Key Site #18 - Steve Lebard
8. Evergreen Shopping Center
9. Key Site #1 - Orcutt Marketplace
10. Key Site #3 - SB Clark LLC
11. Key Site #7 - Vintage Road
12. Key Site #10 - Orcutt Creek
13. Key Site #25 - Orcutt Plaza
14. Key Site #29 - Shared Senior Housing, Phase II
15. Key Site #30 - General Plan Amendment
16. Hope Community Church
17. Key Site #3 - SB Clark LLC
18. Key Site #11 - English Joseph
19. Key Site #30 - General Plan Amendment

Source: Aerial Photography, August 2008.



# Environmental Setting and Impact Analysis

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# SECTION 4

## 4.0 ENVIRONMENTAL SETTING AND IMPACT ANALYSIS

The purpose of this EIR is to assess the impacts of potential future development that could be permitted at the project site under the proposed GPA/Rezone. Because there is no specific development proposal for the site, the impact analyses in this EIR are programmatic (i.e., general), assessing the maximum development that could occur on the site under the proposed General Plan and Zoning designations and standards. The analyses identify the OCP EIR impacts that would apply to the proposed project as well as any new or varied impacts. They also identify OCP development standards that would prevent or assure mitigation of potential impacts associated with future development of the site. Given that there is no project proposed for County approval at this time, the mitigation measures identified in this EIR consist of changes and/or additions to existing OCP development standards that would apply to future development of the site. When a specific development is proposed for the site, that proposal will be assessed in light of the analysis and conclusions in this EIR to determine if further CEQA environmental documentation is required.

Santa Barbara County Planning and Development circulated a Notice of Preparation (NOP) and EIR Scoping Document on December 15, 2009 for review and comment by the public, agencies, and organizations as required under CEQA. The EIR Scoping Document is provided in **Appendix A**. A Public Scoping Meeting was held on January 7, 2010. Comments relating to the EIR scope were taken into consideration in the preparation of this EIR.

The following sections addresses each of the issues that were identified in the Initial Study as requiring further analysis in the EIR. The impact analysis for each issue area examined in this EIR is presented in six subsections as described below:

- **Existing Conditions** – This subsection describes the environmental setting.
- **Thresholds of Significance** – This subsection identifies the thresholds used to assess the significance of project impacts. These are based primarily on applicable CEQA criteria and the County’s Environmental Thresholds and Guidelines Manual.
- **Project Impacts and Mitigation Measures** – This subsection describes the nature and extent to which the proposed project would change the existing environment and makes a determination of whether or not these changes would exceed the thresholds of significance. Mitigation measures are identified for each significant impact that would occur as a result of the proposed project.
- **Cumulative Impacts** – This subsection identifies the potential for significant effects to occur as a result of the proposed project in combination with other development anticipated in the vicinity of the project site and buildout of the OCP, as applicable. Where this potential exists, a determination is made as to whether or not the proposed project’s contribution to this impact is cumulatively considerable and therefore significant.
- **Residual Impacts** – This subsection identifies the levels of significance for the project’s impacts following the implementation of mitigation measures, specifically identifying significant unavoidable adverse impacts, i.e., impacts that cannot be mitigated to less than significant levels. Impacts are classified as follows:
  - Class I – Significant impact that cannot be reduced to a less than significant level with implementation of mitigation measures.
  - Class II – Significant impacts that can be reduced to a less than significant level with implementation of mitigation measures.
  - Class III – Less than significant impacts. Mitigation measures are not required but may be recommended.
  - Class IV – Beneficial impacts.

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## 4.1 AESTHETICS/VISUAL RESOURCES

### 4.1.1 Existing Conditions

#### Visual Character and Quality of the Project Site

The proposed project site consists of four vacant parcels within Key Site 17 (see Figure 2-1 in Section 2.0). **Figures 4.1-1 through 4.1-5** provide photographs that illustrate existing conditions on the site and in the immediate vicinity (all figures are placed at the end of this section). The site is currently undeveloped, with the exception of a 0.28-acre paved parking area at its northeast corner (**Figure 4.1-2, View A**). The remainder of the site is vegetated predominantly with low non-native herbaceous vegetation as shown in **Figure 4.1-2, View B**. This photo also shows a graveled and barren swath along the eastern property boundary, cleared vehicle access paths to the interior of the site, and piles of cement rubble and mulched vegetation. For the most part, the site appears level, open, and devoid of conspicuous or aesthetically appealing features. However, it is noted that the canopies of two oak trees located along the site's northern boundary spread over the site (see **Figure 4.1-3, Views A and B**). The trunks of these trees appear to be located just north of the site boundary. Other than these oak tree canopies, the site does not contain visual resources. However, its openness allows for distant hillside views, as described further below.

#### Visual Conditions of the Site's Immediate Vicinity

The general character of the project area is transitional, from the low-density urban/suburban character of Old Town Orcutt to the north, to a more rural landscape to the south and southwest of the site. As described below, the areas immediately surrounding the site have been (or are in the process of being developed) with various types of structures.

Single-family residences (one-story and some two-story) abut the north side of Soares Avenue opposite the site's northern frontage. **Figure 4.1-3, View C** shows a view of these residences, looking west along Soares Avenue. These homes are built on lots approximately 0.15 acres in size, with homes setback from Soares Avenue at distances of approximately 25 feet. The lack of paved sidewalks in this residential neighborhood contributes to its rural character.

The Stonegate residential development abuts the entire western boundary of the project site. At present, the Stonegate property has been improved with a park along the south side of Soares Avenue (see **Figure 4.1-8, View A**) and single-family residences along Rice Ranch Road. The rooflines of these houses can be seen in southwesterly views from Soares Avenue (see **Figure 4.1-3, View C**). The development of additional single-family homes is planned for the remainder of the Stonegate property, including the area along the project site's western boundary.

As shown in **Figure 4.1-4, View B**, a church and its parking lot, two single-family residences, and a large utility/storage outbuilding abut the south side of Rice Ranch Road, opposite the project site. Further south, and to the southwest of the site is a large expanse of open space that includes Pine Canyon Creek. The riparian vegetation is partially visible in some southerly views across the site, as shown in **Figure 4.1-3, View B**.

As shown in **Figure 4.1-4, View C** in an easterly-oriented photograph across the project site, the Oasis Senior Center, Orcutt Union School District offices, and a school bus storage/maintenance yard abut the project site to the east.

## Topographic Setting and Existing Views

The southern area of Orcutt, which includes the project site, is geographically situated along the southern edge of the Santa Maria Valley, where gently sloping sand terraces and rolling hill terrain is traversed by a number of locally entrenched creek valleys. The area is a level to gently rolling landscape which transitions gradually into the more elevated foothills of the Casmalia Hills to the southwest and the Solomon Hills to the southeast. The topography of the site exhibits level to gentle westerly sloping surface conditions with elevations falling approximately 12 feet across the site, from 352 feet on the eastern site boundary to 340 feet at the western site boundary. Orcutt Creek skirts approximately 2,000 feet to the north of the project site in Old Town Orcutt, and Pine Canyon Creek courses northwesterly from the Solomon Hills to pass by the site approximately 500 feet to the south.

### *Southerly Views of the Casmalia and Solomon Hills*

The Casmalia and Solomon hills provide a scenic backdrop for the community of Old Town Orcutt. However, expansive views of these hills are limited from most locations within this community. With generally level terrain conditions, even the modestly-scaled, single-story residences and associated mature landscaping within the residential neighborhood on the south side of Old Town Orcutt (north of Soares Avenue) are of sufficient heights to block ground level views of the Casmalia and Solomon Hills from public streets. Undeveloped private properties south of Soares Avenue (i.e., the project site within Key Site 17 and Key Sites 13 and 15 south of Rice Ranch Road) allow for visibility of the Solomon Hills (to the southeast) and Casmalia Hills (to the southwest) from Soares Avenue.

The photographs shown in **Figure 4.1-3, View C** and **Figure 4.1-8, View A** illustrate unobstructed southwesterly views across the site to the Casmalia Hills. In southeasterly views from Soares Avenue, views of the Solomon Hills are available, however, they are more distant views and the lower portions of the hills are partially obstructed by intervening vegetation. The only foreground view obstructions to visibility across the site in views from the north are two oak trees and a pepper tree growing along Soares Avenue near the site's northwest corner. These trees block some local views of the Solomon or Casmalia Hills, depending upon the view location and direction of view.

### *Views from Scenic Highways*

The project site is not visible from US Highway 101, a route that is eligible for designation as a State "Scenic Highway" along its entire length in Santa Barbara County. US 101 courses northwesterly through the Santa Maria Valley and passes through Orcutt approximately 2.75 miles east of the project site. The project site is visible, however, in easterly to northeasterly views from State Route 1 (SR 1). SR 1 is classified as "moderately scenic" in the Orcutt Community Plan (OCP) and is also eligible for "Scenic Highway" designation by the State of California. The route trends northerly to northwesterly approximately 2,500 feet (0.47 mile) to the west of the project site, at elevations approximately 20 feet higher than those at the western site boundary. The northeasterly-oriented photographic view toward the project site shown in **Figure 4.1-5** was taken from the northbound lanes of the highway. In the view depicted, the east-west extent of the vacant project site can be discerned between the Stonegate residential development along the western boundary of the site and the Oasis Senior Center and OUSD offices and school bus yard that abut the eastern boundary of the site. Visibility of the surface of the site is partially obscured by the top of riparian vegetation found along Pine Creek to the south of Rice Ranch Road. Presently, the Stonegate residential development is partially completed along the western boundary of the project site. When it is completed the surface area of the project site that is visible now will be further concealed in this view.

## Existing Development Standards

The OCP Visual/Aesthetic Resources section calls for the protection of public views of the Solomon and Casmalia Hills (Policy VIS-O-2). This policy is supported by DevStd VIS-O-2.1, which requires development to be site and designed to minimize disruption of these views. The OCP also includes development standards pertaining to Key Site 17 that are intended to protect the visual character of Old Town Orcutt. The specific language of these development standards is provided in Section 2.0 Project Description (see DevStd KS17-1, DevStd KS17-2, DevStd KS17-7, and Action KS17-6 in Section 2.5 Proposed GPA/Rezone). These development standards, as they apply to a 100 percent senior housing project, call for the inclusion of landscape buffers along Soares Avenue and Rice Ranch Road to partially screen views of future development on the project site; limit the heights of proposed structures along Soares Avenue and adjacent to the required neighborhood park to one-story; allow for two-story structures elsewhere on the site as long as they are of low profile and screened to the greatest degree feasible; require visual compatibility with, and prohibit significant obstruction of long-range southerly views from Old Town Orcutt. In addition, DevStd VIS-O-6.3 requires minimization of night lighting in order to minimize impacts on neighboring properties and the community in general.

### 4.1.2 Thresholds of Significance

The proposed project's aesthetic impacts are assessed below based on significance thresholds provided in Appendix G of the CEQA Guidelines and the County's Environmental Thresholds Guidelines Manual (October 2008). Based on the current CEQA Guidelines, the proposed project would result in a potentially significant visual impact if it would result in one or more of the following conditions:

- a) Would the project have a substantial adverse effect on a scenic vista?
- b) Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?
- c) Would the project substantially degrade the existing visual character or quality of the site and its surroundings?
- d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

The County's Guidelines do "not constitute a formal significance threshold but instead [they] direct the evaluation to the questions which predict the adversity of impacts to visual resources." The questions are as follows:

- 1a. Does the project site have significant visual resources by virtue of surface waters, vegetation, elevation, slope, or other natural or man-made features which are publicly visible?
- 1b. If so, does the proposed project have the potential to degrade or significantly interfere with the public's enjoyment of the site's existing visual resources?
- 2a. Does the project have the potential to impact visual resources of the Coastal Zone or other visually important area (i.e., mountainous area, public park, urban fringe, or scenic travel corridor)?
- 2b. If so, does the project have the potential to conflict with the policies set forth in the Local Coastal Plan, the Comprehensive Plan or any applicable community plan to protect the identified views?
3. Does the project have the potential to create a significantly adverse aesthetic impact through obstruction of public views, incompatibility with surrounding uses, structures, or intensity of development, removal of significant amounts of vegetation, loss of important open space,

substantial alteration of natural character, lack of adequate landscaping, or extensive grading visible from public areas?

For purposes of this analysis, an aesthetic impact is considered significant if the project would:

- a) damage or remove a visual resource;
- b) introduce development that is incompatible with surrounding uses, structures, or intensity of development;
- c) obstruct or otherwise adversely affect a scenic viewshed from a public viewing area (e.g. roadway or other publicly-accessible property); or
- d) create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

In this analysis, only public views or view corridors were evaluated against the above criteria. OCP policy does not regulate or provide for mitigation of visual impacts on private viewsheds, thus changes to views from private properties were not evaluated as part of the following impact assessment. Additionally, views from private property such as backyards, front yards, interior living spaces, etc. are not considered public view corridors.

#### **4.1.4 Project Impacts and Mitigation Measures**

The proposed project includes a General Plan Amendment (GPA) and Rezone, including proposed revisions to the OCP development standards that apply to the project site. As described in Section 2.0, these actions would increase the permissible density of residential development on the site, revise the locations where building heights are limited to one-story, and increase the maximum number of stories for other buildings on the site. The requested revisions to development standards maintain the requirement that buildings along Soares Avenue be limited to one story, however they remove the requirement that buildings adjacent to the park be limited to one story and the reference to two-story buildings on the remainder of the site. The proposed zoning allows a 35-foot maximum building height.

In addition, the requested changes would revise the park requirement such that the park space may be located anywhere within the project site rather than at the northwest corner of the site. This may result in two smaller parks within Key Site 17 rather than one larger park along the south side of Soares Avenue.

The project also includes a proposed new development standard that is intended to ensure neighborhood compatibility and maintain visual resources (i.e., long-range southerly hillside views from Old Town Orcutt). This standard states that buildings shall be of low profile and screened and/or softened with vegetation to the greatest degree and that future development shall follow the Old Town Orcutt Design Guidelines regarding the architectural style and character of the proposed structures.

The purpose of this analysis is to assess the potential impact of future development that could occur on the project site under the proposed GPA/Rezone. As described in Section 2.0, there is no specific development proposal for the site at this time. Therefore, for purposes of this analysis, a reasonable worst-case development footprint and massing of buildings on the project site was assumed. Although the revised development standards set forth a clear intent to minimize view obstruction and assure visual compatibility, this analysis assesses potential future development according to the specific height limitations and set backs that would apply to the site.

To approximate the potential visual impacts of potential future development on the project site, three viewing vantage points were selected from public street locations for which “worst-case” schematic

visual impact simulations were prepared, in the form of height and massing diagrams. These are provided in **Figures 4.1-6 through 4.1-9**. These simulations represent the potential envelopes of future development on-site based on the proposed development standards and zoning (including a 20-foot setback from Rice Ranch Road and Soares Avenue, a 10-foot setback along the east and west property boundary, and a maximum site coverage of 30 percent). Height and massing diagrams typically depict a potential “worst-case” visual impact because they lack landscaping and architectural design features such as building articulation, upper story setbacks, and roofline design elements that reduce or soften visual massing impacts of structures. These diagrams also represent worst-case impacts in terms of the placement of buildings (closest to the project site perimeters) and the assumption of fewer buildings rather than a number of buildings, which would “break-up” the massing. Never-the-less, the simulations provide representations of the potential placement and height of on-site structural development in relation to the surrounding environment. The translucent quality of the schematic height and massing diagrams is intended to illustrate the potential views obstructed. The conclusions that can be drawn from these simulations with regard to community character and impacts on views are described below in the respective analyses.

### Visual Resources

Impact Number	Related OCP EIR Impact	Impact Description	Significance Before Mitigation
N/A	N/A	<b>Development of the site may result in the loss of two coast live oak trees located along the northern boundary of the site.</b>	<b>Less Than Significant</b>

N/A - Not applicable, impact numbers are not assigned to less than significant impacts.

As described above, the site does not contain significant visual resources with the exception of two coast live oak trees located along the northern boundary of the site. Future development of the site may result in loss of the trees, for example as a result of encroachment into the root protection zone of these trees. However, as discussed in Section 4.3 Biological Resources, OCP DevStd BIO-O-3.1 assures that future development would be required to (1) avoid damage to these trees to the maximum extent feasible, and (2) replace these trees if removal cannot be avoided. Therefore, potential impacts on visual resources associated with the possible removal of these trees would be less than significant.

### *Mitigation Measures*

Mitigation measures are not required.

### *Residual Impacts*

The project’s impacts on visual resources would be less than significant before mitigation (**Class III**).

### Visual Character/Compatibility

Impact Number	Related OCP EIR Impact	Impact Description	Significance Before Mitigation
AES 1	VIS-3, VIS 4, VIS-11, VIS-12, KS 17-VIS-1	<b>Development of the site would alter the visual character of the site.</b>	<b>Significant</b>

The OCP EIR (Section 5.17) identifies the following visual compatibility impacts, which could result from the development of Key Site 17:

- Impact VIS-3: Unmaintained stormwater retardation basins. Construction of additional small steep sided, chain-link fenced in, poorly landscaped and maintained retardation basins would create *potentially significant* visual degradation of existing and new neighborhoods.
- Impact VIS-4: Unmaintained roadway medians and planter strips. Construction of new residential and commercial development and roads would include medians and planter strips which, if unmaintained, could result in *potentially significant* adverse impacts to motorists and surrounding residents through the creation of weedy unmaintained areas lining some of the community's major roads.
- Impact VIS-11: Alteration of visual character of Old Town Orcutt. Development of open lands adjacent to Old Town Orcutt (Sites 17, 18, 15) could lead to *potentially significant* impacts to the visual character of Old Town through elimination of approximately 150 acres of open space and substantial changes to views from Clark Avenue and Rice Ranch Road.
- Impact VIS-12: Incompatible development in Old Town Orcutt. New development/redevelopment within the Old Town area could create *potentially significant* visual impacts through construction of buildings whose size and architectural style, etc. are incompatible with the existing character of Old Town.
- Impact KS17-VIS-1: Change in the visual character of the site. Eventual buildout of 135 units on the site would adversely affect existing views and aesthetic qualities on the site. The rural character of Old Town Orcutt would be *significantly* impacted by this project, which would replace open land with residential development and new roads.

These impacts would apply to future development of the project site. The proposed changes to the allowable development at the site, as described above, would exacerbate the previously identified OCP EIR Impacts VIS-11, VIS-12, and KS17-VIS-1. As shown in Figures 4.1-5 through 4.1-7, future development under the proposed project could introduce visual elements that are of substantially greater scale than the surrounding development. The proposed project would maintain the restriction of buildings along Soares Avenue to one story, but would not require that a park be constructed along Soares Avenue nor limit the height of buildings immediately surrounding the park. Three-story structures, behind one-story structures along Soares Avenue and along Rice Ranch Road would likely appear out-of scale with respect to the surrounding environment.

The following development standards would help to reduce the project's potential visual character impacts (redline/strikethrough text indicates changes to these development standards that are part of the proposed project):

**DevStd KS17-1:** Any discretionary development shall include a landscape buffer consisting of drought-tolerant trees and shrubs of sufficient density to partially screen the proposed development from Rice Ranch Road, Soares Avenue, and Dyer Street. The buffer along Soares Avenue shall be integrated with the planned park (~~see Figure KS17-1~~). A meandering trail, as shown on Figure KS17-1, shall also be developed.

**DevStd KS17-2:** For development located on APN 105-330-004, hHomes located on the periphery of the site and those adjacent to the neighborhood park shall be one-story, except as noted in Action KS17-6. To ensure neighborhood compatibility, development located on Soares Avenue shall be one-story.



Any ~~two-story~~ other development on APNs 105-134-004 or 105-134-005 and any development within APNs 105-330-005, 105-330-006, or 105-330-016 shall be visually compatible with, and shall not significantly block long-range southerly views from, Old Town Orcutt.

**DevStd KS17-7:** To ensure neighborhood compatibility and maintain visual resources (i.e., long-range southerly hillside views from Old Town Orcutt), buildings shall be of low profile and screened and/or softened with vegetation to the greatest degree while still meeting the project density objectives. Development shall also follow the Old Town Orcutt Design Guidelines to guide the architectural style and character of the proposed structures and other building elements.

**DevStd VIS-O-4.1:** Basins shall be engineered so that perimeter fencing is minimized. Where required, perimeter fencing shall be unobtrusive (while minimizing interference with wildlife movement on rural parcels). Perimeter landscaping of basins shall consist of low maintenance trees, shrubs, turf, etc., and on public basins should be designed to accommodate recreational uses where appropriate. Landscaping and fencing within basins should be maintained through a Landscape-Open Space Maintenance District.

In addition, future development of the site would require approval of a Development Plan, which requires review by the Board of Architectural Review (BAR). The BAR review would consider the character and scale of future development in relation to the surrounding community. The BAR review would occur during the discretionary phase of a future Development Plan application, and would involve a forum to request changes to a proposed site plan configuration, building heights, architectural character, landscaping etc. The BAR would provide review in consideration of DevStd KS17-7 to protect long-range southerly views to the extent feasible and ensure that the Old Town Orcutt Design Guidelines are incorporated into any design.

Although the above development standards and review requirements would reduce the project's potential visual character impacts, these impacts would remain significant. Future development of the site would still change the rural character of the site and the surrounding area, replacing open land with a residential development. Although the design and scale of such development would be reviewed by the BAR with the intent of maximizing compatibility with the character of Old Town, this review may not result in sufficient revisions to a proposed project (such as reduction of scale) to assure consistency with the character of the surrounding area, particularly given Government Code §65915-65918 requirements pertaining to the provision of senior housing.

### ***Mitigation Measures***

- AES 1-1** The County shall amend the OCP to add a Key Site 17 development standard stating that:
- BAR review of the project shall ensure that buildings are appropriately sized and incorporate design elements to promote visual compatibility with the surrounding neighborhood, particularly along Soares Avenue. Potential design elements may include articulation of outer building facades and roof lines, stepping back upper stories of buildings, and use of building materials common to single-family homes rather than commercial building materials.
  - Mechanical equipment (such as air conditioner units) and trash storage areas

shall be screened from public view. Screening may include a combination of landscaping and/or masonry or lattice walls).

- Low maintenance trees, shrubs, and groundcover shall be used in landscape plans for development of the site, particularly within the outer perimeter of the site.
- The on-site stormwater basin shall be designed to be visually pleasing from on-site as well as in views from Rice Ranch Road. Steep-sided, concrete-lined basins shall be avoided to the maximum extent feasible. The use of natural-appearing contoured basins is preferred. The use of perimeter fencing, in particular chain-link fencing, shall be avoided. Where required, perimeter fencing shall be of a decorative nature.
- The applicant shall improve existing visual resources in the project vicinity to offset the project's impacts on the area's visual character. Options for improving aesthetic/visual resources include, but are not limited to, increased landscaping of undeveloped areas on OUSD-owned property adjacent to public roads.

### ***Residual Impacts***

The project's impact related to alteration of and compatibility with the visual character of the Old Town Orcutt area may not be mitigated to a less than significant level by the mitigation measure identified above. Although review of by the BAR would help to assure these impacts are reduced to the extent feasible, it may not be possible to reduce these impacts to a less than significant level while also providing senior housing units allowed for by the site's zoning along with the density bonus provisions provided by Government Code §65915-65918. Therefore, these impacts would be **significant and unavoidable (Class I)**. The OCP EIR recognized significant unavoidable impacts related to the loss of open space, transformation of the Orcutt area from a semi-rural to urban area, and loss of scenic backdrop; the increased scale of development associated with the proposed project would increase these impacts. Section 67.0 assesses potential alternatives/~~additional development standards~~ that are aimed at avoiding/reducing these impacts.

### **View Impacts**

#### ***Southerly Views of the Casmalia and Solomon Hills from Soares Avenue***

Impact Number	Related OCP EIR Impact	Impact Description	Significance Before Mitigation
AES 2	KS 17-VIS-1	<b>Development on the site could result in a loss of unobstructed views of the Solomon Hills and Casmalia Hills experienced from Soares Avenue.</b>	<b>Significant</b>

As described above, southerly-oriented views of the Casmalia and Solomon Hills are currently available from Soares Avenue (east-west orientation) and its intersecting north-south streets (Pacific Street and Gray Street) across the undeveloped project site. Buildout of the site with one-, two-, and/or three-story structures and associated landscaping would partially obstruct southerly street-level views across the site toward either the Solomon or Casmalia Hills.

The simulation provided in **Figure 4.1-7** illustrates the project's potential effects on a southwesterly panoramic view across the site from Soares Avenue and Gray Street (from near the site's northeast corner). One-story structures along Soares Avenue and three-story structures behind these would block some of the existing views of the Casmalia Hills. However most of the hillcrests remain available in this

view. Because the site and vicinity are relatively level, even single-story structures and immature landscaping trees could block views across the site for pedestrians and motorists from immediately adjacent public streets and/or sidewalks. From public viewing locations located further away from the project site, views of the crests of the Casmalia Hills may be retained, as the line-of-site viewing angles would be improved to allow partial visibility of the distant hills. Given the scenic quality of these hillsides and the value placed on long-range southerly views from the Old Town Orcutt (as expressed in the OCP), the project's potential view blocking effects on the Casmalia Hills are considered a significant impact.

The view depicted in **Figure 4.1-8** illustrates the project's potential effects on southeasterly views across the site view from Soares Avenue (from beyond the site's northwest corner). In this view, the project would introduce structures that would block views in the direction of the Solomon Hills. However, in the pre-project view (View A) development and landscape trees east of the site and a eucalyptus windrow south of the site already block visibility of much of the Solomon Hills. View A shows that even the immature oak trees planted in the open park-like corner of the Stonegate residential development, which abuts the northwest corner project site, are of sufficient height to block distant views of the Solomon Hills. Although views of these hills are already partially obstructed, given the value placed on long-range southerly views from the Old Town Orcutt (as expressed in the OCP), the project's obstruction of views of the ridgelines as a backdrop to southwesterly views is considered a significant impact.

Southerly view impacts are included in OCP EIR Impact KS17-VIS-1, listed above. The proposed revisions to development standards for the project site would increase the severity of previously anticipated impacts by allowing for three-story buildings and removing the requirement for the location of the on-site future park along Soares Avenue. Proposed DevStd KS17-7 requires that buildings be of low profile in order to maintain visual resources (i.e., long-range southerly hillside views from Old Town Orcutt, see above for full text of this development standard). In addition the OCP currently includes the following development standard:

**DevStd VIS-O-2.1:** Development shall be sited and designed to minimize disruption of important public view corridors and viewsheds through building orientation, minimization of grading on slopes, landscaping and minimization of sound walls.

Further, as described above, future development of the site would require approval of a Development Plan, which requires review by the BAR. The BAR would review the project's design in relation to the goal of minimizing disruption of mountain views.

Although the above development standards and review requirements would reduce the project's potential view impacts, these impacts would remain significant. Given the flat topography of the site and the surrounding area to the north, any development of the site would at least partially obstruct views of the Solomon and Casmalia Hills. In addition, the County's ability to modify proposed development at the site in order to minimize view impacts may be limited given Government Code §65915-65918 requirements pertaining to the provision of senior housing.

### Mitigation Measures

No mitigation measures are available to further limit the potential for impacts on southerly views of the Solomon and Casmalia Hills.

Residual Impacts

As stated above, it may not be possible to reduce this impact to a less than significant level given local topographic conditions and the provisions of Government Code §65915-65918. Therefore, this impact would be **significant and unavoidable (Class I)**. The OCP EIR recognized significant unavoidable impacts related to the loss of scenic backdrop. Section 6.0 assesses potential alternative/additional development standards that are aimed at avoiding/reducing these impacts.

***Westerly Views of the Casmalia Hills from Rice Ranch Road***

Impact Number	Related OCP EIR Impact	Impact Description	Significance Before Mitigation
N/A	VIS-11, KS 17-VIS-1	<b>Development on the site could interfere with views of the Casmalia Hills from Rice Ranch Road.</b>	<b>Less Than Significant</b>

As shown in **Figure 4.1-9, Views A and B**, the proposed project has the potential to block a relatively small portion of the more distant hills available in views from along a short distance of Rice Ranch Road, but would not affect existing views of the closer, higher-elevated Casmalia Hills. As such, this impact is considered less than significant.

Mitigation Measures

Mitigation measures are not required.

Residual Impacts

The project's impacts on views of the Casmalia Hills from Rice Ranch Road would be less than significant before mitigation (**Class III**).

***Views from Scenic Highways***

Impact Number	Impact # (Applicable OCP EIR Impact or New)	Impact Description	Significance Before Mitigation
N/A	N/A	<b>Development on the site may be visible in views from SR 1.</b>	<b>Less Than Significant</b>

As noted above, the site is visible in easterly and northeasterly views from SR 1 (Figure 4.1-4). In views from SR 1 the site appears surrounded by existing development. At its distances from SR 1, development on the project site would not be highly noticeable and would largely be situated behind the intervening Stonegate residential development that abuts the entire western boundary of the site. Therefore, the project's impact on views from SR 1 would be less than significant.

Mitigation Measures

Mitigation measures are not required.

Residual Impacts

The project's impacts on views from scenic highways would be less than significant before mitigation (**Class III**).

## Light and Glare

Impact Number	Related OCP EIR Impact	Impact Description	Significance Before Mitigation
N/A	VIS-2	<b>Development on the site would introduce new sources of night lighting.</b>	<b>Less Than Significant</b>

The project site is primarily vacant and with the exception of elevated lighting standards for the parking lot at the northeast corner of the site, the site does not include lighting. Lighting sources existing in areas immediately adjacent to the site are associated with existing uses to the east, west, and south of the site and along adjacent roadways. With development of the project site, new sources of lighting would be introduced at the site. The project would not introduce new sources of night lighting in an area that is currently dark, but would add to night lighting at the southern edge of the Old Town Orcutt area.

The OCP EIR (Section 5.17) identifies the following applicable light and glare impact:

- Impact VIS-2: Increased night lighting. Increased development and associated night lighting from several thousand new units and acres of commercial development at and outside the existing fringes of urban development would result in *potentially significant* disruption of the night sky through the installation of hundreds of street lights and substantial increases in other outdoor lighting.

Development of the project site would contribute to this impact. The proposed project would change the type of development that could occur on the project, from single-family housing to a senior housing development. Night lighting sources associated with a senior housing development may be greater than that associated with single-family housing, including additional nighttime security lighting, lighting required for larger areas such as parking, pedestrian walkways, and lighting to accommodate nighttime activity at the site. The proposed project's nighttime lighting would have the potential to adversely affect nighttime lighting conditions in the area. However, the OCP includes the following applicable development standard:

**DevStd VIS-O-6.3:** Night lighting fixtures adjacent to residential areas shall be of the minimum height and intensity required for security/safety.

Adherence to this standard would assure that night lighting impacts would be less than significant.

### Mitigation Measures

Mitigation measures are not required.

### Residual Impacts

The project's light and glare impacts would be less than significant before mitigation (**Class III**).

## 4.1.5 Cumulative Impacts

The OCP EIR identified the following cumulative impacts that would occur as a result of regional growth in Orcutt, the City of Santa Maria, and the Santa Maria Airport.

- Impact VIS-17: Expansion of urban activities into existing rural open space. Expansion of the existing urban area would result in the loss of existing urban perimeters, alteration of overall

community character, loss of regional open space, and loss of traditional community boundaries, creating *significant and unavoidable* cumulative regional open space/aesthetic impacts.

- Impact VIS-18: Degradation of views from designated scenic corridors. Development of the proposed plan would result in *significant and unavoidable* cumulative visual impacts to scenic view corridors of US 101 and SR 1 through intrusion of extensive urban development and elimination of open space and scenic vistas along the length of these roadways in the Santa Maria Valley.

The proposed project would develop a site that is at the southern edge of, but within an area identified as part of the Old Town urban area. Development of this site is an infill development rather than development of a large tract of rural open space that would expand existing urban perimeters. As such, the proposed project is not expected to significantly contribute to cumulative impact VIS-17.

The proposed project would not be visible from US 101 and would not degrade existing views from SR 1. Therefore, the project would not significantly contribute to this cumulative impact VIS-18.





Aerial Source: County of Santa Barbara, August 2008.

ORCUTT UNION SCHOOL DISTRICT KEY SITE 17 PROJECT



# Existing Conditions Photograph Key Map







**View A** – A parking lot utilized by the Luis Oasis Senior Center, that is located on the project site at its northeast corner, is visible in this southwesterly view across the site toward the Casmalia Hills from Soares Avenue and Gray Street.



**View B** – This west to north-ranging panoramic view across the site illustrates the low non-native vegetation cover present on-site. Vehicular site access along the eastern boundary fence at the right side of the photograph has allowed the dumping of piles of concrete rubble and mulched vegetation on the site.





**View A** – The view depicted is from the northwest corner of the site and it illustrates that existing vegetation in the form of landscaping trees east of the site and a eucalyptus windrow south of the site that tend to block views of the more distant Solomon Hills. The view also shows existing impacts to views across the site made by two oak trees adjacent to Soares Avenue and a pepper tree located at the corner of the project site. The view also shows the OUSD offices and tall screened fencing concealing the bus parking and maintenance yard that abuts the eastern side of the project site.



**View B** – The view depicted is oriented southwesterly across the site toward the Casmalia Hills from Soares Avenue at Pacific Street. The view illustrates the view-blocking effects of two oak trees growing along the northern property line to the project site.



**View C** – This westerly view along Soares Avenue depicts the single-family residential neighborhood that borders the northern side of the project site in Old Town Orcutt.





**View A** – This westerly view from Rice Ranch Road illustrates a church and parking lot, several single-family residences, and a large out-building that border the road opposite the project site. The tall screened fence at the right side of the photograph marks the southwest corner of the OUSD bus parking and maintenance yard that abuts part of the eastern side of the project site.



**View B** – The view depicted is oriented easterly across the project site. It shows development consisting of the Luis Oasis Senior Center, Orcutt Union School District offices, and a school bus storage/maintenance yard that abut the eastern boundary of the site.



**View C** – The view depicted is an unobstructed southwestern view across the site toward the Casmalia Hills from Soares Avenue near Pacific Street. The rooflines of single-family residences being developed on Key Site 17 immediately west of and adjacent to the project site can be seen in the middle right portion of the photograph.





**View A** – The view depicted is oriented northeasterly from State Route 1 (SR1). The viewing distance to the project site is approximately 2,500 feet. The terrain surface of the site is only partially visible as some of it is obscured from view by intervening riparian vegetation along Pine Canyon Creek, and some by single-family residences that have been completed to date along the western boundary of the project site.





Aerial Source: County of Santa Barbara, August 2008.

ORCUTT UNION SCHOOL DISTRICT KEY SITE 17 PROJECT



# Photo Simulation Plan and View Locations



FIGURE 4.1-6





**Existing Conditions**

**View A** - The view depicted is an existing southwesterly panoramic view across the site from Soares Avenue and Gray Street (from near the site's northeast corner).



**Potential Future Conditions**

**View B** - This reasonable worst-case height and massing diagram indicates that introduced structures would block portions of the Casmalia Hills, with views of upper hills and ridgelines remaining in the central and eastern portion of this view.





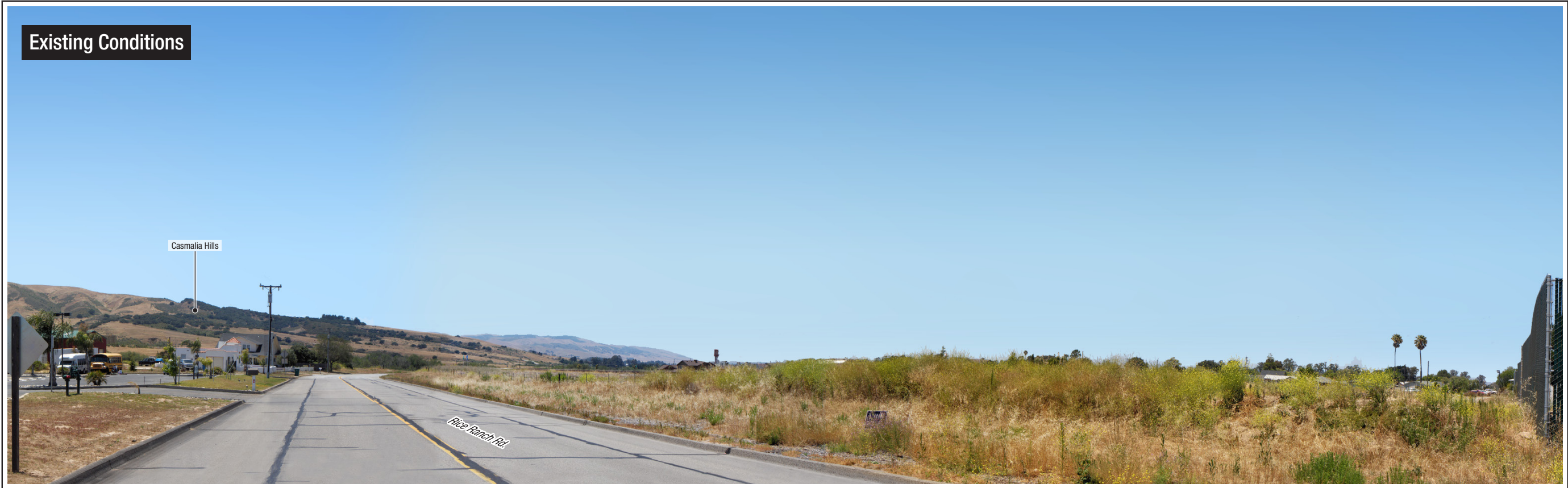
**View A** - The view depicted is an existing southeasterly panoramic view across the site view from Soares Avenue (from northwest of the site's northwest corner).



**View B** - This reasonable worst-case height and massing diagram indicates that structures would block the partial views of the Solomon Hills that are currently available. In the pre-project view above (View A) development and landscape trees east of the site and a eucalyptus windrow south of the site already block visibility of much of the Solomon Hills.



**Existing Conditions**



**View A** - The view depicted is an existing condition westerly view along Rice Ranch Road from the site's southeast corner.

**Potential Future Conditions**



**View B** - This reasonable worst-case height and massing diagram indicates that structures would block a small portion of the hills available in distant horizon views.

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## 4.2 AIR QUALITY

Air quality impacts were evaluated as part of the Orcutt Community Plan (OCP) EIR for the Orcutt Community Plan Area as a whole and for Key Site 17 (OCP EIR Section 5.11 and Volume II Key Site 17 analysis). This section updates the discussion of existing air quality conditions and provides an analysis that specifically addresses the proposed project against current thresholds and air quality standards.

### 4.2.1 Existing Conditions

#### Meteorological Setting

The proposed project site is located on the coastal plain in northern Santa Barbara County, and is part of the South Central Coast Air Basin (SCCAB). The SCCAB includes Ventura, Santa Barbara, San Luis Obispo, and Monterey counties. The climate of the Santa Barbara coastal plain, as with all Southern California, is dominated by the strength and position of the semi-permanent high-pressure center over the Pacific Ocean near Hawaii. It creates cool summers, mild winters, and infrequent rainfall. It drives the cool daytime sea breeze, and it maintains comfortable humidities and ample sunshine after the frequent morning clouds dissipate. Unfortunately, the same atmospheric processes that create the desirable living climate combine to restrict the ability of the atmosphere to disperse the air pollution generated by the population attracted in part by the desirable climate.

Temperatures in the Santa Maria area average 57 degrees annually. Daily and seasonal oscillations of mean temperature are small because of the moderating effects of the nearby oceanic thermal reservoir. In contrast to the steady temperature regime, rainfall is highly variable. Measurable precipitation occurs mainly from early November to mid-April, but total amounts are generally small. Santa Barbara averages 14 inches of rain annually with January as the wettest month.

Winds in the project vicinity display two characteristic regimes. During the day, especially in summer, winds are from the west to east. Daytime wind speeds are 8-10 miles per hour on average. At night, especially in winter, the land becomes cooler than the ocean, and an offshore wind of 5-8 miles per hour develops. One other important wind regime occurs when a high pressure occurs over the western United States that creates hot, dry, and gusty Santa Ana winds from the north and northeast across Santa Barbara County.

The net effect of the wind pattern on air pollution is that any locally generated emissions will be carried offshore at night, and toward inland northern Santa Barbara County by day. Dispersion of pollutants is most restricted when the wind velocity is low during the morning and evening transitions from on/off shore winds. The limited development in inland Santa Barbara County, however, causes few air quality problems during air stagnation. Both summer and winter air quality in the project area is generally very good.

In addition to winds that control the rate and direction of pollution dispersal, Southern California experiences strong temperature inversions that limit the vertical depth through which pollution can be mixed. In summer, coastal areas are characterized by a sharp discontinuity between the cool marine air at the surface and the warm, sinking air aloft within the high pressure cell over the ocean to the west. This marine/subsidence inversion allows for good local mixing, but acts like a giant lid over the region. Air starting onshore at the beach is relatively clean, but becomes progressively more polluted as sources continue to add pollution from below without any dilution from above. Because of Santa Maria's location relative to the ocean, the incoming marine air during warm season onshore flow contains little air pollution. Local air quality is not substantially affected by the regional subsidence inversions.



A second inversion type forms on clear, winter nights when cold air off the mountains sinks to the surface while the air aloft remains warm. This process forms radiation inversions. These inversions, in conjunction with calm winds, trap pollutants such as automobile exhaust near their source. However, northern Santa Barbara County does not have enough mobile sources (which continue to become cleaner each year) such that limited nocturnal mixing effects do not create any localized air pollution “hot spots”.

### **Ambient Air Quality Standards (AAQS)**

Ambient air quality standards are the levels of air quality considered safe, with an adequate margin of safety, to protect the public health and welfare. They are designed to protect those people most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise, called "sensitive receptors." Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed. Recent research has shown, however, that chronic exposure to ozone (the primary ingredient in photochemical smog) may lead to adverse respiratory health even at concentrations close to the ambient standard.

National AAQS were established in 1971 for six pollution species with states retaining the option to add other pollutants, require more stringent compliance, or to include different exposure periods. The initial attainment deadline of 1977 was extended several times in air quality problem areas like Southern California. In 2003, the Environmental Protection Agency (EPA) adopted a rule that extended and established a new attainment deadline for ozone for the year 2021. Because the State of California had established AAQS several years before the federal action and because of unique air quality problems introduced by the restrictive dispersion meteorology, there is considerable difference between state and national clean air standards. Those standards currently in effect in California are shown in **Table 4.2-1**. Sources and health effects of various pollutants are shown in **Table 4.2-2**.

The Federal Clean Air Act Amendments (CAAA) of 1990 required that the U.S. Environmental Protection Agency (EPA) review all national AAQS in light of currently known health effects. EPA was charged with modifying existing standards or promulgating new ones where appropriate. EPA subsequently developed standards for chronic ozone exposure (8+ hours per day) and for very small diameter particulate matter (called "PM-2.5"). New national AAQS were adopted in 1997 for these pollutants.

Evaluation of the most current data on the health effects of inhalation of fine particulate matter prompted the California Air Resources Board (ARB) to recommend adoption of the statewide PM-2.5 standard that is more stringent than the federal standard. This standard was adopted in 2002. The State PM-2.5 standard is more of a goal in that it does not have specific attainment planning requirements like a federal clean air standard, but only requires continued progress towards attainment.

Similarly, the ARB extensively evaluated health effects of ozone exposure. A new state standard for an 8-hour ozone exposure was adopted in 2005, which aligned with the federal 8-hour standard. The California 8-hour ozone standard of 0.07 ppm is more stringent than the federal 8-hour standard of 0.075 ppm. The state standard, however, does not have a specific attainment deadline. California air quality jurisdictions are required to make steady progress towards attaining state standards, but there are no hard deadlines or any consequences of non-attainment. During the same re-evaluation process, the ARB adopted an annual state standard for nitrogen dioxide (NO<sub>2</sub>) that is more stringent than the corresponding federal standard, and strengthened the state one-hour NO<sub>2</sub> standard.

**Table 4.2-1  
Ambient Air Quality Standards**

Pollutant	Averaging Time	California Standards		Federal Standards		
		Concentration	Method	Primary	Secondary	Method
Ozone (O <sub>3</sub> )	1 Hour	0.09 ppm (180 µg/m <sup>3</sup> )	Ultraviolet Photometry	-	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.07 ppm (137 µg/m <sup>3</sup> )		0.075 ppm (147 µg/m <sup>3</sup> )		
Respirable Particulate Matter (PM <sub>10</sub> )	24 Hour	50 µg/m <sup>3</sup>	Gravimetric or Beta Attenuation	150 µg/m <sup>3</sup>	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m <sup>3</sup>		-		
Fine Particulate Matter (PM <sub>2.5</sub> )	24 Hour	No Separate State Standard		35 µg/m <sup>3</sup>	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m <sup>3</sup>	Gravimetric or Beta Attenuation	15 µg/m <sup>3</sup>		
Carbon Monoxide (CO)	8 Hour	9.0 ppm (10 mg/m <sup>3</sup> )	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m <sup>3</sup> )	None	Non-Dispersive Infrared Photometry (NDIR)
	1 Hour	20 ppm (23 mg/m <sup>3</sup> )		35 ppm (40 mg/m <sup>3</sup> )		
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m <sup>3</sup> )		-		
Nitrogen Dioxide (NO <sub>2</sub> )	Annual Arithmetic Mean	0.03 ppm (57 µg/m <sup>3</sup> )	Gas Phase Chemiluminescence	53 ppm (100 µg/m <sup>3</sup> )	Same as Primary Standard	Gas Phase Chemilumi- nescence
	1 Hour	0.18 ppm (339 µg/m <sup>3</sup> )		100 ppm (188 µg/m <sup>3</sup> )	None	
Lead	30-Day average	1.5 µg/m <sup>3</sup>	Atomic Absorption	-	Same as Primary Standard	High Volume Sampler and Atomic Absorption
	Calendar Quarter	-		1.5 µg/m <sup>3</sup>		
	Rolling 3-month Average	-		0.15 µg/m <sup>3</sup>		
Sulfur Dioxide (SO <sub>2</sub> )	24 Hour	0.04 ppm (105 µg/m <sup>3</sup> )	Ultraviolet Fluorescence	-	0.5 ppm (1,300 µg/m <sup>3</sup> )	Ultraviolet Flourescence Spectrophotometry (Pararosaniline Method)
	3 Hour	-		-		
	1 Hour	0.25 ppm (655 µg/m <sup>3</sup> )		75 ppb (196 µg/m <sup>3</sup> )		
Visibility Reducing Particles	8 Hour	Extinction coefficient of 0.23 per kilometer–visibility of 10 miles or more (0.07–30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70 percent. Method: Beta Attenuation and Transmittance through Filter Tape.		<b>No Federal Standards</b>		
Sulfates	24 Hour	25 µg/m <sup>3</sup>	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m <sup>3</sup> )	Ultraviolet Fluorescence			
Vinyl Chloride	24 Hour	0.01 ppm (26 µg/m <sup>3</sup> )	Gas Chromatography			

Source: California Air Resources Board (09/08/10).

**Table 4.2-2**  
**Health Effects of Major Criteria Pollutants**

<b>Pollutants</b>	<b>Sources</b>	<b>Most Relevant Effects</b>
Carbon Monoxide (CO)	<ul style="list-style-type: none"> <li>Incomplete combustion of fuels and other carbon-containing substances, such as motor exhaust.</li> <li>Natural events, such as decomposition of organic matter.</li> </ul>	<ul style="list-style-type: none"> <li>Reduced tolerance for exercise.</li> <li>Impairment of mental function.</li> <li>Impairment of fetal development.</li> <li>Death at high levels of exposure.</li> <li>Aggravation of some heart diseases (angina).</li> </ul>
Nitrogen Dioxide (NO <sub>2</sub> )	<ul style="list-style-type: none"> <li>Motor vehicle exhaust.</li> <li>High temperature stationary combustion.</li> <li>Atmospheric reactions.</li> </ul>	<ul style="list-style-type: none"> <li>Aggravation of respiratory illness.</li> <li>Reduced visibility.</li> <li>Reduced plant growth.</li> <li>Formation of acid rain.</li> </ul>
Ozone (O <sub>3</sub> )	<ul style="list-style-type: none"> <li>Atmospheric reaction of organic gases with nitrogen oxides in sunlight.</li> </ul>	<ul style="list-style-type: none"> <li>Aggravation of respiratory and cardiovascular diseases.</li> <li>Irritation of eyes.</li> <li>Impairment of cardiopulmonary function.</li> <li>Plant leaf injury.</li> </ul>
Lead (Pb)	<ul style="list-style-type: none"> <li>Contaminated soil.</li> </ul>	<ul style="list-style-type: none"> <li>Impairment of blood function and nerve construction.</li> <li>Behavioral and hearing problems in children.</li> </ul>
Respirable Particulate Matter (PM-10)	<ul style="list-style-type: none"> <li>Stationary combustion of solid fuels.</li> <li>Construction activities.</li> <li>Industrial processes.</li> <li>Atmospheric chemical reactions.</li> </ul>	<ul style="list-style-type: none"> <li>Reduced lung function.</li> <li>Aggravation of the effects of gaseous pollutants.</li> <li>Aggravation of respiratory and cardio respiratory diseases.</li> <li>Increased cough and chest discomfort.</li> <li>Soiling.</li> <li>Reduced visibility.</li> </ul>
Fine Particulate Matter (PM-2.5)	<ul style="list-style-type: none"> <li>Fuel combustion in motor vehicles, equipment, and industrial sources.</li> <li>Residential and agricultural burning.</li> <li>Industrial processes.</li> <li>Also, formed from photochemical reactions of other pollutants, including NO<sub>x</sub>, sulfur oxides, and organics.</li> </ul>	<ul style="list-style-type: none"> <li>Increases respiratory disease.</li> <li>Lung damage.</li> <li>Cancer and premature death.</li> <li>Reduces visibility and results in surface soiling.</li> </ul>
Sulfur Dioxide (SO <sub>2</sub> )	<ul style="list-style-type: none"> <li>Combustion of sulfur-containing fossil fuels.</li> <li>Smelting of sulfur-bearing metal ores.</li> <li>Industrial processes.</li> </ul>	<ul style="list-style-type: none"> <li>Aggravation of respiratory diseases (asthma, emphysema).</li> <li>Reduced lung function.</li> <li>Irritation of eyes.</li> <li>Reduced visibility.</li> <li>Plant injury.</li> <li>Deterioration of metals, textiles, leather, finishes, coatings, etc.</li> </ul>
Source: California Air Resources Board, 2009.		

As part of EPA's 2002 consent decree on clean air standards, a further review of airborne particulate matter (PM) and human health was initiated. A substantial modification of federal clean air standards for PM was promulgated in 2006. Standards for PM-2.5 were strengthened, a new class of PM in the 2.5 to 10 micron size was created, some PM-10 standards were revoked, and a distinction between rural and urban air quality was adopted.

In response to continuing evidence that ozone exposure at levels just meeting federal clean air standards is demonstrably unhealthful, EPA has proposed a further strengthening of the 8-hour standard. A final decision on a possible new standard has not been made.

## Baseline Air Quality

Existing and probable future levels of air quality at the project site can be best inferred from ambient air quality measurements conducted by the Santa Barbara Air Pollution Control District (APCD) at its Santa Maria air monitoring station. This station measures regional pollution levels such as ozone, carbon monoxide, larger particulate matter (PM-10) and ultrafine particulates (PM-2.5). **Table 4.2-3** summarizes the last six years of published data from the Santa Maria station.

**Table 4.2-3**  
**Project Area Air Quality Monitoring Summary (2003 - 2008)**

Pollutant/Standard	2003	2004	2005	2006	2007	2008
<b>Ozone</b>						
1-Hour > 0.09 ppm (S)	0	0	0	0	0	0
8-Hour > 0.07 ppm (S)	0	0	0	0	0	0
8- Hour > 0.08 ppm (F)	0	0	0	0	0	0
Max. 1-Hour Conc. (ppm)	0.065	0.074	0.063	0.064	0.065	0.072
Max. 8-Hour Conc. (ppm)	0.060	0.064	0.061	0.062	0.054	0.064
<b>Carbon Monoxide</b>						
1-Hour > 20. ppm (S)	0	0	0	0	0	0
8- Hour > 9. ppm (S, F)	0	0	0	0	0	0
Max 1-Hour Conc. (ppm)	2.3	2.4	1.7	1.5	1.6	1.5
Max 8-Hour Conc. (ppm)	1.1	0.9	0.9	0.7	0.9	0.8
<b>PM-10</b>						
24-Hour > 50 $\mu\text{g}/\text{m}^3$ (S)	1/60	1/60	0/59	1/61	10/147	38/348
24-Hour > 150 $\mu\text{g}/\text{m}^3$ (F)	0/60	0/60	0/59	0/61	0/147	0/348
Max. 24-Hour Conc. ( $\mu\text{g}/\text{m}^3$ )	58.	52.	43.	56.	80.	87
<b>Ultra-Fine Particulates (PM-2.5)</b>						
24-Hour > 35 $\mu\text{g}/\text{m}^3$ (F) <sup>a</sup>	0/59	0/58	0/48	0/57	0/57	0/55
Max. 24-Hr. Conc. ( $\mu\text{g}/\text{m}^3$ )	20.5	16.6	30.5	34.5	23.0	25.0
<sup>a</sup> Revised standard adopted in 2006. Source: Santa Barbara County Annual Summaries, 2003-2008, Santa Maria, 906 S. Broadway, Air Monitoring Station.						

The following conclusions can be drawn from these data:

- Photochemical smog (ozone) levels normally do not exceed standards. The state 1-hour and 8-hour standards and the 8-hour federal standard all have not been exceeded in the last six years.

- Measurements of carbon monoxide have shown very low baseline levels in comparison to the most stringent 1- and 8-hour standards.
- Respirable dust (PM-10) levels periodically exceed the state standard, but the less stringent federal PM-10 standards have never been violated since 2003. The number of violations exceeding 50  $\mu\text{g}/\text{m}^3$  increased in 2007 and 2008 as well as the maximum 24-hour concentration values.
- The PM-2.5 standard of 35  $\mu\text{g}/\text{m}^3$  has not been exceeded in the last 6 years. PM-2.5 levels are generally quite low in the project area.

## Air Quality Planning

State and federal laws require that jurisdictions that do not meet clean air standards develop plans and programs that will bring those areas into compliance. These plans typically contain emission reduction measures and attainment schedules to meet specified deadlines. If and when attainment is reached, the attainment plan becomes a “maintenance plan.” The Santa Barbara APCD is the agency responsible for regulating air pollution in the project area.

As of 2008, Santa Barbara County is designated as a federal ozone attainment area for the 8-hour ozone standard (the 1-hour standard was revoked for Santa Barbara County). A new California 8-hour ozone standard was implemented in May 2006. The County violated this new state 8-hour ozone standard and continues to violate the state standard for PM-10. Santa Barbara County is therefore a non-attainment area for the state standards for ozone and for PM-10. The County is in attainment for the federal PM2.5 standard and unclassified for the state PM2.5 standard (based on monitored data from 2006 – 2008). The County is designated “attainment” or “unclassified” for other state standards and for all federal clean air standards.

In 2001, an ozone attainment plan was developed that was designed to meet both federal and state standards to be included in the State Implementation Plan (SIP). The 2001 Clean Air Plan (CAP) was adopted as the Santa Barbara County portion of the SIP designed to meet and maintain federal clean air standards. The 2007 CAP, adopted by the APCD Board, is currently the most recent Clean Air Plan for ultimately meeting the state ozone standard. The CAP projects future emissions based on selected activity indicators (including population, housing, employment, oil production, number of producing oil wells, daily vehicle miles traveled, and daily vehicle starts) as well as emissions reductions achieved from existing and proposed regulations. General growth of population, housing, and employment are based on forecasts made by the Santa Barbara County Association of Governments (SBCAG). These forecasts are based on the land use capacity of local general plans.

### 4.2.2 Thresholds of Significance

The *County of Santa Barbara Environmental Thresholds and Guidelines Manual* states that a significant adverse air quality impact may occur when a project, individually or cumulatively:

- Interferes with progress towards the attainment of the ozone standard by releasing emissions that equal or exceed the established long-term quantitative thresholds for NO<sub>x</sub> and ROC.
- Equals or exceeds the state or federal ambient air quality standard for any criteria pollutant (as determined by modeling).

Cumulative air quality impacts and consistency with the policies and measures in the Air Quality Supplement of the Comprehensive Plan, other general plans, and the Air Quality Attainment Plan

(AQAP) should be determined for all projects (i.e., whether the project exceeds the AQAP emission projections or growth assumptions.)

### Quantitative Construction Thresholds

The Santa Barbara County Environmental Thresholds and Guidelines Manual does not provide quantitative thresholds for short-term, construction-related PM-10, however it states that the effects of PM-10 should be discussed in all environmental documents for projects involving ground disturbance, and dust control measures are required for most projects following the County's Grading Ordinance. Additionally, the County violates the State standard for PM-10; therefore dust mitigation measures are required for all discretionary construction activities.

The Environmental Thresholds and Guidelines Manual does not provide short-term, construction-related thresholds for NOX and ROG emissions. The Manual also states that NOX emissions from construction equipment in the County are considered less than significant. However, the APCD uses 25 tons per year for ROG and NOx as a guideline for determining the significance of construction activity impacts.

### Quantitative Operational Impacts

The following significance thresholds for operational emissions are based on the Santa Barbara County Environmental Thresholds and Guidelines Manual and the Santa Barbara County APCD CEQA implementation guidelines (*Scope and Content of Air Quality Sections in Environmental Documents*, SBCAPCD, 2010):

The proposed project would result in a significant impact if it would:

- Emit (from all project sources, mobile and stationary) more than the daily trigger levels for off-sets under APCD Rule 802. The off-set thresholds are 55 pounds per day for ROG or NOx, and 80 pounds per day for PM-10;
- Emit 25 pounds per day or more of unmitigated ROG from motor vehicle trips only;
- Emit 25 pounds per day or more of unmitigated NOx from motor vehicle trips only;
- Cause or contribute to a violation of any California or National Ambient Air Quality standard (except ozone);
- Exceed the APCD health risk public notification thresholds adopted by the APCD Board (10 excess cancer cases in a million for cancer risk and a Hazard Index of more than 1.0 for non-cancer risk); or
- Be inconsistent with federal and state air quality plans for Santa Barbara County.

## 4.2.3 Project Impacts and Mitigation Measures

### Construction Period Impacts

Impact Number	Related OCP EIR Impact	Impact Description	Significance Before Mitigation
N/A	AQ-2	<b>Temporary construction activity associated with development of the site would result in the generation of air pollutant emissions, including dust and construction equipment exhaust.</b>	<b>Less than Significant</b>

## ***Dust***

Dust is normally the primary concern during construction of new buildings and infrastructure. Because such emissions are not amenable to collection and discharge through a controlled source, they are called “fugitive emissions.” Emission rates vary as a function of many parameters (soil silt, soil moisture, wind speed, area disturbed, number of vehicles, depth of disturbance or excavation, etc.). These parameters cannot be precisely estimated prior to project development and may change from day to day. Because of the inherent uncertainty in the predictive factors for estimating fugitive dust generation, regulatory agencies typically use one universal “default” factor based on the area disturbed assuming that all other input parameters into emission rate prediction fall into mid-range average values.

The OCP EIR notes that sandy soils throughout the planning area are highly susceptible to wind erosion. Left exposed to the elements, the sandy top soil can be blown off-site by prevailing winds creating a nuisance to surrounding neighborhoods. It identifies the following general impact, which would apply to the proposed project:

Impact AQ-2: Dust and PM-10 generation. Implementation of the Community Plan would result in *potentially significant* air quality impacts associated with the generation of fugitive dust and PM10 emissions during construction related activities.

For purposes of this analysis, dust emissions were estimated using URBEMIS2007 as shown in **Table 4.2-4**, below. Dust control measures are required for all construction activities under the County of Santa Barbara’s Grading Ordinance. Use of dust control procedures such as continual soil wetting, use of supplemental binders, early paving, etc. can achieve a significant improvement in PM-10 control efficiency. With the use such control measures the California Air Resources Board URBEMIS2007 computer model predicts that emissions can be reduced to 1-2 pounds per acre of disturbance per day. Given the required implementation of dust control measures, the proposed project’s construction-period dust emissions would be less than significant.

Current research in particulate exposure health effects suggest that the most adverse effect derives from ultra-small diameter particulate matter comprised of chemically reactive pollutants such as sulfates, nitrates, or organic material. A new national clean air standard for particulate matter of 2.5 microns or smaller in diameter (called “PM-2.5”) was adopted in 1997. Very little construction activity particulate matter is in the PM-2.5 range. Soil dust is also more chemically benign than typical urban atmospheric PM-2.5. Given the limited amount of PM-2.5 that would be generated as a result of the project, significant PM-2.5 impacts are not expected.

## ***Construction Equipment Exhaust***

Exhaust emissions during construction would result from the on- and off-site operation of heavy equipment. A specific development project is not currently proposed. In addition, the types and numbers of equipment would vary among contractors such that associated emissions cannot be quantified with certainty.

However, for purposes of this analysis the URBEMIS2007 computer model was used to calculate emissions using the following prototype construction equipment fleet:

**Project Equipment Fleet**

<b>Grading</b>	1 Grader
	1 Tractor/Loader/Backhoe
	1 Excavator
	1 Dozer
	1 Water Truck
<b>Construction</b>	2 Forklifts
	1 Tractor/Loader/Backhoe
	1 Crane
	1 Generator Set
	3 Welders
<b>Paving</b>	1 Paving Equipment
	1 Paver
	1 Roller
	1 Tractor/Loader/Backhoe
	4 Cement Mixers

Table 4.2-4 provides the project's estimated daily construction emissions calculated by URBEMIS2007. These calculations conservatively assume that site grading would require one month and construction, paving, and painting would require 12 months. Annual emissions are shown in **Table 4.2-5**.

**Table 4.2-4**  
**Daily Construction Activity Emissions (pounds/day)**

Activity	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM-10	PM-2.5	CO <sub>2</sub>
<b>Grading</b>							
Without Dust Control	3.8	30.6	17.4	0.0	25.4	6.4	2,901.1
With Dust Control	3.8	30.6	17.4	0.0	3.2	1.8	2,901.1
<b>Construction, Painting, and Paving</b>							
	48.6	36.6	49.0	0.0	2.8	2.5	5,417.0

Source: URBEMIS2007 Model, Output in Appendix B.

Santa Barbara County CEQA significance thresholds have not been adopted for construction activities. As shown on Table 4.2-5, peak annual construction equipment emissions are estimated to be below APCD guidelines. Therefore, the project's construction-period emissions are anticipated to be less than significant.

**Table 4.2-5**  
**Annual Construction Activity Emissions (tons/year)**

Activity	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM-10	PM-2.5	CO <sub>2</sub>
<b>Grading</b>							
Without Dust Control	0.04	0.35	0.20	0.00	0.29	0.07	33.36
With Dust Control	0.04	0.35	0.20	0.00	0.04	0.02	33.36
<b>Construction, Painting, and Paving</b>							
	3.96	3.93	5.72	0.00	0.29	0.26	624.05

Source: URBEMIS2007 Model, Output in Appendix B.



Because the Santa Barbara County portion of the SCCAB is a nonattainment area for the state PM<sub>10</sub> standard, construction emissions control measures are required for all projects involving earthmoving activities regardless of size or duration. Use of standard construction emissions control measures is also required by OCP Policy AQ-O-2, which states:

*Policy AQ-O-2: Significant fugitive dust and PM<sub>10</sub> emissions shall be reduced through implementation of appropriate construction restrictions and control measures, consistent with standards adopted by the Board.*

In accordance with standard practices, such construction emissions control measures would be shown on grading and building plans and as a note on a separate information sheet to be recorded with map. According to the SBCAPCD's *Scope and Content of Air Quality Sections in Environmental Documents* (June 2008), implementation of required dust control measures results in fugitive dust emissions that are less than significant. The specific measures that would be applied in accordance with standard requirements include the following:

- *During construction, use water trucks or sprinkler systems to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this should include wetting down such areas in the late morning and after work is completed for the day. Increased watering frequency should be required whenever the wind speed exceeds 15 mph. Reclaimed water should be used whenever possible. However, reclaimed water should not be used in or around crops for human consumption.*
- *Minimize amount of disturbed area and reduce on site vehicle speeds to 15 miles per hour or less.*
- *Gravel pads must be installed at all access points to prevent tracking of mud on to public roads.*
- *If importation, exportation and stockpiling of fill material are involved, soil stockpiled for more than two days shall be covered, kept moist, or treated with soil binders to prevent dust generation. Trucks transporting fill material to and from the site shall be tarped from the point of origin.*
- *After clearing, grading, earth moving or excavation is completed, treat the disturbed area by watering, or revegetating, or by spreading soil binders until the area is paved or otherwise developed so that dust generation will not occur.*
- *The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holiday and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the Air Pollution Control District prior to land use clearance for map recordation and land use clearance for finish grading for the structure.*
- *Prior to land use clearance, the applicant shall include, as a note on a separate informational sheet to be recorded with map, these dust control requirements. All requirements shall be shown on grading and building plans.*

As of June 15, 2008, fleet owners are subject to sections 2449, 2449.1, 2449.2, and 2449.3 in Title 13, Article 4.8, Chapter 9, of the California Code of Regulations (CCR) to reduce diesel particulate matter (PM) and criteria pollutant emissions from in-use off-road diesel-fueled vehicles. The following shall be adhered to during project grading and construction to reduce NO<sub>x</sub> and PM<sub>2.5</sub> emissions from construction equipment:

- *All portable construction equipment shall be registered with the state's portable equipment registration program OR permitted by the SBCAPCD by September 18, 2008.*
- *Diesel construction equipment meeting the California Air Resources Board's Tier 1 emission standards for off-road heavy-duty diesel engines shall be used. Equipment meeting Tier 2 or higher emission standards should be used to the maximum extent feasible.*

- *The engine size of construction equipment shall be the minimum practical size.*
- *The number of construction equipment operating simultaneously shall be minimized through efficient management practices to ensure that the smallest practical number is operating at any one time.*
- *Construction equipment shall be maintained in tune per the manufacturer's specifications.*
- *Construction equipment operating onsite shall be equipped with two to four degree engine timing retard or pre-combustion chamber engines.*
- *Catalytic converters shall be installed on gasoline-powered equipment, if feasible.*
- *Diesel catalytic converters, diesel oxidation catalysts and diesel particulate filters as certified and/or verified by EPA or California shall be installed on equipment operating on-site.*
- *Diesel powered equipment should be replaced by electric equipment whenever feasible.*
- *Idling of heavy-duty diesel trucks during loading and unloading shall be limited to five minutes; auxiliary power units should be used whenever possible.*
- *Construction worker trips should be minimized by requiring carpooling and by providing for lunch onsite.*

The SBCAPCD also requires that prior to occupancy of new buildings, Authority to Construct permits are required for diesel engines rated at 50 bhp and greater (e.g., fire pumps and emergency standby generators) and boilers/large water heaters whose combined heat input rating exceeds 2.0 million BTUs per hour.

These requirements would ensure that any construction-related air quality impacts remain less than significant.

### ***Mitigation Measures***

Mitigation measures are not required.

### ***Residual Impacts***

The project's construction-period air quality impacts would be less than significant prior to mitigation (Class III).

## **Operational Impacts**

### ***Project Emissions***

Impact Number	Related OCP EIR Impact	Impact Description	Significance Before Mitigation
N/A	N/A	<b>Development at the site would generate air pollutant emissions.</b>	<b>Less than Significant</b>

Operation of 257 senior residential units at the project site would result in the generation of area source emissions (e.g., heating, air conditioning) and vehicular emissions associated with daily trip generation. The project is predicted to generate 772 new trip ends per day (based on the traffic study conducted for this project, provided in Appendix F). Mobile and area source emissions for the project were calculated using the URBEMIS2007 model, a computerized procedure developed by the California Air Resources Board (CARB) for urban growth mobile source emissions. As shown in **Table 4.2-6**, operational emissions would include 22.3 pounds of ROG, 10.3 pounds of NO<sub>x</sub>, and 9.7 pounds of PM<sub>10</sub>. The

project's emissions would not exceed any County thresholds and therefore would result in a less than significant impact.

**Table 4.2-6  
Project Operational Area Source and Vehicular Emissions  
(pounds/day)**

Year 2011	Emissions (lbs/day)						
	ROG	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM-10	PM-2.5	CO <sub>2</sub>
Area Sources	14.6	2.0	2.4	0.0	0.0	0.0	2,477.1
Mobile Sources	7.7	8.3	74.6	0.1	9.6	1.9	5,099.0
<b>Total</b>	<b>22.3</b>	<b>10.3</b>	<b>76.9</b>	<b>0.1</b>	<b>9.7</b>	<b>1.9</b>	<b>7,576.1</b>
Santa Barbara County Significance Thresholds							
Total Emissions (Mobile + Area Sources)	55	55	N/A	N/A	80	N/A	N/A
Mobile Sources Only (Transportation)	25	25	N/A	N/A	N/A	N/A	N/A
Source: URBEMIS2007 Air Quality Model; Output in Appendix B.							

### Mitigation Measures

Mitigation measures are not required. It is noted, however, that the recommended measure identified in Section 4.12 Greenhouse Gas Emissions/Climate Change (GHG 1-1) would further reduce the project's operational emissions.

### Residual Impacts

The project's operational air quality impacts would be less than significant prior to mitigation (**Class III**).

### ***Toxic Air Contaminant (TAC) Exposure***

Impact Number	Related OCP EIR Impact	Impact Description	Significance Before Mitigation
N/A	N/A	<b>Development of the site would introduce residential units in the vicinity of a school bus maintenance and storage yard, which generates diesel emissions.</b>	<b>Less than Significant</b>

There are eleven diesel-powered school buses stored in the adjacent OUSD bus storage and maintenance facility. Airborne toxics control measures (ATCMs) have been approved that limit school bus idling at or near schools. The ARB's school bus idling fact sheet (last reviewed December 22, 2009) also states, "A driver of a school bus...is prohibited from idling more than five minutes at each stop beyond schools, such as parking or maintenance facilities."

These rules are designed to restrict the emissions of diesel exhaust. Diesel particulate matter (DPM) in the exhaust is a known carcinogen. The following analysis assesses the potential for health risks associated with DPM exposure at the proposed residences.

The accepted health risk analysis protocol is to assume that people are exposed to a source of TACs for a 70-year lifetime while remaining outdoors at one single location for their entire life. Over the next 70 years (2011-2080), the predicted emission rate (EMFAC2007) for diesel-powered vehicles is 0.263 grams per hour of idling (EMFAC2007). For eleven buses, the average daily DPM emission rate is 0.24 grams if they each idle for 5 minutes. The California Office of Environmental Health Hazard Assessment's (OEHHA) Air Toxic Hot Spots Program Risk Assessment Guidelines (2003) recommend that risk assessments initially perform a screening assessment to determine if a more detailed analysis is warranted. Table 4.2 of the Guidelines recommends use of the SCREEN3 model for long-term exposure with simple terrain. Table 4.4 of the Guidelines state the requirements for using SCREEN3 in a point source mode. Detailed factors such as stack diameter, exit velocity, stack temperature, and the exact x, y, z coordinate of each bus are not known. Table 4.6 of the Guidelines for modeling the bus exhaust as an area source is most appropriate in a screening level assessment. The EPA's SCREEN3 dispersion model was therefore used to calculate the maximum one-hour DPM exposure at the interface between the OUSD facility and the project site. This maximum level of one-hour DPM exposure was assumed to occur on 250 days per year. The predicted worst-case one-hour shown in the model output DPM concentration is  $0.003956417 \mu\text{g}/\text{m}^3$  (see Appendix B for model input and output). The annual average concentration was calculated using Table 4.3 of the OEHHA Guidelines ("Recommended Factors to Convert Maximum 1-hour Concentrations to Other Averaging Periods"). The recommended conversion factor is 0.08. The annual average DPM exposure at the project boundary with the OUSD property is:

$$0.003956417 \mu\text{g}/\text{m}^3 (1\text{-hour}) \times 0.08 (\text{hourly to annual}) = .00045 \mu\text{g}/\text{m}^3$$

$$.00045 \mu\text{g}/\text{m}^3 / 365 \text{ days per year} \times 250 \text{ days} = 0.00034209 \mu\text{g}/\text{m}^3$$

The excess individual cancer risk relative to the APCD's significance threshold of 10 in a million was calculated using Appendix A (Hot Spot Unit Risk and Cancer Potency Factors) of OEHHA's "TSD for Cancer Potency Factors" (May 2009) as follows:

$$0.00034209 \mu\text{g}/\text{m}^3 \times 300 \text{ in a million per } \mu\text{g}/\text{m}^3 = 0.09 \text{ in a million}$$

Even under ultra-conservative assumptions (e.g., that the wind will blow from the bus yard to the closest project residence every day of the year, the 70-year exposure, etc.) the predicted health risk is less than significant.

The chronic non-cancer health risk index (HI) for DPM exposure equals the annual average divided by five, or 0.00006. An HI of 1.0 is considered significant. Therefore, the chronic non-cancer health risk would be less than significant.

### Mitigation Measures

Mitigation measures are not required.

### Residual Impacts

The project's impacts associated with TAC exposure would be less than significant prior to mitigation (**Class III**).

## Air Quality Planning Consistency

Impact Number	Related OCP EIR Impact	Impact Description	Significance Before Mitigation
N/A	N/A	<b>Development of the site would increase on-site population as compared to the population expected under existing plans.</b>	<b>Less than Significant</b>

The proposed project would allow for the development of an increased number of residential units at the project site (257 senior dwelling units) as compared to the number of units allowed under the adopted Orcutt Community Plan (77 single-family homes). The population associated with 77 single-family homes is estimated at 220 (2.87 residents per unit x 77 units). The proposed project would generate a population of about 385 (assuming 1.5 people per unit). Although the potential number of units and population at the site would be greater with the proposed project, the number of vehicle miles travelled may or may not increase, depending on the type of unit developed. The number of trips generated by 77 single-family homes would total about 737 trips per day based on a generation rate of about 10 trips per day. Trip generation rates for senior housing varies depending on the type of senior housing provided, from 2.15 to 3.71 trips per day. The total daily trips generated by 257 units would range from 553 to 953. Therefore, the proposed project may increase or decrease the trip generation at the site relative to the existing General Plan land use capacity, depending on the type of unit provided. It is also noted that average trip lengths for senior housing are also typically shorter since the residents do not generate commuting home-to-work trips.

The proposed project is not expected to increase the area's overall population and vehicle miles travelled (as compared to projections based on existing land use capacities) to an extent that would interfere with the achievement of emission reductions planned for by the CAP. As such, plan consistency impacts are considered less than significant.

### *Mitigation Measures*

Mitigation measures are not required.

### *Residual Impacts*

The project's impacts related to consistency with air quality planning would be less than significant prior to mitigation (**Class III**).

## 4.2.4 Cumulative Impacts

The OCP EIR identifies significant cumulative air quality impacts associated with vehicular and other emission sources generated by build out of the OCP and other regional growth. Development of the site would contribute to this impact. According to the Santa Barbara County Environmental Thresholds and Guidelines Manual, if a project's total emissions of the ozone precursors, NO<sub>x</sub> or ROC, exceed the long-term threshold, the project's cumulative impacts will be considered significant. As described above, the proposed project's emissions do not exceed these thresholds, therefore the proposed project's emissions are not considered cumulatively significant (Class III).

## 4.3 BIOLOGICAL RESOURCES

### 4.3.1 Existing Conditions

#### Methodology

The analysis of biological resources included a literature review as well as a field investigation and biological survey of the project site by Envicom Corporation on May 24, 2010. The analysis also relies upon, as appropriate, pertinent information about biological resources from the Orcutt Community Plan (OCP) and OCP Environmental Impact Report (1995), as well as prior biological studies of Key Site 17 (Old Town South) in 1995 and 2001. The project site is a 9.5-acre portion of the 19.7-acre extent of Key Site 17.

#### Literature Review

The literature review included previous site-specific and non site-specific studies and California Department of Fish and Game (CDFG) publications, as follows:

- *Biological Resources Assessment for Selected Key Sites within the Orcutt Planning Area Final Report*, Katherine Rindlaub Biological Consulting, July 27, 1995;
- *Orcutt Union School District - Sensitive Species Survey*, LFR Levine Fricke, May 2, 2001;
- *Orcutt Community Plan*, Santa Barbara County Planning and Development Comprehensive Planning Division, Adopted July 1997 and Amended July 2001 and October 2004;
- *Orcutt Community Plan EIR*, County of Santa Barbara Planning and Development, 1995;
- *Santa Barbara County Comprehensive General Plan*, County of Santa Barbara Planning and Development;
- *California Natural Diversity Database (CNDDDB) Rarefind 3 Element Occurrence Report for Orcutt, Casmalia, Guadalupe, Lompoc, Los Alamos, Santa Maria, Sisquoc, Surf, Twitchell Dam Quadrangles*, California Department of Fish and Game, data as of May 2010;
- *Biogeographic Information and Observation System (BIOS)*, California Department of Fish and Game, data as of May 2010;
- *List of Special Vascular Plants, Bryophytes, and Lichens*, California Department of Fish and Game, January 2010;
- *Special Animals*, California Department of Fish and Game, July 2009;
- *List of California Vegetation Alliances*, California Department of Fish and Game Vegetation Classification and Mapping Program, December 28, 2009;
- *List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database*, California Department of Fish and Game Vegetation Classification and Mapping Program, September 2003;
- *CNPS Inventory of Rare and Endangered Plants, version 7-10b*, California Native Plant Society, data as of April 21, 2010; and,
- *FWS Critical Habitat Mapper for Threatened and Endangered Species*, US Fish and Wildlife Service, data as of May 2010.

#### Biological Surveys

Katherine Lindlaub Biological Consulting surveyed Key Site 17 on April 7 and June 2, 1995, as part of an inventory and evaluation of the biological resource values of undeveloped sites within the OCP area. The focus of the survey was on the identification and mapping of sensitive flora, fauna, and habitats.

LFRC Levine Fricke surveyed Key Site 17 for sensitive vascular plants, wildlife species, and habitats on April 20, 2001 for the environmental review of a previously proposed project at the site, which was not developed.

James Anderson, biologist of Envicom Corporation, conducted a vascular plant survey; wildlife observations; and a search for rare, threatened, and endangered species, sensitive natural communities, and jurisdictional resources at the project site on May 24, 2010 (mostly sunny, 63 degrees, very light wind). The surveys were conducted on foot and covered the entire site. Wildlife species were identified by direct observation, vocalization, or by sign (e.g. tracks, scat, burrows).

## **Environmental Setting**

### ***Regional Setting***

Orcutt is located in the southern portion of the Santa Maria Valley and is bounded to the south by the Solomon Hills and to the west by the Casmalia Hills. The area is biologically unusual as it is situated on a series of wind-blown sand dunes known as the Orcutt Terrace, deposited approximately 6,000 to 80,000 years ago. Soils of the area are dominated by Aeolian sands of marine and fluvial origin and primarily consist of moderately well-drained to well-drained loamy sands and sandy loams or excessively drained sands. Orcutt Creek, an intermittent stream that drains the northern slopes of the Solomon Hills and southern portions of the Santa Maria Valley, including the Orcutt Terrace dune sheet, is the largest watercourse in the Orcutt area.

The Orcutt Terrace is exposed to warm, dry summers with coastal fog and cool, wet winters combined with prevailing winds from the northwest. Coastal summer fogs are also an important climatic feature of this region. The average annual rainfall is 12 to 18 inches and the average annual air temperature is 57 degrees Fahrenheit.

A majority of habitats within the Orcutt area have been disturbed by past urban, agricultural, and oil development. Regionally significant habitats remain in the Solomon and Casmalia Hills and within the corridors of Orcutt, Pine Canyon, and Graciosa Creeks. Some open spaces within the urban area support unique ecological communities with substantial populations of native plants and animals, and serve as links or corridors from the surrounding hills to the valley floor.

### ***Project Site***

The project site is essentially flat and slopes slightly and imperceptibly from the east to west. The elevation of the site is approximately 355 feet above mean sea level. The USDA Soil Conservation Service has mapped and classified the soils of the site and surrounding area as Garey sandy loam. According to the Soil Conservation Service, soil permeability of Garey sandy loam is slow. The only evidence of concentrated runoff is a small rivulet at the site's lower-elevation southwest corner.

The project site is characterized by historical and ongoing disturbance. The majority of the site is vegetated almost exclusively with non-native grasses and forbs. The site's easternmost portion contains an asphalt parking lot, a gravel roadbed, a nearly barren area of hard-packed sandy soil, which appears to have been mechanically disturbed, and areas of low vegetative cover that have been impacted by vehicles unloading mulch and wood debris. Several piles of mulch are distributed throughout the southern two-thirds of the site. A pile of concrete and other construction debris is present in the southeastern portion of the site.

The project site is surrounded by urban development and roads (See Section 2.0 Project Description for a regional/project location map and a description of surrounding land uses). Pine Canyon Creek, which



flows intermittently and generally west to its confluence with Graciosa Creek, which in turn flows to Orcutt Creek, is approximately 400 feet from the site's southern boundary.

## Existing Biological Resources

### *Vegetation and Sensitive Plant Communities*

Vegetation at the project site consists overwhelmingly of introduced non-native grasses and forbs, with native species poorly represented. The plant species composition reflects historical and ongoing soil disturbance, which has favored the establishment and reproduction of invasive species, as well as its urban location and historical agricultural and ranching uses in the region. Undoubtedly, some species have been introduced to the site due to its use as a storage area or dumping ground for mulch and other vegetative cuttings.

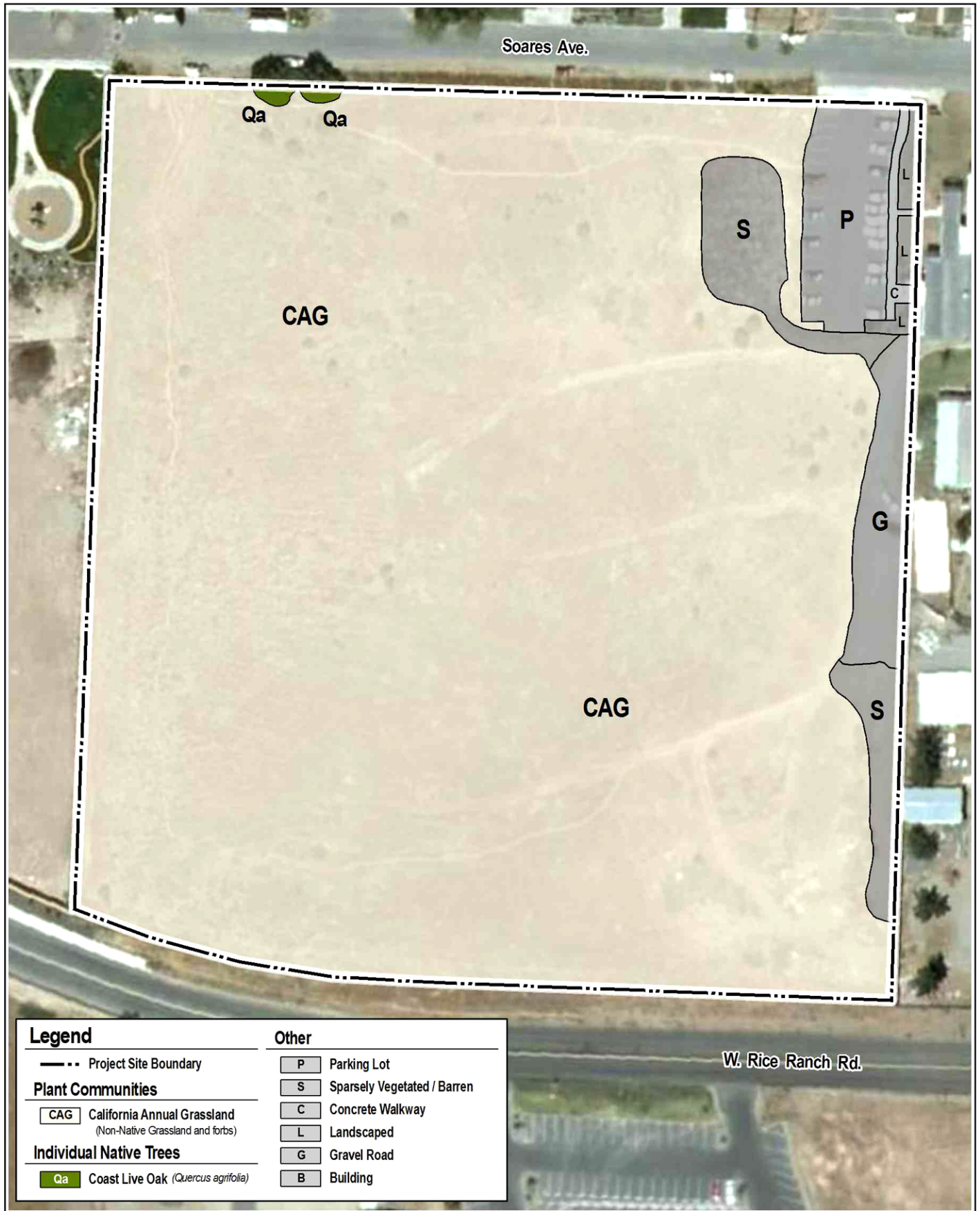
Introduced annual European grasses are most common at the site, with Italian rye grass (*Lolium multiflorum*), foxtail barley (*Hordeum murinum*), and wild oats (*Avena* spp.) prevalent. Non-native forbs make up the majority of the remaining vegetative cover. Other selected non-native species occurring in notable quantities are long-beaked filaree (*Erodium botrys*), cut-leaf plantain (*Plantago coronopus*), sheep sorrel (*Rumex acetosella*), wild radish (*Raphanus sativus*), spring vetch (*Vicia sativa*), and Italian thistle (*Carduus pycnocephalus*). Native species represent less than one percent of the vegetative cover, among these species are goldenbush (*Isocoma menziesii*), creeping ryegrass (*Leymus triticoides*) and western ragweed (*Ambrosia psilostachya*). Two adult coast live oaks (*Quercus agrifolia*) are located just north of the site's northern boundary, and a few small willow (*Salix* sp.) seedlings are located to the south of the existing onsite parking lot. Several coast live oak seedlings occur within the site boundary, including a significant and noteworthy patch in the site's south central portion.

### California Annual Grassland

The only plant community at the site is California Annual Grassland, which was identified from those plant communities included in the *List of California Vegetation Alliances* and the *List of California Natural Communities Recognized by the California Natural Diversity Database*, published by the CDFG in December 2009 and September 2003, respectively. These two documents together present a comprehensive list, as of December 2009, of officially recognized plant communities occurring within the State of California.

**Figure 4.3-1** presents a vegetation and landcover map of the project site. Of the site's 9.5 acres, 8.7 acres consist of California Annual Grassland, 0.02 acres are the canopies of adult coast live oak trees, 0.3 acres are sparsely vegetated or barren, 0.05 acres are landscaped, and 0.5 acres contains various facilities.

A conservation status rank or a "high inventory priority" designation is used to determine the significance of project impacts to plant communities. The *List of California Vegetation Alliances* provides a conservation status rank for each Alliance, and the *List of California Natural Communities Recognized by the California Natural Diversity Database* identifies plant communities that are of "high inventory priority." The conservation status ranking system, which was developed by NatureServe and has been adopted by the CDFG, consists of a geographic scale (G=Global; S=State) and a degree of threat (1=critically imperiled; 2=imperiled; 3=vulnerable to extirpation or extinction; 4=apparently secure; and 5=demonstrably widespread, abundant, or secure). Plant community alliances with global or state conservation status ranks of G1 through G3, or S1 through S3, respectively, are sensitive. Plant communities identified to be of "high inventory priority" are also sensitive. Sensitive plant communities are protected pursuant to CEQA, and impacts to these communities must therefore be avoided or mitigated.



Aerial Source: County of Santa Barbara, August 2008.

California Annual Grassland does not receive a conservation status rank and is not considered to be of “high inventory priority.” Therefore, and because it is comprised almost exclusively of non-native invasive species, the California Annual Grassland at the site is clearly not a sensitive plant community. Areas classified as California Annual Grassland often contain a significant component of native forbs (wildflowers) interspersed with the dominant annual grasses, which add biological value to a site. In this case, these native species are absent.

Classification of vegetation at the site as California Annual Grassland, which was formerly named non-native grassland in *Preliminary Descriptions of the Terrestrial Natural Communities of California* by Holland (1986), is consistent with descriptions of Key Site 17 in the OCP, and with the conclusions of biological surveys of Key Site 17 in 1995 (Katherine Lindlaub Biological Consulting, 1995) and in 2001 (LFR Levine Fricke, 2001). Also described by previous studies is scattered coastal dune scrub as well as non-native cultivated pine on Key Site 17. As previously discussed, the current project site is a portion of what was defined as Key Site 17 in the OCP and OCP EIR. The non-native cultivated pines, and possibly the coastal dune scrub as well, were located on Key Site 17, but to the east of the current project site. Any coastal dune scrub that may have occurred at the current project site is no longer evident. If it existed at the time of prior biological surveys, it has likely been removed or outcompeted by invasive species.

#### Sensitive Plant Communities - California Natural Diversity Database (CNDDDB)

A review of the California Department of Fish and Game’s Natural Diversity Database (CNDDDB) Rarefind 3 commercial application (May 2010) revealed ten Sensitive Plant Communities have been reported within the Orcutt Quadrangle, or within adjacent quadrangles, namely, Central Coast Arroyo Willow Riparian Forest, Central Dune Scrub, Central Foreduces, Central Maritime Chaparral, Coastal and Valley Freshwater Marsh, Northern Coastal Salt Marsh, Southern California Coastal Lagoon, Southern Cottonwood Willow Riparian Forest, Southern Vernal Pool, and Southern Willow Scrub. These communities are absent from the project site.

#### Pine Canyon Creek and Downstream Waterbodies

The Pine Canyon Creek corridor is located to the south, southwest, and southeast of the project site, and is retained in natural, undeveloped open space. The project site is separated from the Pine Canyon Creek corridor to the south by a single-family home and a church. To the southwest and southeast, the project site and creek corridor are separated only by Rice Ranch Road and non-native grassland. Pine Canyon Creek flows intermittently west to its confluence with Graciosa Creek, approximately 1500 feet west of the project site, which then flows for roughly 2000 feet to Orcutt Creek, the primary drainage in the Orcutt area.

There are extensive sensitive riparian plant communities along portions of Pine Canyon, Graciosa, and Orcutt Creeks. A large willow and oak forest surrounds the Pine Canyon Creek bed generally south of the project site. The creeks and associated riparian vegetation provide important foraging grounds and roosting habitat for a variety of wildlife, and are important areas for wildlife movement.

These creeks currently receive stormwater flows from impervious surfaces in urban areas, and at least some, if not all, of the stormwater runoff from the project site that reaches surface streets flows to Pine Canyon Creek.

#### ***Sensitive Plant Species***

Sensitive plant species either have unique biological significance, limited distribution, restricted habitat requirements, particular susceptibility to human disturbance, or a combination of these factors. Herein,

we reserve the term “sensitive” to denote those species that meet the criteria of CEQA Section 15380 as an Endangered, Rare or Threatened Species, whether or not officially listed, as provided in 15380(d). Our discussion of sensitive plant species includes those that meet either of the following:

- Plant species that are listed, proposed for listing, or meet the criteria for listing as endangered, threatened, or rare by under the Federal Endangered Species Act (FESA) or California Endangered Species Act (CESA); or,
- Plant species that are listed on the California Department of Fish and Game’s (CDFG) Special Vascular Plants, Bryophytes and Lichens List, which includes the California Native Plant Society (CNPS) Inventory of Rare and Endangered Vascular Plants. Plants on the CNPS List 1B (which includes rare, threatened, or endangered species in CNPS’s opinion in California and elsewhere) and List 2 (plants considered rare, threatened, or endangered in California, but more common elsewhere) are considered sensitive.

A botanical spring survey of the site on May 24, 2010 identified a total of 66 species at the project site, including 54 non-native and 12 native species. Appendix C presents a comprehensive list of the vascular plants observed during this survey. Vascular plant species determinations were made using *The Jepson Manual: Higher Plants of California* (Hickman [ed.] 1993), and reflect any taxonomic or nomenclatural changes since the publication of Hickman 1993 from The Jepson Herbarium Online Interchange. Prior biological surveys of the site were conducted in 1995 for development of the OCP and OCP EIR and in 2001 for environmental review of a proposed development project on Key Site 17. No sensitive vascular plant species were found during biological surveys of the project site in 1995, 2001, or 2010.

In this case, an assessment of the potential for occurrence of sensitive plant species at the site based on recorded elements within the California Natural Diversity Database and California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants was not conducted. The possibility that a sensitive plant species is present is remote, considering the disturbed condition of the site and intense competition from invasive annual grasses and weeds. Also, the absence of sensitive species was verified by a thorough and recent botanical survey in 2010.

#### Critical Habitat for La Graciosa Thistle

Designated Critical Habitat (Unit 2) for the La Graciosa Thistle (*Cirsium loncholepis*) is located along the Pine Canyon, Graciosa Creek, and Orcutt Creek corridors, and includes the open space surrounding Pine Canyon Creek to the south of the project site (USFWS, November 3, 2009). The La Graciosa Thistle is listed as Endangered under the Federal Endangered Species Act and as Threatened under the California Endangered Species Act.

The La Graciosa thistle is a member of the sunflower family (Asteraceae) that grows primarily in dune scrub, freshwater seeps and springs, coastal and valley freshwater marshes, mule fat scrub, willow scrub, riparian forest, chaparral, oak woodland, intermittent streams, and other wetlands.

Critical habitat is a term in the federal Endangered Species Act that identifies geographic areas containing physical or biological features essential for the conservation of a threatened or endangered species, some of which may require special management considerations or protection. Designation of critical habitat does not imply the species is present, only that the habitat is essential for the long-term conservation and recovery of the species. There are no known occurrences of La Graciosa thistle in the Pine Canyon Creek corridor to the south of the project site.

The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. Federal agencies that undertake, fund or permit activities

that may affect critical habitat are required to consult with the Fish and Wildlife Service to ensure such actions do not adversely modify or destroy designated critical habitat. The designation does not affect purely private or state actions on private or state lands, nor require non-federal lands to be positively managed for conservation.

### ***Protected Trees***

Two native adult coast live oak (*Quercus agrifolia*) trees occur just north of the northern boundary of the project site along Soares Avenue. The main stem of both trees is outside of the project site, while the canopies of both trees extend within the boundary of APN 105-134-004. These adult oak trees are healthy and structurally sound and have biological value, but have not reached the stature to be considered specimen trees. Several coast live oak seedlings occur within the project boundary, particularly in the site's south central portion. Many of these oak seedlings, particularly those in the southern portion of the site, were likely introduced to the site as acorns present within mulch left at the property. None of the oak seedlings at the site can be considered "established" pursuant to the OCP, as each is less than six feet in height. Native willow (*Salix* sp.) seedlings, which are located in the eastern portion of the site south of the parking lot, are also less than six feet in height.

### ***Wetlands***

Wetlands are lands where saturation with water is the dominant factor determining the nature of soil development and the types of plant and animal communities living in the soil and on its surface. Wetlands are sensitive habitats and are typically productive systems of high biological value. Wetlands are protected and regulated by a number of federal, state, and local policies.

For the purposes of determining potentially significant effect, Santa Barbara County uses the following wetland definition from Cowardin (1979) that has been adopted by most resource protection agencies (U.S. Fish and Wildlife Service, the California Coastal Commission, the California Fish and Game Commission, and the California Department of Fish and Game). This definition reads:

"For purposes of this classification wetlands must have one or more of the following three attributes:

- a) At least periodically, the land supports predominately hydrophytes, that is, plants adapted to moist areas.
- b) The substrate is predominately un-drained hydric soil, and
- c) The substrate is non soil and is saturated with water or covered by shallow water at some time during the growing season of each year."

Conditions at the project site in May 2010 support the common to infrequent occurrence of a number of hydrophytic species that are known to occur in wetlands. Sheep sorrel (*Rumex acetosella*) [FAC-]<sup>1</sup> is

<sup>1</sup> Plant Wetland Indicator Status Categories (US ACOE 1987):

OBL = Obligate Wetland – Occur almost always (estimated probability >99%) under natural conditions in wetlands.

FACW = Facultative Wetland – Usually occur in wetlands (estimated probability 67%-99%), but occasionally found in non-wetlands.

FAC = Facultative – Equally likely to occur in wetlands or non-wetlands (estimated probability 34%-66%).

FACU = Facultative Upland – Usually occur in non-wetlands (estimated probability 67%-99%), but occasionally found in wetlands (estimated probability 1%-33%).

UPL = Obligate Upland – Occur in wetlands in another region, but occur almost always (estimated probability >99%) under natural conditions in non-wetlands in the region specified. If a species does not occur in wetlands in any region, it is not on the National List.

None = No indicator status given in Reed.

scattered throughout the site. Toad rush (*Juncus bufonius*) [FACW+] and cut-leaf plantain (*Plantago coronopus*) [FAC] occur occasionally, and curly dock (*Rumex crispus*) [FACW-] and willow (*Salix* sp.) [FACW] seedlings are also present. These species are interspersed within moderate to high cover of upland vegetation consisting of several upland species.

An assessment of the presence/absence of areas meeting the above Santa Barbara County “single-parameter” wetland definition at the site incorporated the methods outlined in the US Army Corps of Engineers *Corps of Engineers Wetland Delineation Manual* (1987) and *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (September 2008). These ACOE documents provide a well-defined, widely accepted and repeatable methodology for determining the predominance of hydrophytic vegetation, and the presence of hydric soils and wetland hydrology. Examination of the site found that no areas contained a predominance of hydrophytic species or hydric soils, and no areas of the site were non-soil and saturated with water or covered by shallow water at some time during the growing season of each year. Therefore, no portion of the project site meets the single-parameter definition of wetlands utilized by Santa Barbara County and the California Department of Fish and Game. This conclusion is consistent with the OCP and OCP EIR and previous site investigations, which also describe hydrophytic species but conclude the site lacks jurisdictional wetland habitat.

### ***Observed Wildlife and Wildlife Habitat***

Vertebrate wildlife species observed during the May 24, 2010 biological survey included one lizard, 14 birds, and two species of mammals. Many of these species are typical of undeveloped weedy lots within urban areas or at the urban-wildland interface. A list of these species is provided in **Table 4.3-1**, below.

Annual grasslands are an important habitat resource for a variety of wildlife species. Annual grasslands typically support abundant rodent fauna, and numerous rodent burrows were observed at the site. This prey base attracts mammalian and avian predators. Red-tailed hawk and red-shouldered hawk were observed foraging at low altitude over the project site during the biological survey in 2010. Annual grasslands are an important foraging resource for bats as well. Nevertheless, the habitat at the site is of relatively low biological value, given the general lack of native plant species and habitat diversity, and its small size and lack of continuity with natural habitats.

This is consistent with the OCP EIR, which reports Key Site 17 has very low habitat diversity and marginal wildlife habitat values.

### ***Sensitive Wildlife Species***

For the purposes of this analysis, the term “sensitive” is used to denote those species that meet the criteria of CEQA Guidelines Section 15380 as an Endangered, Rare or Threatened Species, whether or not officially listed, as provided in Section 15380(d). Our discussion of sensitive wildlife species includes those that are:

- Listed, proposed for listing, or meet the criteria for listing as endangered, threatened, or rare by under the Federal Endangered Species Act (FESA) or California Endangered Species Act (CESA); or
- Listed on the California Department of Fish and Game’s (CDFG) Special Animals list with a designation of SSC (Species of Special Concern) or CFP (California Fully Protected).

**Table 4.3-1**  
**Vertebrate Wildlife Species Observed<sup>a</sup> at the Project Site**  
**May 24, 2010**

Common Name	<i>Scientific Name</i>
<b>Reptiles</b>	
western fence lizard	<i>Sceloporus occidentalis</i>
<b>Birds</b>	
American crow	<i>Corvus brachyrhynchos</i>
Anna's hummingbird	<i>Calypte anna</i>
barn swallow	<i>Hirundo rustica</i>
Brewer's blackbird	<i>Euphagus cyanocephalus</i>
bushtit	<i>Psaltriparus minimus</i>
cliff swallow	<i>Petrochelidon pyrrohnota</i>
European starling	<i>Sturnus vulgaris</i>
house finch	<i>Carpodacus mexicanus</i>
killdeer	<i>Charadrius vociferus</i>
mourning dove	<i>Zenaida macroura</i>
northern mockingbird	<i>Mimus polyglottos</i>
red-shouldered hawk	<i>Buteo lineatus</i>
red-tailed hawk	<i>Buteo jamaicensis</i>
western bluebird	<i>Sialia mexicana</i>
<b>Mammals</b>	
Botta's pocket gopher	<i>Thomomys bottae</i>
California ground squirrel	<i>Otospermophilus beecheyi</i>

<sup>a</sup> by direct observation, vocalization, or sign (e.g. burrows, scat, tracks).

No sensitive wildlife species were observed at the project site during biological surveys in 1995, 2001, or 2010. Sensitive wildlife species with potential to occur at the project site are listed in **Table 4.3-2**. Considered in this assessment was the complete range of sensitive wildlife species from the California Natural Diversity Database with recorded observations in the Orcutt and eight surrounding 7.5' USGS quadrangles and sensitive wildlife species listed as potentially occurring in the Orcutt Plan Area by the OCP. The species that can be reasonably anticipated to occur were determined based on the reporting ranges of the species, and the type and extent of habitat available at the site.

Use of the site by sensitive vertebrate wildlife species would be limited to foraging by some species of birds and bats listed as California Fully Protected (CFP) or Species of Special Concern (SSC) by the State of California. No sensitive species are expected to reside or reproduce at the site.

Holmgren (2000) reports a historical communal roosting site for the white-tailed kite (*Elanus leucurus*) observed in late-1999 and early-2000 at the junction of Graciosa Canyon, Orcutt Creek, and Pine [Canyon] Creek, generally west of the project site.



**Table 4.3-2**  
**Sensitive Vertebrate Species with Potential to Occur at the Project Site**

Common Name <i>Scientific Name</i>	Status*	Habitat
White-tailed kite <i>Elanus leucurus</i>	CFP	Uncommon and local resident of grasslands, savannah, marshlands, and similar open habitats. Suitable grassland habitats are found throughout the Orcutt area. Moderate potential to forage at the site, but not nesting.
Northern Harrier <i>Circus cyaneus</i>	SSC	Year-round resident in Santa Barbara County, most often frequents open terrain. Northern harriers are expected to occur as transients within the Orcutt area. Low potential to forage over site, but not nesting.
Burrowing Owl <i>Athene cunicularia hypugea</i>	SSC	Rare local breeder in extensive sparse grassland and agricultural areas in the Santa Maria Valley. Uncommon to rare winter visitor in the project region. Ground squirrel burrows are used for roosting and nesting. Low potential to forage at site, but not nesting.
Loggerhead Shrike <i>Lanius ludovicianus</i>	SSC	Uncommon to fairly common permanent resident in open-country habitats of Northern Santa Barbara County. More widespread in winter. Low potential to forage at site, but not nesting.
Pallid Bat <i>Antrozous pallidus</i>	SSC	Museum records indicate that this species is an uncommon, permanent resident of Santa Barbara County. A number of habitats are used for foraging. Known to occur in the Santa Maria Valley. Potentially foraging over site, but not roosting.
Townsend's Big-eared Bat <i>Corynorhinus townsendii</i>	SSC	Uncommon but found throughout California in all but subalpine and alpine habitats. Details of its distribution are not well known. Potential to forage over site cannot be discounted.
Western Red Bat <i>Lasiurus blossevillii</i>	SSC	Occurs from Shasta Co. to the Mexican border. Winter range includes western lowlands and coastal regions south of San Francisco Bay. Forages over a wide variety of habitats including grasslands, shrublands, open woodlands and forests and croplands. Potential to forage over the site cannot be discounted.
<p><sup>a</sup> CFP – California Fully Protected Species. California Fully Protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock.</p> <p>SSC - California Species of Special Concern. A California Species of Special Concern is a species, subspecies or distinct population of an animal native to California that currently satisfies one or more of the following (not necessary mutually exclusive) criteria:</p> <ul style="list-style-type: none"> <li>• Is extirpated from the State or, in the case of birds, in its primary seasonal or breeding role;</li> <li>• Is listed as Federally- but not State-, threatened or endangered; meets the State definition of threatened or endangered but has not formally been listed;</li> <li>• Is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status;</li> <li>• Has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for State threatened or endangered status.</li> </ul>		

### ***Wildlife Movement***

Wildlife need to access essential habitat for water, foraging, breeding, and cover. Examples of barriers or impediments to movement include housing and other urban development, roads, fencing, inadequate habitat, or open areas with little vegetative cover.

Large areas of natural habitat and habitat linkages between these areas are necessary to maintain healthy ecological and evolutionary processes. For example, habitat linkages for wildlife movement are necessary for dispersal and migration, to ensure the mixing of genes between populations, and so wildlife can respond and adapt to environmental stress.

The project site is currently separated from natural open space to the south in the Pine Canyon Creek corridor by urban development and two-lane Rice Ranch Road. Some animals probably do cross Rice Ranch Road infrequently to forage at the undeveloped project site at night. However, given its location at the edge of existing urban development and its relatively low biological resource value, the project site is not in a critical area for wildlife movement. Also, the project site does not serve as a habitat linkage between larger areas of open space.

## **Regulatory Setting**

### ***Federal***

#### Endangered Species Act of 1973

The Federal Endangered Species Act and implementing regulations, Title 16 United States Code (USC) Section 1531 et seq. (16 USC 1531 et seq.), Title 50 Code of Federal Regulations (CFR) Section 17.1 et seq. (50 CFR Section 17.1 et seq.), include provisions for the protection and management of federally listed threatened or endangered plants and animals and their designated critical habitats. Section 7 of the Endangered Species Act requires a permit to take threatened or endangered species during lawful project activities. The administering agency is the USFWS for terrestrial, avian, and most aquatic species.

#### Fish and Wildlife Coordination Act

Section 7 of Fish and Wildlife Coordination Act, 16 USC 742 et seq., 16 USC 1531 et seq., and 50 CFR 17 require consultation if any project facilities could jeopardize the continued existence of an endangered species. Applicability depends on Federal jurisdiction over some aspect of the project (e.g., dredge or fill activities in “waters of the U.S.”). The administering agency is typically the US Army Corps of Engineers (ACOE) in coordination with the US Fish and Wildlife Service (USFWS).

#### Migratory Bird Treaty Act

The Migratory Bird Treaty Act (16 USC Sections 703-711) includes provisions for protection of migratory birds, including the non-permitted take of migratory birds, under the authority of the USFWS and CDFG.

#### Clean Water Act of 1977, Section 404

This section of the Clean Water Act (33 USC 1251 et seq., 33 CFR Sections 320 and 323) gives the ACOE authority to regulate discharges of dredge or fill material into waters of the U.S., including wetlands.

Clean Water Act of 1977, Section 401

This section of the Clean Water Act requires a State-issued Water Quality Certification for all projects regulated under Section 404. In California, the RWQCB issues Water Quality Certifications with jurisdiction over the project area. The RWQCB - Central Coast Region, issues Section 401 Water Quality Certifications for applicable project activities in Santa Barbara County.

*State*California Endangered Species Act of 1984

The California Endangered Species Act and implementing regulations in the Fish and Game Code, Section 2050 through Section 2098, include provisions for the protection and management of plant and animals species listed as endangered or threatened, or designated as candidates for such listing. The Act includes a consultation requirement “to ensure that any action authorized by a State lead agency is not likely to jeopardize the continued existence of any endangered or threatened species...or result in the destruction or adverse modification of habitat essential to the continued existence of the species” (Section 2090). Plants of California declared to be endangered, threatened, or rare are listed at 14 CCR Section 670.2. Animals of California declared to be endangered or threatened are listed at 14 CCR Section 670.5. 14 CCR Section 15000 et seq. describes the types and extent of information required to evaluate the effects of a proposed project on biological resources of a project site.

California Species Preservation Act 1970: California Fish and Game Code Sections 900 – 903

This law includes provisions for the protection and enhancement of the birds, mammals, fish, amphibians, and reptiles of California, and is administered by the CDFG.

Fish and Game Code

The Fish and Game Code provides specific protection and listing for several types of biological resources. These include:

- Fully-protected species.
- Streams, rivers, sloughs, and channels.
- Significant Natural Areas.
- Designated Ecological Reserves.

Fully Protected Species are listed in Section 3511 (Fully Protected birds), Section 4700 (Fully Protected mammals), Section 5050 (Fully Protected reptiles and amphibians), and Section 5515 (Fully Protected fishes). The Fish and Game Code of California prohibits the taking of species designated as Fully Protected.

The Fish and Game Code Section 1600 requires a Streambed Alteration Agreement for any activity that may alter the bed and/or bank of a stream, river, or channel. Typical activities that require a Streambed Alteration Agreement include excavation or fill placed within a channel, vegetation clearing, structures for diversion of water, installation of culverts and bridge supports, cofferdams for construction dewatering, and bank reinforcement.

The Fish and Game Code Section 1930 designates Significant Natural Areas. These areas include refuges, natural sloughs, riparian areas, and vernal pools and significant wildlife habitats. An inventory of Significant Natural Areas is maintained by the CDFG Natural Heritage Division and is part of the NDDB. Section 1580 of the Fish and Game Code lists Designated Ecological Reserves. Designated

Ecological Reserves are significant wildlife habitats to be preserved in natural condition for the general public to observe and study.

The Fish and Game Code Sections 2081(b) and (c) allows CDFG to issue an incidental take permit for a State listed threatened and endangered species only if specific criteria are met. These criteria can be found in Title 14 CCR, Sections 783.4(a) and (b). No Section 2081(b) permit may authorize the take of “fully protected” species and “specified birds.” If a project is planned in area where a species or specified bird occurs, an applicant must design the project to avoid all take; the CDFG cannot provide take authorization under this act.

The Fish and Game Code Section 3503 specifies it is unlawful to take, possess, or needlessly destroy the nest of any bird, except as otherwise provided by this code. Section 3503.5 specifies it is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey), to take, possess, or needlessly destroy the nest of any such bird, except as otherwise provided by this code.

#### CEQA, Public Resources Code Section 2100 et seq.

The CEQA Guidelines provide a framework for the analysis of impacts to biological resources. The administering agency is the CEQA Lead Agency, which is in this case the County of Santa Barbara.

#### Native Plant Protection Act of 1977

The Native Plant Protection Act of 1977 and implementing regulations in Section 1900 et seq. of the Fish and Game Code designates rare and endangered plants and provides specific protection measures for identified populations. It is administered by the CDFG.

#### Public Resources Code Sections 25500 & 25527

These code sections prohibit the siting of development in certain areas of critical concern for biological resources, such as ecological preserves, wildlife refuges, estuaries, and unique or irreplaceable wildlife habitats of scientific or educational value. If there is no alternative, strict criteria are applied under the authority of the CDFG.

#### Public Resources Code Section 21083.4

This code section requires that a county shall determine whether a project within its jurisdiction may result in conversion of oak woodlands that will have a significant effect on the environment. If a county determines that there may be a significant effect on oak woodlands, the county shall require one or more specified oak woodlands mitigation alternatives that include (1) Conservation Easements; (2) planting an appropriate number of trees, including maintaining plantings and replacing dead or diseased trees (this may be used for up to one-half of a project’s mitigation requirement); (3) contributing funds to the Oak Woodlands Conservation Fund established under Section 1363 of the Fish and Game Code; or (4) other mitigation measures developed by the county.

### ***Local***

#### Santa Barbara County Comprehensive General Plan

The Santa Barbara County Comprehensive General Plan establishes requirements for the protection of biological resources in the unincorporated area of Santa Barbara County. These documents identify sensitive habitats and species, and provide measures to direct project design and policies to protect biological resources.

### Orcutt Community Plan

The OCP describes the existing condition of biological resources within the Orcutt Planning Area (OPA), identifies sensitive biological resources known to occur and that may potentially occur in the OPA, and establishes a number of policies and development standards pertaining to biological resources. The Biological Habitat section of the OCP includes two development standards that are applicable to the proposed project. DevStd BIO-O-1.1 prohibits the planting of highly invasive, weedy plants within 500 feet of natural undeveloped open space areas. DevStd BIO-O-3.1 requires avoidance of damage to established native trees, to the maximum extent feasible, and replacement of such trees where removal is required. See Section 4.3.3, below for the full text of these standards.

The OCP EIR identifies impacts to biological resources that may result from buildout of the OCP and development of key sites within the OPA, and establishes measures to mitigate those impacts. The OCP EIR concludes that the site contains no significant habitats or resources (OCP EIR Vol II, page 17-6).

## **4.3.2 Thresholds of Significance**

### **State CEQA Guidelines Appendix G**

In accordance with Appendix G of the State CEQA Guidelines the proposed project would have a significant impact on biological resources if it would:

- 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;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;
- 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;
- 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;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

### **County of Santa Barbara Environmental Thresholds and Guidelines Manual (October 2008)**

The following additional thresholds of significance are provided in the County of Santa Barbara's *Environmental Thresholds and Guidelines Manual*:

#### ***Types of Impacts to Biological Resources***

Disturbances to habitats or species may be significant, based on substantial evidence in the record (not public controversy or speculation), if they substantially impact significant resources in the following ways:

- a) Substantially reduce or eliminate species diversity or abundance.
- b) Substantially reduce or eliminate quantity or quality of nesting areas.
- c) Substantially limit reproductive capacity through loss of individuals or habitat.
- d) Substantially fragment, eliminate, or otherwise disrupt foraging areas and/or access to food resources.
- e) Substantially limit or fragment range and movement (geographic distribution of animals and/or seed dispersal routes).
- f) Substantially interfere with natural processes, such as fire or flooding, upon which the habitat depends.

### ***Less Than Significant Impacts***

The County of Santa Barbara's *Environmental Thresholds and Guidelines Manual* provides examples of areas in the County where impacts to habitat are presumed to be less than significant, including:

- a) Small acreages of non-native grassland if wildlife values are low.
- b) Individuals or stands of non-native trees if not used by important animal species such as raptors or monarch butterflies.
- c) Areas of historical disturbance such as intensive agriculture.
- d) Small pockets of habitats already significantly fragmented or isolated, and disturbed or degraded.
- e) Areas of primarily ruderal species resulting from pre-existing man-made disturbance.

### ***Individual Native Trees***

Native specimen trees, regardless of size, are potentially significant and rare native trees, which are very low in number or isolated in distribution (such as Island Oak), may be particularly significant. This significance evaluation is done on a case-by-case basis and considers tree size, numbers, location, relationship to habitat, etc.

Specimen trees are defined, for biological assessment purposes, as mature trees that are healthy and structurally sound and have grown into the natural stature particular to the species.

In general, the loss of 10% or more of the trees of biological value on a project site is considered potentially significant.

### **4.3.3 Project Impacts and Mitigation Measures**

There is currently no specific development proposal or plan for the site. The applicant is requesting a General Plan Amendment and Rezone of four parcels within Key Site 17. This analysis of impacts to biological resources considers the reasonable maximum development that could occur on the site under the proposed General Plan and Zoning designations and standards. For purposes of this analysis, it is assumed that all on-site vegetation would be removed. This would likely occur as a result of future development of the site with or without the proposed General Plan Amendment and Rezone.

## Vegetation and Sensitive Plant Communities

Impact Number	Related OCP EIR Impact	Impact Description	Significance Before Mitigation
N/A	N/A	<b>Development of the site would result in removal of vegetation.</b>	<b>Less Than Significant</b>

N/A - Not applicable, impact numbers are not assigned to less than significant impacts.

Vegetation at the site consists overwhelmingly of invasive non-native grasses and forbs, with native species poorly represented. The vegetation at the site is classified as California Annual Grassland, which is not a sensitive plant community. Therefore, removal of this vegetation would result in a less than significant impact.

Fuel modification, based on the standard distances required for vegetation clearance from buildings (200 feet) and parking lots (150 feet), would only impact non-native grassland habitats, and would not encroach into the riparian zone of Pine Canyon Creek. Sensitive species would not be directly impacted or adversely affected. These areas would be on the opposite side of Rice Ranch Road, a substantial firebreak. Furthermore, these areas would be within the standard fuel modification distances from existing development on the south side of Rice Ranch Road. Therefore, impacts to vegetation and sensitive plant communities as a result of fuel modification requirements would be less than significant.

### *Mitigation Measures*

Mitigation measures are not required.

### *Residual Impacts*

The project's impacts on vegetation would be less than significant before mitigation (**Class III**).

## Sensitive Plant Species

Sensitive plant species were not observed during surveys of the site in 1995, 2001, or during a spring survey in May 2010. Also, no sensitive plant species are expected to occur at the site due to its disturbed condition and heavy competition from invasive species. Therefore, the project would not result in impact to sensitive plant species.

## Protected Trees

Impact Number	Related OCP EIR Impact	Impact Description	Significance Before Mitigation
N/A	N/A	<b>Development of the site may result in the damage or removal of two coast live oak trees.</b>	<b>Less Than Significant</b>

The canopy and root protection zones of two adult coast live oak trees extend into the boundary of parcel APN 105-134-005, the northwestern parcel within the project site. A proposed project has the potential to encroach upon the root protection zone of each of these trees. Encroachment into the root protection zone of a coast live oak can potentially result in damage to or loss of the tree. The County of Santa Barbara generally considers the loss of 10% or greater of the individual native trees of biological value at a site to

be a potentially significant impact. In this case, the two roadside oak trees do not provide significant habitat and therefore, removal of these trees would result in a less than significant impact.

It is noted that the OCP contains a development standard for protection of established native trees in developable areas, which reads as follows (OCP 1997, pg. 196):

**DevStd BIO-O-3.1:** To the maximum extent feasible, development shall be designed to avoid damage to established native trees (e.g. oaks) by incorporating setbacks, clustering, or other appropriate methods. Areas protected from grading, paving, and other disturbances shall include the area six (6) feet outside of established native tree driplines, unless this distance would interfere with reasonable development of a property. Where native trees are removed, they shall be replaced in a manner consistent with County standards.

### ***Mitigation Measures***

Mitigation measures are not required.

### ***Residual Impacts***

The project's impacts on oak trees would be less than significant before mitigation (**Class III**).

### **Wetlands**

No regulated wetlands as defined by Santa Barbara County or any other regulatory agency criteria occur at the project site. Therefore, the project would not result in impacts to wetlands.

### **Sensitive Wildlife Species**

Impact Number	Related OCP EIR Impact	Impact Description	Significance Before Mitigation
N/A	N/A	<b>Development of the site would remove foraging habitat for sensitive wildlife species.</b>	<b>Less Than Significant</b>

No sensitive wildlife species have been observed at the project site during biological surveys in 1995, 2001, or 2010. Sensitive wildlife species with potential to occur at the site are limited to some species of birds and bats that may forage over the site, but are not expected to take cover or reproduce thereon. These species would be capable of escaping harm during vegetation removal and grading/construction activities and are not dependent upon habitat or resources at the site for any part of their life cycle or for their survival. Therefore, impacts to sensitive wildlife species would be less than significant.

### ***Mitigation Measures***

Mitigation measures are not required.

### ***Residual Impacts***

The project's impacts on sensitive wildlife species would be less than significant before mitigation (**Class III**).



## Exterior Night Lighting

Impact Number	Related OCP EIR Impact	Impact Description	Significance Before Mitigation
N/A	N/A	<b>Development of the site would introduce new sources of night lighting in the vicinity of the Pine Canyon Creek open space.</b>	<b>Less Than Significant</b>

The project site is near to the open space and riparian habitat of Pine Canyon Creek, south of Rice Ranch Road. Some sensitive species have the potential to occur within the Pine Canyon Creek corridor and are expected to utilize the habitats and open space there for foraging, cover, reproduction, and movement. Exterior night lighting during a project operational phase could potentially result in light trespass and glare, which could disrupt normal behavior and breeding for some sensitive wildlife species, and cause some species to avoid the area.

However, the OCP includes the following applicable development standard:

**DevStd VIS-O-6.3:** Night lighting fixtures adjacent to residential areas shall be of the minimum height and intensity required for security/safety.

Adherence to this standard would assure that night lighting impacts would be less than significant.

### *Mitigation Measures*

Mitigation measures are not required.

### *Residual Impacts*

The project's night lighting impacts would be less than significant before mitigation (**Class III**).

## Nesting Birds

Impact Number	Related OCP EIR Impact	Impact Description	Significance Before Mitigation
<b>BIO 1</b>	N/A	<b>Construction at the project site may disturb nesting birds and/or remove nests.</b>	<b>Potentially Significant</b>

Construction of a proposed project at the site during the bird nesting season would have the potential to result in the damage or loss of shrubs and trees that could contain active bird nests. Also, construction activities would have the potential to disturb nesting birds within the vicinity of the project site. Project activities that result in the loss of bird nests, eggs, and young, would be in violation of one or more of California Fish and Game Code sections 3503 (any bird nest), 3503.5 (birds-of-prey), or 3511 (Fully Protected birds). In addition, removal or destruction of one or more active nests of any other birds listed by the federal Migratory Bird Treaty Act of 1918 (MBTA), whether nest damage was due to tree removal or to other construction activities, would be considered a violation of the MBTA and California Fish and Game Code Section 3511, and therefore would be a significant impact. Construction of a proposed project would result in a potentially significant impact.

### *Mitigation Measures*

**BIO-1-1** — The County shall amend the OCP to add a development standard requiring that no earlier than 14 days prior to construction or site preparation activities that would occur during the nesting/breeding season of native bird species potentially nesting on the site (typically February 1 through August 31), a field survey shall be conducted by a qualified biologist to determine if active nests of any bird species protected by the state or federal Endangered Species Acts, Migratory Bird Treaty Act, and/or the California Fish and Game Code Sections 3503, 3503.5, or 3511 are present in the construction zone or within 200 feet of the construction zone for songbirds and within 500 feet of the construction zone for raptors. If active nests are found within the survey area, construction activities shall stop within a 200-foot radius for songbirds and a 500-foot radius for raptors until consultation with the County, CDFG, and USFWS (when applicable, i.e. if the nesting birds are listed under the federal Endangered Species Act), is conducted and an appropriate setback can be established. A fence barrier shall be erected around the buffer and clearing and construction within the fenced area shall be postponed or halted, at the discretion of a biological monitor, until the nest is vacated and juveniles have fledged, as determined by the biologist, and there is no evidence of a second attempt at nesting.

**BIO-1-1** The County shall amend the OCP to add a Key Site 17 development standard requiring that nesting bird surveys be conducted by a qualified biologist prior to site preparation activities to determine if any active nests of special status bird species are present in the construction disturbance zone. The construction disturbance zone includes areas within 200 ft. of the site (for songbirds) and areas within 500 ft. of the site (for raptors). If active nests of raptors or other special status species are found within the disturbance zone, construction activities shall be limited, and an appropriate setback shall be established in consultation with the County and CDFG.

### *Residual Impacts*

The project's impacts on nesting birds would be less than significant after mitigation (**Class II**).

### **Invasive Plant Species in Landscaping**

Impact Number	Related OCP EIR Impact	Impact Description	Significance Before Mitigation
N/A	BIO-33	<b>Development of the site would result in the potential introduction of invasive plant species at the site, which is close to the Pine Canyon Creek open space.</b>	<b>Less Than Significant</b>

Although the project site is not directly adjacent to the open space and riparian habitat of Pine Canyon Creek, it is close enough to result in the spread of invasive species to these areas. Invasive exotic species introduced as landscaping could spread to natural areas and outcompete native plants and disrupt normal ecological processes. Spread of invasive exotic species into natural areas may reduce the biological diversity of these areas and potentially threaten the quality of natural habitats. The OCP EIR identifies the following impact, which would apply to the proposed project:

Impact BIO-33: Weed Invasion. Landscaping with weedy species in the proposed newly urbanized areas could have a potentially significant impact on the remaining acreages of native plant

communities by displacing native species and thus significantly altering habitat characteristics and ecological functions. These weedy species include iceplant, pampus grass, veldt grass, eucalyptus, spiny clotbur and Australian fireweed.

However the OCP contains a development standard related to protection of open space areas from invasion by non-native species, which reads as follows (OCP 1997, pg. 194):

**DevStd BIO-O-1.3:** Landscaping for development on the edge of designated natural undeveloped open space areas shall include native trees and shrubs, with habitat restoration efforts focused on buffers. Planting of highly invasive weedy plants (e.g., iceplant, pampas grass, veldt grass, Monterey pine, eucalyptus, spiny clotbur, and Australian fireweed) shall be prohibited within 500 feet of natural undeveloped open space areas as designated on the Open Space map (Figure 20 [of the OCP]).

Given the required adherence to DevStd BIO-O-1.3, the proposed project's impacts related to the potential introduction of invasive, non-native plant species would be a less than significant.

### ***Mitigation Measures***

Mitigation measures are not required.

### ***Residual Impacts***

The project's impacts related to the potential introduction of invasive, non-native plant species would be less than significant before mitigation (**Class III**).

## **Water Quality Impacts on Pine Canyon Creek and Downstream Waterbodies**

Impact Number	Related OCP EIR Impact	Impact Description	Significance Before Mitigation
<b>BIO 2</b>	N/A	<b>Development of the site would result in the potential introduction of urban pollutants in stormwater runoff from the site, which drains to Pine Canyon Creek.</b>	<b>Potentially Significant</b>

Development of the project site would remove existing vegetation and increase the amount of impervious surfaces at the site, which would increase the flow rate and quantity of stormwater runoff reaching Pine Canyon Creek, and potentially Graciosa and Orcutt Creeks. The possibility exists for pollutants to be present in stormwater runoff from the site as a result of temporary construction activities during the construction phase (e.g. sediment) and routine human activities during the operational phase of the project (e.g. hydrocarbons, heavy metals, herbicides and fertilizers). Pollutants, if present, could degrade water and soil quality and impact sensitive riparian and aquatic habitats and communities, as well as known or potentially occurring sensitive wildlife and vascular plant species in Pine Canyon, Graciosa, and Orcutt Creeks. Examples of potentially affected sensitive habitats and species include riparian plant communities and the federally threatened California red-legged frog (*Rana draytonii*), which is known to occur in Orcutt Creek. Impacts to sensitive biological resources as a result of stormwater runoff are considered potentially significant.

***Mitigation Measures***

Impact BIO-2 would be mitigated by water quality mitigation measures included in Section 4.6 Flooding and Water Quality.

***Residual Impacts***

The project's downstream water quality impacts would be less than significant after mitigation (**Class II**).

**Wildlife Movement**

Impact Number	Related OCP EIR Impact	Impact Description	Significance Before Mitigation
N/A	N/A	<b>Development of the site would restrict wildlife movement across the site.</b>	<b>Less Than Significant</b>

The project site is not in an important area for wildlife movement and is not part of linkage between large areas of open space. Therefore, impacts to wildlife movement are less than significant.

***Mitigation Measures***

Mitigation measures are not required.

***Residual Impacts***

The project's impacts on wildlife movement would be less than significant before mitigation (**Class III**).

**4.3.4 Cumulative Impacts**

Implementation of the OCP would produce a wide range of impacts on biological resources, including direct removal of about 2,000 acres of open space containing extensive habitat, including grassland habitats, to accommodate new development. In addition to direct habitat elimination, the remaining 1,500 acres of open lands could experience a significant reduction in their ability to support what remains of native plant and animal populations. Populations would be reduced due to fragmentation of habitat (interruption of contiguous and interrelated habitats) and increased levels of human disturbance, as well as constriction of wildlife movement along corridors. A potentially significant reduction in the diversity of plants and wildlife in the remaining open spaces is also likely. Finally, encroaching development on these remaining open lands is expected to introduce the presence of many non-native weeds, which may, over time, replace a significant percentage of the native populations.

Currently, a total of 19 related residential and commercial projects are proposed for development within the Orcutt area, as described in Section 3.0 Related Projects. The majority of these projects are within urban areas.

Future development of the project site would not contribute to habitat fragmentation or the constriction of wildlife movement. It would result in the loss of 8.4 acres of non-native grassland habitat, but the relatively low value of the site's grassland habitat, as demonstrated by low native cover and diversity (less than 1 percent cover of native plant species with native plant species only about 18 percent of the total plant species richness), and its separation from larger areas of grassland or other natural habitats does not raise the habitat loss to the level of a significant contribution to a cumulative impact. Loss of the habitat at the site would also not contribute to a significant cumulative loss of native diversity.

Future development of the project site has the potential, before mitigation, to result in a potentially significant contribution to cumulative impacts associated with the build-out of the OCP from pollutants in stormwater runoff. With mitigation, this contribution would be reduced to a less than significant level.

## 4.4 CULTURAL RESOURCES

### 4.4.1 Existing Conditions

The OCP EIR (Section 5.7) discusses the archaeological sensitivity of the Orcutt Community Plan area based on the prehistory of the area, the existence of known archaeological sites in the area, and a Phase I Archaeological Survey conducted for the OCP (ISERA Group, 1995). It provides the following general description:

Remaining archaeological sites are most often found in areas with common topographic and geographic features. The general indicators include proximity to water, such as rivers, creeks, lakes, or natural springs, fairly level slopes as on mesas or floodplains, marsh/wetland areas, and drainage confluences. The OPA contains areas which present all of these features, so the undeveloped parcels represent possible sensitivity to archaeological resources. The Casmalia and Solomon Hills, as well as all creek corridors within the OPA, should be considered highly sensitive archaeological regions with the potential for the future discovery of significant cultural resources.

Within the OPA, there are four known pre-historic archaeological sites, three mixed archaeological sites (containing both historic and pre-historic resources), and ten known isolated artifacts. A number of these sites are small pre-historic campsites, where because of their low-density nature, they are often mistakenly considered insignificant and not preserved. These low-density prehistoric sites provide information regarding the hunting and gathering nature of this society which is different than larger, readily identified village sites.

The entire Key Site 17 was assessed as part of the above-referenced Phase I Archaeological Survey. The records and literature search conducted for the Phase I study indicated that no cultural resource surveys had previously been conducted on the Key Site 17, and no cultural resources have been previously recorded on the site. An archaeological survey of the site was conducted; no cultural resources were found.

### SB 18 Consultation

SB 18 requires consultation with the Native American Heritage Commission (NAHC) when the County considers a proposal to amend its General Plan. The County of Santa Barbara has initiated the consultation process regarding the proposed General Plan Amendment considered in this EIR.

### 4.4.3 Thresholds of Significance

As per CEQA Guidelines Section 15064.5 (b), the proposed project would result in a significant impact if it causes a substantial adverse change in the significance of an historical or unique archaeological resource as set forth in Section 15064.5 (c).

### 4.4.4 Project Impacts and Mitigation Measures

Impact Number	Applicable OCP EIR Impact	Impact Description	Significance Before Mitigation
CULT 1	ARCH-1	<b>Development of the site may result in potential impacts to archaeological resources, if present at the site.</b>	<b>Less Than Significant</b>

There are no known cultural resources at the project site based on an archival record search and a field survey. While no archaeological sites are known to be present at the project site, there is a possibility that artifacts or deposits could be encountered during site preparation and grading. The OCP EIR notes that impacts could occur to undiscovered archaeological sites below the ground surface on any of the Key Sites, whether or not ground surveys have been conducted. Therefore, the following impact was identified:

Impact ARCH-1: Destruction of resources. Buildout of the Orcutt Community Plan would result in *potentially significant* impacts to cultural resources due to the destruction of pre-historic resources as a direct result of surface and subsurface grading.

Although the proposed project may entail increased site disturbance as compared to the smaller scale project assessed in the OCP EIR, the potential for impacts associated with the currently proposed project would generally be similar to those anticipated in the OCP EIR. However, given Santa Barbara County's Standard Conditions of Approval that require work stoppage or redirect work immediately in the event archaeological remains are encountered during grading, construction, landscaping, or other construction-related activity, the proposed project's impacts are considered less than significant.

### **Residual Impacts**

Given the County's Standard Conditions of Approval specified above, the project's potential impact on cultural resources would be less than significant without mitigation (**Class III**).

#### **4.4.5 Cumulative Impacts**

Development of the project site in combination with buildout of the OCP and other regional development could result in a significant cumulative impact on the remaining archaeological resources in the region through destruction during construction of structures, roads, paths, trails, and public infrastructure. The proposed project would contribute to this impact. If archaeological resources are found at the site, the project's contribution to this impact could be significant. However, the County's Standard Conditions of Approval would assure that the project's contribution would be less than significant.

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## 4.5 GEOLOGY AND SOILS

### 4.5.1 Existing Conditions

#### Geology and Soils Conditions

The following discussion summarizes information contained in the Orcutt Community Plan EIR (OCP EIR, 1995) Volume I Section 5.4 Geology and provides updated information from reports prepared after the OCP EIR. The proposed project site lies within the central portion of Key Site 17 (**Figure 4.5-1**).

#### *Geology and Soils Units, and Slope Stability*

Geologically, the project site is underlain by “Dune Sand” consisting of Pleistocene age poorly-consolidated to unconsolidated tan sand deposited in ancient sand dunes (Figure 4.5-1). Soils developed on the dune sand consist of Garey sandy loam (GaC2, 2-9% slope). This well-drained soil occupies rounded, rolling, wind-modified terraces typical of the southern edges of the Santa Maria Valley. Terrace Escarpments (TcG, 9-75% slope) and Sandy alluvial land (Sh) occur in the southwest corner of Key Site 17, west of the project site (OCP EIR, 1995).

A site-specific geologic hazards investigation (Earth Systems Pacific, 2001) boring encountered loose to very dense poorly graded sand and poorly graded sand with clay to a depth of 22 feet, underlain by very dense clayey sand and sandy clay to 39 feet and fine-grained, soft, friable, and massive sandstone of the Pleistocene-age Orcutt formation at 53 feet. At the Stonegate Ranch property immediately west of the project site (GSI Soils Inc., 2004), the near surface soils encountered in borings generally consisted of loose to medium dense dark reddish brown, fine grained silty sands and sandy silts to a depth of 2 to 4 feet, underlain by medium dense to very dense silty and clayey sands and sands to termination depth of 21 feet. Perched ground water was encountered in Stonegate Ranch Boring B-1 (near 4 feet deep), Boring B-2 (near 9 feet), and Boring B-4 (near 9.5 and 14.5 feet) during the referenced field exploration.

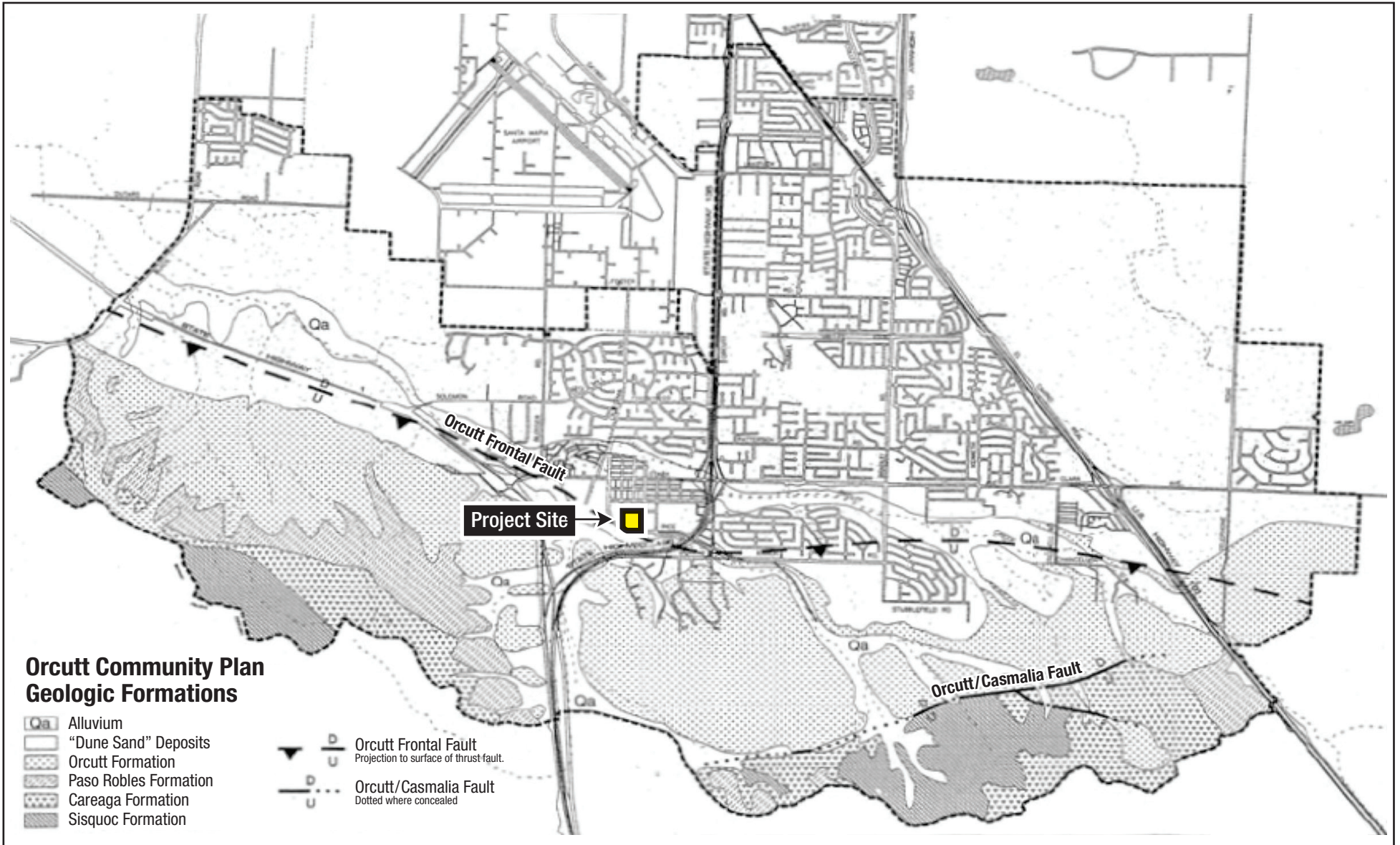
Expansive soil potential is low, and collapsible soil potential is moderate under certain load and moisture conditions due to the sandy, poorly consolidated nature of the deposits. Dune sands (mostly in the upper few feet) have a moderate to high erosion potential with medium surface runoff and are subject to severe erosion by wind and water when disturbed by development. These potential soils hazards can be effectively addressed through the normal regulatory process with standard geotechnical investigations, and site-specific measures involving site preparation (grading) and building design (OCP EIR, 1995).

The project site is relatively flat with no significant natural slopes immediately adjacent to the proposed improvements. Therefore, the potential for slope instability (e.g., landslides, soil slips) is considered nil.

Seismic Ground Shaking and Earthquake Faults – The project site is located in a seismically low risk area (Category I Low Problem Severity area) based on the Santa Barbara County Seismic Safety Geological Problems Index (OCP EIR, 1995). Based on the California Geological Survey website (2010a), the probable acceleration level for soft rock and alluvium is 0.29 to 0.33g (g = force of gravity) considering regional and local fault earthquake potential. Required implementation of California Building Code (CBC; ICBO, 2007) building standards addresses potential moderate seismic ground shaking hazards.

There are no Alquist-Priolo Earthquake Fault Zones at or near the project site. As shown in the OCP EIR (Figure 4.5-1) the two faults near the project site are the Orcutt/Casmalia fault approximately 1.5 miles to the south-southeast, and the Orcutt Frontal fault (a buried or “blind” thrust fault) shown at the southwest edge of the project site (OCP EIR, 1995).





Source: Orcutt Community Plan, 1995.

ORCUTT UNION SCHOOL DISTRICT KEYSITE 17



# Orcutt Community Plan Geologic Formations



More recent work (USGS, 2008) indicates the Orcutt Frontal fault is also known as the Casmalia fault, which is a potentially active, southwest dipping thrust fault that may be capable of a magnitude 6.5 to 6.7 earthquake. The Orcutt/Casmalia and Casmalia (Orcutt Frontal) fault may be interrelated. Earth Systems Pacific (2001), Tetra Tech Inc. (2001), the latest State fault map (CGS, 2010b), and the City of Santa Maria Safety Element (1995, Figure SE-2) indicate that the Casmalia fault shown in the OCP EIR geology section actually is located about one mile south of the project site.

The potential for ground rupture or ground deformation along the Orcutt Frontal fault is believed to be low, since the fault does not reach the ground surface, is not mapped through the project site, and may actually be located one mile south of the project site. Findings from a project-specific hazard analysis can effectively address this issue through clarification of the actual fault location, building setbacks, and/or various foundation reinforcement techniques, if warranted.

### ***Groundwater, Liquefaction Potential, and Subsidence***

Based on the OCP EIR (1995), groundwater is generally more than two hundred feet below the ground surface. The Earth Systems Pacific (2001) geotechnical boring did not encounter groundwater within the maximum depth explored (76.5 feet). A local water well literature survey by Tetra Tech Inc. (2001) indicates that groundwater is likely greater than about 150 feet deep in the project site area. This is consistent with water level contours (believed to be elevation) provided for the Santa Maria Groundwater Basin report (County of San Luis Obispo, 2005) showing elevations between 110 and 115 feet.

Perched groundwater was encountered (GSI Soils Inc., 2004) in borings at depths ranging from 4 feet to 14.5 feet during field exploration at the Stonegate property immediately west of the project site. This water is likely localized and resting on low permeability clay layers. This potential shallow perched water condition can be effectively addressed through the normal regulatory process with standard geotechnical investigations, site-specific investigations, construction measures involving local dewatering, and building design for underground openings and utility trenches.

Due to both the depth to a continuous groundwater level and the very dense nature of the underlying geologic formations (Earth Systems Pacific, 2001), the chances of liquefaction or lateral spreading at the site are nil.

There is no report of subsidence in the OCP EIR (1995) and no mention of subsidence in the Santa Maria Groundwater Basin report (County of San Luis Obispo, 2005).

## **OCP Development Standards**

The OCP incorporates several policies and development standards that address geologic hazards and provide construction- and operational-phase runoff control to reduce associated erosion impacts. Several of these were modeled after mitigation measures in the OCP EIR. The OCP development standards that would apply to the project are provided below.

**DevStd GEO-O-1.1:** New construction shall be set back a minimum of 50 feet from all known active or potentially active faults which have been mapped.

**DevStd GEO-O-1.2:** The County shall determine the need for a fault study conducted by a Registered Geologist or Certified Engineering Geologist in order to determine the presence and location of any active or potentially active faults.

- DevStd GEO-O-2.4:** All surface water runoff shall be culverted and diverted to avoid erosion of exposed slopes and shall be directed to the nearest natural drainage channel. Where such measures are feasible and would not substantially increase erosion, vegetated earthen channels should be substituted for culverts. Cribwalls or other methods should only be used where necessary to retain slopes.
- DevStd GEO-O-2.6:** All landscape plans shall be reviewed by P&D to ensure revegetation of graded areas in areas of sandy soils. Landscape securities shall be required unless expressly waived by P&D.
- DevStd FLD-O-2.1:** Pervious construction materials, such as turf-block, non-grouted brick, and gravel, shall be used where feasible.
- DevStd FLD-O-3.1:** Development projects shall incorporate sedimentation traps to minimize the erosion of soils into natural and manmade flood control drainages, where feasible. [*The remaining text of this standard applies to development adjacent to stream channels, which is not applicable to this project.*]
- DevStd FLD-O-3.2:** Silt fencing, straw bails, or sand bags shall be used in conjunction with other methods to prevent erosion on slopes and siltation of the stream channel.

## 4.5.2 Thresholds of Significance

The *County of Santa Barbara Environmental Thresholds and Guidelines Manual* (Published October 2008) includes Geologic Constraints Guidelines approved by the Santa Barbara County Board of Supervisors. These guidelines are reproduced below with subheadings added for clarity.

*Geologic Constraints Guidelines:* The purpose of these guidelines is to provide preliminary criteria for determining whether a particular activity could have a potentially significant impact on the environment as described in Section 15064 of the State CEQA Guidelines. Because geologic conditions are highly variable within Santa Barbara County, these guidelines are not fixed thresholds upon which a determination of significant impact would be made. They serve to point out when further study of site-specific conditions is required in order to assess geologic impacts. The level of project geologic impacts (i.e. potentially significant, potentially significant but subject to effective mitigation, or not significant) is made by the Planning and Development Department staff (in consultation with licensed geologists and engineers as necessary) upon review of project plans, proposed mitigation measures, and site-specific geologic information.

*Threshold of Significance:* Impacts are considered potentially significant if the proposed development activity, including all proposed mitigation measures, could result in substantially increased erosion, landslides, soil creep, mudslides, and unstable slopes (Appendix G(q), CEQA Guidelines). In addition, impacts are considered significant when people or structures would be exposed to major geologic hazards upon implementation of the project (Appendix G(r), CEQA Guidelines). In anticipation of these potential impacts development sites are required to have detailed site-specific engineering geologic and geotechnical investigations related to the proposed project elements.

*Site or Project Characteristics that Require Detailed Geologic Study:* Impacts related to geology have the potential to be significant if the proposed project involves any of the following characteristics:

1. The project site or any part of the project is located on land having substantial geologic constraints, as determined by the Planning and Development Department or the Public Works Department. Areas constrained by geology include parcels located near active or potentially active faults and property underlain by rock types associated with compressible/collapsible soils or susceptible to landslides or severe erosion. Special problem areas designated by the Board of Supervisors have been established based on geologic constraints, flood hazards and other physical limitations to development.
2. The project results in potentially hazardous geologic conditions such as the construction of cut slopes exceeding a grade of 1.5 horizontal to one vertical.
3. The project proposes construction of a cut slope over 15 feet in height as measured from the lowest finished grade.
4. The project is located on slopes exceeding 20 percent grade.

Mitigation measures may reduce impacts to a less than significant level. These measures would include minor project redesign and engineering steps recommended by licensed geologists, and engineers subsequent to detailed investigation of the site.

### 4.5.3 Project Impacts and Mitigation Measures

Future development of the site would involve site disturbance due to mass surface grading, excavation for underground structures and utilities, and construction of foundations and pavements. Standard residential, commercial, and light industrial construction is governed by the 2007 California Building Code (CBC; based on the 2006 International Building Code--IBC). Geotechnical, engineering geology, and environmental assessment reports have been prepared for the site, and for a site in the near vicinity, by Earth Systems Pacific (2001), Tetra Tech Inc. (2001), and GSI Soils Inc. (2001). Each report provides data, analysis, and recommendations for specific projects planned at the site or immediately to the west, and collectively demonstrate that future development is geotechnically feasible. None of these reports addresses a specific development proposal for the site. A geotechnical and engineering geology report that brings together this past information and adds new information where necessary to adequately address the design and construction parameters for a specific project within the framework of the County of Santa Barbara and 2007 California Building Code requirements will be required.

As presented in the OCP EIR (Volumes I and II), and as discussed above, there are no geologic constraints that would prevent future development. Seismic ground shaking, collapsible soils, and shallow groundwater are considered less than significant due to required regulatory compliance, involving standard geotechnical investigations and site-specific measures. Potential impacts associated with erosion and possible proximity to a buried potentially active "blind" thrust fault are discussed below.

### Erosion

Impact Number	Related OCP EIR Impact	Impact Description	Significance Before Mitigation
N/A	KS 17-GEO-1	<b>Grading and construction at the site would result in the potential for erosion.</b>	<b>Less Than Significant</b>

N/A - Not applicable, impact numbers are not assigned to less than significant impacts.

The OCP EIR (Volume II) identifies the following potential impact as result from future development on this site:

Impact KS17-GEO-1: Construction Related Erosion. Grading and construction activities associated with build out on the project site could result in increased erosion of soil materials creating a *potentially significant* short-term impact to the residences along the western project site boundary as well as to Pine Canyon Creek.

The OCP includes development standards to prevent erosion impacts, including GEO-O-2.4, GEO-O-2.6, FLD-O-2.1, and FLD-O-3.2, as listed above. These development standards require that surface water runoff be culverted and diverted to avoid erosion of exposed slopes; landscape plans be implemented for all new development in areas of sandy soil to ensure vegetation of graded area; pervious construction materials be used where feasible to reduce runoff; and silt fencing, straw bails, or sand bags be used in conjunction with other methods to prevent erosion on slopes and siltation of stream channels. In addition, development of the project site would be subject to National Pollutant Discharge Elimination System (NPDES) permit requirements (see Section 4.7 Flooding and Water Quality) and construction activities would also be subject to the County's grading ordinance. The grading ordinance generally requires a grading permit and an Erosion and Sediment Control Plan for all new grading, excavations, fills, cuts, borrow pits, stockpiling, compaction of fill, and land reclamation projects on privately owned land where the transported amount of materials exceeds 50 cubic yards or the cut or fill exceeds three feet in vertical distance to the natural contour of the land. The County will accept a Storm Water Pollution Prevention Plan (SWPPP) in lieu of an Erosion and Sediment Control Plan, as long as the SWPPP contains the requirements of the County's Erosion and Sediment Control Plan. In addition, a master drainage plan is required as part of the grading plan for all grading permit applications. Given the above requirements, future development of the site is not expected to result in significant erosion impacts.

### ***Mitigation Measures***

Mitigation measures are not required.

### ***Residual Impacts***

The project's erosion impacts would be less than significant before mitigation (**Class III**).

### **Fault Rupture**

Impact Number	Related OCP EIR Impact	Impact Description	Significance Before Mitigation
N/A	N/A	<b>Development of the site could occur in proximity to the Orcutt Frontal fault.</b>	<b>Less Than Significant</b>

Build out on the project site could result in the development of buildings in proximity to the Orcutt Frontal fault (Figure 4.5-1), as shown in the OCP EIR (Volume I Figure 5.4-1) just outside the project site on the southwest. If this fault is properly mapped at this location, sufficiently active, and close to the ground surface, then ground deformation from a 6.5 to 6.7 magnitude, or greater earthquake could have a potentially significant impact on the nearby building units. The potential for such an impact is considered low since the most recent fault maps and reports (published since the 1995 OCP EIR) show the Casmalia (Orcutt Frontal) fault to be about one mile away from the project site. However, the potential for this impact cannot be ruled out based on the information available to date. This impact was not specifically considered in the 1995 OCP EIR analysis of Key Site 17 (Volume II).

The OCP includes Development Standards GEO-O-1.1 and GEO-O-1.2, which state that new construction shall be set back a minimum of 50 feet from all known active or potentially active faults that



have been mapped and that the County shall determine the need for a fault study conducted by a Registered Geologist or Certified Engineering Geologist in order to determine the presence and location of any active or potentially active faults. The fault study required by Development Standard GEO-O-1.2 would determine whether or the Orcutt Frontal fault actually occurs within the site. If the fault study identifies the presence of a fault that could affect on-site development, plans for future development of the site would be required to include a 50-foot setback from the fault to proposed structures. Given these requirements, potential fault rupture impacts are considered less than significant.

### ***Mitigation Measures***

Mitigation measures are not required.

### ***Residual Impacts***

The project's potential fault rupture impacts would be less than significant before mitigation (**Class III**).

## **4.5.4 Cumulative Impacts**

Geologic impacts are generally project-specific in nature, as they involve the land upon which the project is proposed to be located. However, if not properly controlled, grading and subsequent erosion from other past, planned, or pending projects in combination with the proposed project may contribute to off-site sedimentation and/or deposition of large amounts soil, which could result in significant cumulative impacts. The OCP development standards and other erosion and stormwater control measures required for development in the County, as discussed above, would assure that the project's contribution to cumulative erosion impacts would be less than significant.

## 4.6 HAZARDS AND HAZARDOUS MATERIALS

This analysis is based on the OCP EIR, a Phase I Environmental Site Assessment of the project site (Tetra Tech, Inc., 2001), a Natural Gas Pipeline Risk Analysis Study (ENSR Corporation, 2001), a Preliminary Endangerment Assessment (Tetra Tech, Inc. 2001), and updated information obtained from current site observations, and recent aerial photographs.

### 4.6.1 Existing Conditions

The project site consists of four undeveloped (vacant) parcels within Key Site 17, which are currently planned for and zoned as residential property. The east and west boundaries are fenced with open access along the north and south boundaries, along Soares Avenue and Rice Ranch Road, respectively. As described in Section 4.3, Biological Resources, the site is vegetated with predominantly non-native grasses. The northeast portion is paved and used as a parking lot for the adjacent Oasis Senior Center.

### OCP EIR Analysis (1995) and Development Standards

The discussion of hazards in the OCP EIR (relevant to the project site) centers around historic oil and gas activity in the OCP area, the presence of facilities involving the use of hazardous materials, and the potential for these factors to result in hazards for new development. In particular, the analysis specific to Key Site 17 (Volume II of the OCP EIR) states that the Orcutt Pump Station is located in close proximity to the project site, and it is likely that Key Site 17 was historically part of an oil pipeline corridor between the Orcutt Hill oil production facilities and the Orcutt Pump Station. Additionally, an easement to the Pacific Coast Oil Co. and Pinal Dome Oil Co. for pipelines was recorded in 1905 for the central parcels within Key Site 17. Based on this information, the OCP EIR identified the potential for a significant impact and mitigation measure MITIGATION-OIL-1 requiring an Oil Activity Overlay to be placed on Key Site 17.

In addition, based on the impacts identified in the OCP EIR, the following applicable Development Standards were included in the OCP:

- DevStd RISK-O-1.1:** Parcels listed in Table 41 [Key Site 17 is included in Table 41 as a potential historic oil pipeline corridor] shall be inspected by County Petroleum Office personnel to determine the existence of hazardous substances on the property or immediately abutting properties prior to County acceptance of an application for development.
- DevStd RISK-O-1.2:** In the event that past oil activity or potential hazardous substances are uncovered during grading or construction-related activity, such activity should be suspended immediately until a Phase II Environmental Site Assessment and appropriate remedial action has been completed.
- DevStd RISK-O-1.3:** Development should be sited and designed to include remedial and/or avoidance measures which may include actions such as setbacks and/or excavation as determined appropriate by a Phase II study. Any remediation plan shall include requirements that soil undergoing remediation must be tarped and not placed within the viewshed of the public or adjacent residents, where feasible.

**DevStd RISK-O-1.4:** New habitable development shall be setback a minimum 25 feet from known oil and gas-related pipeline rights-of-way unless a project specific risk assessment indicates closer development is appropriate.

As described below, investigation conducted as part of the 2001 Phase I Environmental Site Assessment (Phase I ESA) indicated that based on interviews with Tosco and Torch petroleum companies, the local oil operations, no oil transmission pipelines have been installed within or near the property. The Phase I ESA concluded that there was no potential for impacts to the then proposed school site as a result of the Orcutt Pump Station or potential historical pipeline corridor.

### **Phase I Environmental Site Assessment (2001)**

In 2001 the OUSD began conducting environmental evaluations of the project site, including investigations for impacts associated with hazards and hazardous materials, in consideration of constructing a school on the property. A Phase I ESA was prepared to determine the site's environmental liabilities based upon activities, at or near the site, which may have involved, or resulted in the use, storage, disposal, and/or release of hazardous or potentially hazardous substances to the environment. The Phase I ESA concluded that no evidence of hazardous substances or petroleum products was observed at the project site and that oil pipelines have not been installed within the site or immediate area. The investigation involved review of available geologic, hydrogeologic, and environmental reports; surveys of aerial photographs from 1938 to 2000; site reconnaissance to evaluate hazardous substance use on-site and in adjacent areas; chain of title research; interviews with the Orcutt Union School District and other property owners and regulatory representatives; and database and records searches.

### ***Past Uses of the Site and Surrounding Area***

The Phase I ESA found that the site remained predominantly undeveloped and vacant from 1938 through the present. No building permits were obtained, and agricultural production utilizing pesticides or herbicides did not occur on the site. A review of the Department of Oil, Gas and Geothermal Resources's (DOGGR) Wildcat Map No. 311 found that no petroleum wells are located on the project site. The nearest wells (Lucas No.1 and Los Nietos-Gulf S.S.T), located within a 1-mile radius of the project site, have been abandoned and plugged. No oil transmission pipelines were reported within the area of the site. A review of the Santa Barbara Protection Services Division Record Review did not reveal any waste violations or any significant effects on the project site from offsite sources of hazards within 0.25 mile of the site. Former USTs that occurred at the OUSD bus maintenance yard and nearby (within 0.5 to 1 mile) Texaco and Unocal gasoline stations would not likely have affected the site or groundwater below the site. The USTs at the OUSD bus and equipment maintenance yard, which were once reported to have leaked, have been removed and replaced with above ground fuel storage tanks for diesel and gasoline. The tanks are located on the east side of Dyer Street and are required to be contained in an area to catch overspills during fueling.

### ***Site Reconnaissance***

The Phase I investigation included a site reconnaissance to evaluate the site and neighboring properties for potential hazardous substance use, storage, and disposal, including the presence of underground storage tanks, asbestos-containing materials, PCB-containing transformers or electrical equipment, and/or evidence of soil staining, stressed vegetation, ponds, pits, sumps, suspicious odors, fill and depressions, drums and barrels, or any other condition indicative of contamination. No environmental concerns were identified, with the exception of the potential for radon gas.

### Radon

Radon is a naturally occurring, odorless, colorless gas produced by certain geologic materials. It is known to be a human carcinogen and can pose a cancer risk greater than one in one million in humans at concentrations equal to or greater than 4 picoCuries per liter (pCi/L). The project site is within a Radon Zone Level 1 area; these areas have a predicted average indoor screening level greater than 4 pCi/L. The Phase I investigation notes that testing in the Orcutt area measured local radon levels lower than 4.0 pCi/L, averaging at 0.318 pCi/L for first floor living areas (basement areas and second floor living areas were not reported). Testing of radon levels at the project site itself have not been completed.

The Phase I ESA concludes that in open areas of the site, it is unlikely that radon would pose an environmental risk. Although radon gas levels measured in the Orcutt area were found to be less than 4 pCi/L, the Phase I ESA recommends that a radon survey should be conducted for potential radon gas accumulation in any structures constructed on the site and that radon-resistant construction techniques should be considered when designing the structures for the site.

### ***Environmental Records Review***

An environmental records review of 16 databases per ATSM Phase I ESA standards found several properties within 1 mile of the project site that contain hazardous materials and may have released hazardous substances into the environment. Databases searched include California Hazardous Materials Incident Report System (CHMIRS); Cortese List; Leaking Underground Storage Tank (LUST) Information System database; HAZNET; National Priorities List (NPL); Resource Conservation and Recovery Information System (RCRIS); Comprehensive Environmental Response, Compensation and Liability Information Systems (CERCLIS). County of Santa Barbara Fire Department Protection Services Division (SBCPSD) records were also reviewed. SBCPSD is the agency responsible for administering local UST management. Two gas stations, Texaco and Unocal, within 0.5 to 1 mile of the site were listed as CORTESE sites. Records indicated that there were no known spills that would likely have affected the project site. In addition, the adjacent OUSD facility was listed in HAZNET as producing hazardous waste, but would not affect the project site.

### **Natural Gas Pipeline Risk Analysis Study (2001)**

According to the Natural Gas Pipeline Risk Analysis Study, there are two Southern California Gas Company (SCGC) natural gas pipelines, one 12-inch and one 6.5-inch, located approximately 1,230 feet and 1,280 feet, respectively, west of the project site. The Study was prepared to determine whether there would be a potential for impacts to a then proposed school site for the property. It determined potential risks associated with rupture or failure of the pipelines, based on 1) an identification of the events that could lead to failure, 2) an assessment of the probability or frequency of these events occurring, and 3) an estimation of the consequences that would result from a failure. The presence of the pipelines does not generally pose a health and safety risk unless the structural integrity is compromised, resulting a release of gas to the environment. The Study evaluated both the types of events that could result in a pipeline rupture as well as the qualitative probability or frequency that such events could occur. Potential events that could cause the pipelines to be ruptured include: third party dig-ins, corrosion and deterioration, weld or material defects, and ground movement. Based on discussions with SCGC, the Study concludes that none of these issues are a risk for these pipelines based on the requirements for future construction to identify (e.g. Underground Service Alert) and avoid pipelines and the structural integrity of the pipelines themselves.

## **Preliminary Endangerment Assessment (2001)**

A Preliminary Endangerment Assessment (PEA) was prepared for the project site to further assess the potential exposure to hazardous materials (beyond the Phase I ESA) as part of the planning for a previously proposed school on the project site. The PEA included soil sampling and a soil gas survey. The gas survey indicated that the site subsurface had not been contaminated with hydrogen sulfide or methane gas from the nearby oil fields, or from volatile organic vapors from the former USTs located in the School District maintenance yard. Soil sampling results indicated that organochlorine pesticides are not present within a former Christmas tree farm area in an adjacent site to the east, and that metal concentrations were within naturally occurring levels.

## **Current Site Conditions/Recent Use of the Site and Adjacent Property**

Recent site observations indicate the presence of debris deposited in the southeast corner of the site, including concrete and other construction waste. In addition, piles of mulch and wood cuttings are present in the southern half of the site. An aerial photograph taken in approximately the year 2007 indicates the presence of a portable structure at the project site. The portable structure appears to have been a storage bin, trailer, or similar use-structure and is no longer present.

Immediately east of the project site is an OUSD bus storage and maintenance facility. This facility is operated in conjunction with the Hazardous Materials Business Plan (HMBP) for the site at 520 Dyer Street (on the east side of Dyer Street). In order to conduct maintenance on the OUSD's buses, the facility utilizes hazardous substances in the form of fuels, lubricants, oil, and other solvents and cleaners. The HMBP regulates the use, storage, and disposal of these substances to prevent exposure of hazards to adjacent properties. The bus maintenance and storage facility occurs on both the east and west sides of Dyer Street. Within the portion of the storage and maintenance facility immediately adjacent to the eastern boundary of the project site, on the west side of Dyer Street, equipment maintenance is not conducted; this area is currently used exclusively for storage.<sup>1</sup> However, since the overall operations are conducted pursuant to the HMBP for the entire facility (both sides of Dyer Street), it is possible that maintenance and hazardous materials could be stored and/or used on the portion directly adjacent to the project site in the future.

### **4.6.2 Thresholds of Significance**

The *County of Santa Barbara Environmental Thresholds and Guidelines Manual* (published October 2008) contains thresholds that categorize the significance of impacts to public safety resulting from the involuntary exposure to hazardous materials. The thresholds focus on identifying activities that include the installation or modification to facilities that handle hazardous materials, the transportation of hazardous materials, or non-hazardous land uses exercised in proximity to hazardous facilities. The proposed project is not a hazardous facility, and therefore the associated risk-based thresholds are not particularly applicable.

For purposes of this analysis, the proposed project would result in a significant impact if it would develop residential uses in a location such that the project's residents would be exposed to potential risks associated with the presence of hazardous materials at or near the project site.

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<sup>1</sup> Oasis Associates, Inc., personal communication, June 2010.



### 4.6.3 Impacts and Mitigation Measures

#### Exposure to Hazardous Materials/Hazards

Impact Number	Related OCP EIR Impact	Impact Description	Significance Before Mitigation
HAZ 1	HAZMAT-1	<b>Development of the project site would result in the potential exposure to hazardous materials from on-site dumping/storage, an adjacent OUSD Business Plan site, and/or natural radon gas emissions.</b>	<b>Potentially Significant</b>

#### *Onsite Dumping/Uses*

Given the time since the 2001 Phase I ESA and 2001 PEA were completed, and current observations that the site has since been used for some amount of dumping and storage, it cannot be conclusively established that no new hazardous materials have been located on the project site. Therefore, there is a potential for exposure of people to hazardous materials should the site be developed with residential uses at this time or in the future.

#### *Offsite Uses Involving Hazardous Materials*

Although there is no evidence of the project site having been affected by area LUFT sites or HMBP sites, the OUSD bus storage and maintenance facility located immediately east of the project site could present a potential impact. The OCP EIR identified potentially significant impacts associated with exposure to hazardous materials from new developments occurring adjacent to businesses operating under regulation of a HMBP. As such, since the proposed project would be located directly adjacent to the OUSD bus storage maintenance operations, the project could result in exposure to hazardous materials.

#### *Exposure to Radon Gas*

The Phase I ESA identified the potential for elevated radon gas levels above at the site. Potential exposure to radon gas as a result of future development under the proposed amendment to OCP could occur.

#### *Historic Oil Pipelines and Southern California Gas Pipelines*

The OCP EIR determined that given its proximity to the Orcutt Pump station, Key Site 17 (which includes the project site) was historically part of an oil pipeline corridor between the Orcutt Hill oil production facilities and the Orcutt Pump station, and that an easement to the Pacific Coast Oil Co. and Pinal Dome Oil Co. for pipelines was recorded in 1905 for the central parcels. The Orcutt Community Plan Development Standards for Risk of Upset/Hazardous Materials include DevStd RISK-O-1.1, DevStd RISK-O-1.2, DevStd RISK-O-1.3 and DevStd RISK-O-1.4 to determine the existence of hazardous substances on the property and to avoid and minimize potential impacts as a result of any potential for exposure to petroleum contaminated soils or oil and/or gas pipelines. Based upon the investigation conducted as part of the Phase I ESA and Natural Gas Pipeline Risk Analysis Study, such pipelines have not existed at the site, or are of sufficient distance so as to not create a significant impact. Therefore, these development standards no longer apply to the project site. The proposed project's changes to the potential future development at the site, as described in Section 2.5 Proposed GPA/Rezone, would not create new potentially significant impacts associated with oil or gas pipelines.

## Mitigation Measures

- HAZ 1-1** The County shall amend the OCP to add a Key Site 17 development standard stating that: Prior to approval of a senior housing development at the project site, the applicant shall update the Phase I Environmental Site Assessment to ensure that more recent activities on the property have not resulted in deposition of hazardous materials that could result in impacts to future residents at the site. If such materials are found to exist, affected areas will be remediated. Review and approval by County Environmental Health Services Department (EHS) and Santa Barbara County Fire are required.
- HAZ 1-2** The County shall amend the OCP to add a Key Site 17 development standard stating that: Development on the site shall be designed to minimize potential conflicts with the adjacent bus yard operations.
- HAZ 1-3** The County shall amend the OCP to add a Key Site 17 development standard stating that: A radon gas survey shall be performed prior to development on this site. Radon-resistant construction techniques shall be implemented where necessary to prevent radon gas accumulation within enclosed areas.

## Residual Impacts

With implementation of the above mitigation measures, the proposed project's potential significant impact would be reduced to a less than significant level (**Class II**).

### 4.6.4 Cumulative Impacts

The OCP EIR identifies a potential significant cumulative impact related to exposure of additional persons to hazards associated with abandoned oil wells, particularly in the South Orcutt area. Individual projects considered under the OCP are considered less than significant, however, development of the entire South Orcutt area is considered a potential significant impact, but mitigable. As discussed above, the proposed project would not expose people to abandoned oil wells, as such wells do not exist at the site. Therefore, the proposed project would not contribute to this cumulative impact.

Cumulative effects related to hazardous materials associated with future development in combination with the proposed project are not expected because current development proposals in Orcutt include residential uses and commercial (retail and office) development (see Section 3.0 Related Projects). New industrial uses in the vicinity of the site are not currently planned.

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## 4.7 FLOODING AND WATER QUALITY

### 4.7.1 Existing Conditions

The following discussion summarizes information contained in the Orcutt Community Plan EIR (OCP EIR, 1995) Section 5.5 Flooding and Drainage and provides updated information from a site visit by Envicom Corporation on May 24, 2010 and a preliminary drainage basin analysis by Wallace Group (August 1, 2007, provided in Appendix E).

#### Regional Setting

The Orcutt Planning Area (OPA) is located at the southern edge of the Santa Maria Valley and is wholly contained within the Flood Control District defined 29,000-acre Orcutt Drainage Area. Orcutt Creek, the primary drainage in the OPA, flows southeast to northwest across a 5,000-acre drainage area into the former Betteravia Lakes and terminates at the Santa Maria River. Orcutt Creek carries significant amounts of silt, which when backed up by culverts and road crossings, causes flood waters to overflow the banks. Natural drainage courses located in South Orcutt consist of the upper reaches of Orcutt Creek, and primary tributaries from Graciosa Canyon, Pine Canyon and an unnamed drainage northwest of Mount Solomon.

The County Flood Control and Water Conservation District Orcutt Master Drainage Plan/Fund, established in 1961 (and amended in 1964 and 1992), identifies and provides drainage facilities for Orcutt. While most retardation basin and storm drain facilities in the system were designed to accommodate a 25-year storm event, major culvert crossings and open channel drainage facilities are sized to a 100-year event. In the Orcutt area, stormwater runoff is conveyed to natural drainages by way of a series of open channels, small storm drains, and retardation basins.

Average rainfall in Orcutt is 13.4 inches per year, an insufficient amount to produce substantial surface runoff in most years. The sand substrates of the area allow complete absorption of very high intensity rainfall. However, upon saturation of the dune sand layer, stormwater runoff is nearly equivalent to the amount of rainfall. As a result of these factors, significant runoff occurs statistically about once every 6 to 7 years, accounting for the lack of perennial stream flow in the Orcutt area.

Preliminary locations for regional detention basins are identified in the OCP. These basins would minimize or eliminate the use of project-specific onsite basins by accommodating increased storm flows associated with the High-Build Option of the proposed OCP. A potential site for a regional detention basin was identified to the west of Rice Ranch Road on Key Site 15, which, if constructed could potentially receive stormwater flows from the project site. This basin has not been constructed.

#### Project Site Setting

The proposed project site lies within the central portion of Key Site 17. The 9.53-acre project site is essentially flat. Precipitation at the site primarily percolates into the ground or is transported as sheet flow to surface streets. The only evidence of concentrated runoff is a small rivulet at the site's southwest corner. At least some of the stormwater from impervious surfaces upslope from the project site is transported in an underground culvert to an outlet on the south side of Rice Ranch Road, which then flows to Pine Canyon Creek. Pine Canyon Creek, a USGS blue-line stream which flows intermittently generally west to its confluence with Graciosa Creek, which in turn flows to Orcutt Creek, is located approximately 400 feet south of the site's southern boundary. The stormwater runoff that flows off of the impervious and vegetated surfaces at the site to surface streets presumably flows to Pine Canyon Creek.

Approximately 9.25 acres of the project site consist of permeable surfaces, including vegetated areas, sparsely vegetated/barren areas, and a gravel road. Approximately 0.28 acres of the project site consist of impermeable surfaces, including 0.03 acres of concrete walkways and a 0.25-acre parking lot.

### ***Flooding***

Potential flood hazards may result from overflow of natural watercourses and man-made drainage systems due to excessive and unusual storm run-off. The standard for assessing flooding hazard is the so-called “100-year flood,” a benchmark used by the Federal Emergency Management Agency (FEMA) throughout the country. The project site is not within a FEMA designated special flood hazard area subject to 100-year flooding, as indicated on the FEMA Flood Insurance Rate Map for Santa Barbara County, California and Incorporated Areas – Panel 452, effective date September 30, 2005.

### ***Surface Water Quality***

Pollutant discharge in stormwater runoff from the project site has the potential to affect the water quality of Pine Canyon Creek and other downstream waterbodies within the watershed, including Graciosa and Orcutt Creeks. General categories of substances that impact water quality are metals, pesticides, pathogens, nutrients, sedimentation/siltation, salinity/total dissolved solids/chlorides, trash, and priority organics. In the current condition, runoff from the developed area located in the northeastern portion of the site may contain pollutants associated with normal human activities such as hydrocarbons and heavy metals from vehicle use or herbicides and fertilizers used in landscaping. The presence and quantity of pollutants in runoff from these areas is unknown, but is expected to be minimal given its small size and minimal use. The undeveloped area of the site is predominantly vegetated but includes small areas used for storage or dumping of mulch and other debris. However, there is no evidence of dumped materials that are known to be a potential source of pollutants.

Also, there is potential for erosion to result in additional sediment being transported to Pine Canyon Creek. Water quality problems caused by erosion such as high sediment loads, total suspended solids, and turbidity can affect aquatic plant growth and survival and reproduction of some animal species. Sediment is also one of the primary sources of pollutants since bacteria, metals, hydrocarbons, and organic matter can attach to fine particles and/or be trapped within sedimentary deposits. Given the flat topography of the site and the lack of natural drainages or significant concentrated runoff, erosion of sediment from the site in the current condition is expected to be relatively low.

### ***Groundwater Quality***

The Santa Maria River Valley Groundwater Basin underlies a surface area of 184,000 acres (288 square miles) in southern San Luis Obispo and northern Santa Barbara Counties, including the Santa Maria Valley and the project site area (DWR, 2004). Natural recharge to the basin comes from seepage losses from the major streams, percolation of rainfall, and subsurface flow. As described in the OCP EIR, regional ground water quality trends were analyzed by the County Water Agency. Water quality tends to decrease (i.e. have higher Total Dissolved Solids (TDS)) south and west of the recharge area along the Santa Maria River. No long-term regional trend of decreasing ground water quality was observed in the sparse historic water quality data available for the study. However, an earlier study by the County Water Agency states that groundwater in the Santa Maria Basin is gradually degrading in quality due to salt loading from agricultural return flows and wastewater infiltration. Historically, the Santa Maria Valley Groundwater Basin has been subject to high nitrate concentrations, particularly in the vicinity of the City of Santa Maria and in Guadalupe (DWR, 2004). High TDS, sulfate or chloride content impairs groundwater in some parts of the basin (DWR, 2004).

The Orcutt Planning Area currently obtains its entire water supply from the Santa Maria Groundwater Basin (see Section 4.9.5 Water Supply for discussion of groundwater quantity/supply issues.)

### OCP Development Standards

OCP development standards pertaining to flooding and water quality that are applicable to the project are as follows:

- DevStd FLD-O-2.1:** Pervious construction materials, such as turf-block, non-grouted brick, and gravel, shall be used where feasible.
- DevStd FLD-O-3.1:** Development projects shall incorporate sedimentation traps to minimize the erosion of soils into natural and manmade flood control drainages, where feasible. [*The remaining text of this standard applies to development adjacent to stream channels, which is not applicable to this project.*]
- DevStd FLD-O-3.2:** Silt fencing, straw bails, or sand bags shall be used in conjunction with other methods to prevent erosion on slopes and siltation of the stream channel.
- DevStd FLD-O-4.2:** Developers shall purchase capacity in and connect to the planned regional retention basins, if feasible. If participation in the Mello Roos district for the regional basin system is determined by Flood Control to be infeasible, the developer may construct on-site retention facilities with sufficient capacity to reduce offsite runoff in accordance with Flood Control District standards. All private basins shall be attractively landscaped and where appropriate, shall be designed to accommodate recreational facilities. Prior to development of private basins, all applicants for discretionary projects shall agree to maintain the basins and demonstrate that a Homeowners Association will be established which will generate adequate revenues to provide long term maintenance of the basins including all landscaping and recreational facilities.

It is noted that the County is currently considering an amendment to the OCP that would replace Policy Fld-O-4 (which calls for the construction and maintenance of a regional detention basin system on Orcutt, where feasible) and associated development standards (including DevStd FLD-O-4.2), with the following:

- Policy FLD-O-4:** All applications for development within the Orcutt Community Plan area shall comply with applicable development standards regarding floodplain management and stream setbacks.
- Dev Std FLD-O-4.1:** The Santa Barbara Flood Control and Water Conservation District shall review all site and grading plans and verify conformance to all applicable development requirements to ensure proposed drainage and water conveyance systems are designed to meet District standards and are directed into a District approved watercourse or drainage facility.

Project Plans shall be prepared to incorporate the most current Standard Conditions for Project Plan Approval-Water Quality Best Management Practices meet or exceed current County of Santa Barbara Project Clean Water and Drainage Ordinance standards.

## 4.7.2 Thresholds of Significance

### Surface Drainage/Flooding

In accordance with Appendix G of the State CEQA Guidelines the proposed project would have a significant impact on flooding or water quality if it would:

- Substantially alter the existing drainage pattern of the site or area, including through 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;
- Create or contribute runoff water, which would exceed the capacity of existing or planned stormwater drainage systems; or
- 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.

### Water Quality

According to the County of Santa Barbara *Environmental Thresholds and Guidelines Manual* (October 2008), the proposed project would result in a significant water quality impact if its construction or operation:

- Is located within an urbanized area of the county and the project construction or redevelopment individually or as a part of a larger common plan of development or sale would disturb one (1) or more acres of land;
- Increases the amount of impervious surfaces on a site by 25 percent or more;
- Results in channelization or relocation of a natural drainage channel;
- Results in removal or reduction of riparian vegetation or other vegetation (excluding non-native vegetation removed for restoration projects) from the buffer zone of any streams, creeks or wetlands;
- Is an industrial facility that falls under one or more of categories of industrial activity regulated under the NPDES Phase I industrial stormwater regulations (facilities with effluent limitation; manufacturing; mineral, metal, oil and gas, hazardous waste, treatment or disposal facilities; landfills; recycling facilities; steam electric plants; transportation facilities; treatment works; and light industrial activity);
- Discharges pollutants that exceed the water quality standards set forth in the applicable NPDES permit, the Regional Water Quality Control Board's (RWQCB) Basin Plan or otherwise impairs the beneficial uses of a receiving waterbody;
- Results in a discharge of pollutants into an "impaired" waterbody that has been designated as such by the State Water Resources Control Board or the RWQCB under Section 303 (d) of the Federal Water Pollution Prevention and Control Act (i.e., the Clean Water Act); or
- Results in a discharge of pollutants of concern to a receiving water body, as identified in by the RWQCB.

## 4.7.3 Project Impacts and Mitigation Measures

There is currently no specific development proposal or plan for the site. The applicant is requesting a General Plan Amendment and Rezone of four parcels within Key Site 17. This analysis assesses flooding and water quality impacts associated with a 257-unit residential project at the site, i.e. the reasonable maximum development that could occur on the site under the proposed General Plan and Zoning designations and standards.



## Surface Drainage/Flooding Impacts

Impact Number	Related OCP EIR Impact	Impact Description	Significance Before Mitigation
N/A	KS17-FLD-1	<b>Development of the site would result in an increase in stormwater runoff from the site.</b>	<b>Less than Significant</b>

The 9.53-acre project site currently includes approximately 0.3 acres of impervious surfaces consisting of paved areas, including a parking lot and concrete walkways. Development of the site would result in a reduction in vegetated area and an increase in the amount of impervious surfaces. These impermeable surfaces would increase the quantity and peak flow of stormwater runoff and, without proper drainage facilities, could result in on- or off-site flooding. This is considered a significant impact.

The OCP EIR analysis of Key Site 17 (Volume II) identifies and describes this impact as follows:

- Impact KS17-FLD-1: Increased stormwater runoff. Impervious surfaces (roofs, roadways, parking facilities, etc.) associated with buildout on the project site could result in increased runoff into the creek basin possibly affecting low-lying properties.

Based on a preliminary hydrologic and basin routing analysis conducted for two basin alternatives (Wallace Group, 2007), stormwater control at the site is anticipated to involve a drainage system that conveys stormwater to a detention pond in the site's southwest corner. The site currently slopes gently from east to west/southwest. Stormwater collected in the detention pond would flow into a subsurface system (30" reinforced concrete pipe (RCP) bleeder pipe) to an outflow on the south side of Rice Ranch Road, which would then flow to Pine Canyon Creek. It is presumed that off-site construction of this pipe from the outlet of the on-site stormwater basin to an existing outlet into Pine Canyon Creek would be required as part of the proposed project, unless an existing stormdrain of adequate capacity is available beneath Rice Ranch Road. Based on the preliminary analysis, a detention pond and drainage system can be designed for the site that could accommodate 25-year storm flows, with stormwater in an overtopping situation passing through a weir and flowing to Rice Ranch Road before entering into the subsurface drainage system and being conveyed to Pine Canyon Creek. Flows exiting the detention pond would be regulated with an orifice plate, and would not exceed existing historic bypass flows (which would also be directed to the basin) plus 0.07 times the total developed area. This would amount to an increase of approximately 0.8 cubic feet per second (cfs) of stormwater flow to Pine Canyon Creek compared to the existing condition.

The preliminary hydrologic and basin routing analysis relied on standard drainage conditions for plan approval to determine the necessary design criteria, and the Santa Barbara Urban Hydrograph method for calculations of the existing condition and 25-year storm events. The preliminary analysis assumed a 3:1 ratio of impervious to pervious surfaces in the developed condition.

Although the preliminary hydrologic and basin routing analysis demonstrates the feasibility of providing an adequate drainage facility, a specific project and plan to incorporate an on-site basin have not yet been prepared.

Adherence to OCP DevStd FLD-O-4.2, which requires development to provide and maintain on-site detention facilities with a sufficient capacity to reduce site runoff to County Flood Control District (FCD) standards, would ensure that impacts are mitigated to a less than significant level. FLD-O-4.2 also suggests that where appropriate on-site facilities shall be dual use (e.g., ball fields, park facilities) and that

all applicants shall enter into a maintenance agreement with FCD to assure perpetual maintenance of the private basins and other private drainage improvements required for the development.

Should the currently proposed OCP amendment regarding Policy Fld-O-4 be approved, the proposed OCP Dev Std FLD-O-4.1 would also assure that potential surface drainage issues would be less than significant.

The project site is not within a FEMA designated special flood hazard area subject to 100-year flooding, as indicated on Federal Insurance Rate Maps (FIRM) maps. As such, the proposed project would not result in future development within a 100-year flood zone and associated flood hazard impacts would be less than significant.

### ***Mitigation Measures***

Mitigation measures are not required.

### ***Residual Impacts***

The project's drainage and flooding impacts would be less than significant before mitigation (**Class III**).

### **Surface and Ground Water Quality - Construction Phase**

Impact Number	Related OCP EIR Impact	Impact Description	Significance Before Mitigation
<b>FLD/WQ 1</b>	N/A	<b>Construction activity at the site would result in the potential introduction of urban pollutants into surface and ground water.</b>	<b>Potentially Significant</b>

A proposed 257-unit residential project at the site would be located within an urbanized area of the County and would disturb more than one acre of land. Grading activities and vegetation removal during construction could result in short-term water quality impacts associated with increased erosion and the potential transport of sediment to Pine Canyon Creek and other downstream water bodies. Also, spills, leakage, or improper handling and storage of substances such as oils, fuels, chemicals, metals and other substances from vehicles, equipment, and materials used during the construction phase could cause pollutants to be present in stormwater runoff and impact downstream water bodies. Impacts to surface water quality from grading and construction activities are potentially significant. (Section 4.6 Geology and Soils also addresses construction phase erosion impacts.)

The potential for effects on groundwater quality depend on the extent to which pollutants infiltrate into groundwater sources. Oils, fuels, chemicals, metals, and other substances from vehicles, equipment, and materials used during the construction phase may potentially leach into subsurface waters and reach the Santa Maria Valley Groundwater Basin. Prior to the implementation of preventive measures to avoid spills and properly handle and store potential pollutants, construction-period impacts on groundwater are considered potentially significant.

All construction activities disturbing one or more acres are subject to the General Permit for Storm Water Discharge Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ), which require preparation of a Storm Water Pollution Prevention Program (SWPPP) to control the discharge of pollutants, including sediment, into local surface water drainages. The SWPPP is designed

to minimize water quality degradation through storm water monitoring, establish BMPs, implement erosion control measures, and implement spill prevention and containment measures.

In addition to NPDES permit requirements, construction activities would also be subject to the County's grading ordinance and applicable OCP development standards, including Dev Std FLD-O-3.1 and FLD-O-3.2 (above). The grading ordinance generally requires a grading permit and an Erosion and Sediment Control Plan for all new grading, excavations, fills, cuts, borrow pits, stockpiling, compaction of fill, and land reclamation projects on privately owned land where the transported amount of materials exceeds 50 cubic yards or the cut or fill exceeds three feet in vertical distance to the natural contour of the land. The County will accept a SWPPP in lieu of an Erosion and Sediment Control Plan, as long as the SWPPP contains the requirements of the County's Erosion and Sediment Control Plan. In addition, a master drainage plan is required as part of the grading plan for all grading permit applications. Nevertheless, due to the potential for erosion and sedimentation into Pine Canyon Creek, impacts would potentially be significant.

### ***Mitigation Measures***

**FLD/WQ 1-1:** The County shall amend the OCP to add a Key Site 17 development standard stating that: The Applicant shall submit proof of exemption or a copy of the Notice of Intent to obtain coverage under the Construction General Permit of the National Pollutant Discharge Elimination System issued by the California Regional Water Quality Control Board.

### ***Residual Impacts***

Implementation of the mitigation measure identified above would reduce water quality impacts to a less than significant level (**Class II**).

### **Surface and Ground Water Quality - Operational Phase**

Impact Number	Related OCP EIR Impact	Impact Description	Significance Before Mitigation
FLD/WQ 2	N/A	<b>During the operational phase of a development at the site, urban pollutants may be introduced into surface and groundwater.</b>	<b>Significant</b>

A proposed 257-unit residential project would not create effluent discharges from point sources and therefore the project would not violate any waste discharge requirements.

The project would increase impervious surfaces at the site by more than 25 percent. Pollutants that may be present on-site during the operational phase include pesticides, herbicides, and fertilizers used for landscaping, and oil, gasoline, metals, and other substances from vehicles. If untreated, the pollutants would be discharged off-site and to receiving waterbodies (Pine Canyon Creek), which could potentially result in water quality degradation. Impacts to water quality resulting from stormwater runoff during the operational phase are considered potentially significant.

A proposed project consisting of 257 residences is expected to collect and convey runoff exposed to pollutants into an on-site detention basin. There would be some potential for pollutants to enter subsurface water through soils within the detention basin, and for pesticides, herbicides, and fertilizers to infiltrate into subsurface groundwater from landscaped areas. Impacts to groundwater quality during project operation are considered potentially significant.

### ***Mitigation Measures***

**FLD/WQ 2-1:** The County shall amend the OCP to add a Key Site 17 development standard stating that: The development shall incorporate and maintain the following operational erosion control measures:

1. Erosion control measures, such as plantings or hard surfaces, shall be incorporated into the drainage plan for all project drainages as required by the Flood Control District and P&D.
2. Development in areas of high erosion potential shall be sited and designed to minimize increased erosion and may be required to have a site-specific evaluation of erosion-control measures. Project approval shall be conditioned to ensure that erosion will be reduced to acceptable levels.
3. Landscaped areas adjacent to structures shall be graded so that drainage is away from structures.
4. Irrigation shall be controlled so that overwatering does not occur. An irrigation schedule shall be reviewed and approved by P&D prior to land use clearance for grading.

**FLD/WQ 2-2:** The County shall amend the OCP to add a Key Site 17 development standard stating that: The applicant shall submit and implement a Storm Water Quality Management Plan (SWQMP) designed to prevent the entry of pollutants from the project site into the storm drain system after development. The SWQMP shall identify:

1. A combination of structural and non-structural Best Management Practices (BMPs) from the California Storm Water BMP Handbook for New Development and Redevelopment (California Storm Water Quality Association), or other approved methods;
2. Potential pollutant sources that may affect the quality of the storm water discharges;
3. Design and placement of structural and non-structural BMPs to address identified pollutants;
4. Inspection and maintenance program; and
5. Method for ensuring maintenance of all BMPs over the life of the project.

**FLD/WQ 2-3:** The County shall amend the OCP to add a Key Site 17 development standard stating that: LID is an alternative site design strategy that uses natural and engineered infiltration and storage techniques to control stormwater runoff where it is generated to reduce downstream impacts. The Environmental Protection Agency has determined that the following LID measures are highly beneficial. In order to further reduce water quality impacts, the SWQMP and project design shall include the following LID measures:

#### Design Measures

- Vegetated swales, buffers and strips throughout the project site;
- Use of permeable pavement to the extent feasible;
- Two-foot permeable pavement strips located at the base of driveways, spanning the width of the driveway; and
- Impervious surface reduction and disconnection.

#### Structural Measures

- Tree boxes filters to capture and infiltrate street runoff upstream of detention basins;
- Roof leader flows directed to planter boxes and other vegetated areas and/or vegetated swales and buffers;
- Soil amendments to increase infiltration rates; and
- Rain gardens, rain barrels, and cisterns.

### ***Residual Impacts***

Implementation of the mitigation measures identified above would reduce potentially significant operational water quality impacts to a less than significant level (**Class II**).

#### **4.7.4 Cumulative Impacts**

Several projects are proposed for development within the general vicinity of the project, as described in Section 3.0: Related Projects. These related projects represent a mix of residential and commercial projects, which will result in various changes in the amount of impervious surfaces and the degree of potential flooding and surface water quality degradation before necessary regulatory requirements are met.

Build-out of the OCP would provide for the development of an additional 6,300 new units and an estimated 2.3 million square feet of commercial space on 4,450 acres within the Orcutt Planning Area, including an approximately 1,500 acre expansion of the Urban Boundary Line (UBL). This development would create an estimated increase in impervious surfaces of over 1,500 acres with associated increases in runoff. In addition, in the more urban portions of the community much of this development would drain into man-made and natural drainage systems, which cannot accommodate flows from 25- to 100-year floods. Extensive grading and clearing associated with new development could substantially accelerate erosion of the areas sandy soils leading to increased sedimentation of creeks and drainage facilities causing decreased capacity and increased flooding.

Build-out of the OCP is anticipated to result in the following impacts identified in Section 5.4 of the OCP EIR (Volume I).

- Impact FLD-3: Increased storm flows from impervious surfaces. Urban development associated with build out of the OCP would lead to the creation of approximately 1,000 acres of new impervious surfaces, causing a significant increase in run-off and peak flows leading to potentially significant flooding impacts to streets and existing residences due to increased flood heights and inadequate channel capacities to accommodate higher flows.
- Impact FLD-4: Decreased channel capacity from increased sedimentation. Grading, clearing on over 1,500 acres, and increased velocity of run-off associated with development permitted under the proposed Orcutt Community Plan would create potentially significant impacts to the capacity of both natural stream channels and County retention basins through increased erosion and downstream sedimentation, creating indirect but substantial increases in flooding through decreased channel and retention basin capacity.
- The identified potentially significant project level flooding and water quality impacts (Impacts FLD-1, FLD-2 and FLD-3) are also potential considerable contributions to cumulative flooding and water quality impacts prior to installation of storm control infrastructure and proper implementation of BMPs in compliance with all applicable regulations and permit conditions.

The project's contribution to drainage and flooding impacts would be less than significant given the OCP development standards discussed above. Its contribution to surface water quality impacts is considered potentially significant. Implementation of the mitigation measures identified above for project level impacts would also ensure that the project's contribution to cumulative water quality impacts is less than significant (Class II).

## 4.8 NOISE

Noise impacts were evaluated as part of the Orcutt Community Plan (OCP) EIR for the Orcutt Community Plan Area as a whole and for Key Site 17 (OCP EIR Section 5.10 and Volume II Key Site 17 analysis). This section updates the discussion of existing noise levels in the project area and provides an analysis that addresses the currently proposed project.

### 4.8.1 Existing Conditions

#### Noise Descriptors

Sound is mechanical energy transmitted by pressure waves in a compressible medium such as air. Noise is generally defined as unwanted sound. Sound is characterized by various parameters that describe the rate of oscillation of sound waves, the distance between successive troughs or crests, the speed of propagation, and the pressure level or energy content of a given sound wave. In particular, the sound pressure level has become the most common descriptor used to characterize the loudness of an ambient sound level. The unit of sound pressure expressed as a ratio to the faintest sound detectable by a keen human ear is called a decibel (dB).

Because sound or noise can vary in intensity by over one million times within the range of human hearing, a logarithmic loudness scale similar to the Richter scale used for earthquake magnitude is used to keep sound intensity numbers at a convenient and manageable level. Since the human ear is not equally sensitive to all sound frequencies within the entire spectrum, noise levels at maximum human sensitivity are factored more heavily into sound descriptions in a process called "A-weighting," written as dB (A). Any further reference to decibels in this report written as "dB" should be understood to be A-weighted values.

Decibel levels associated with sound decrease as the distance from the source increases. Sound dissipates exponentially with distance from the noise source. For a point source such as mechanical equipment, sound levels decrease approximately 6 dB per doubling of distance from the source. For a line source noise such as traffic, the sound typically decreases three decibels for each doubling of distance. If the site is primarily vegetative which absorbs sound, the rate of dissipation for a line source is four and one-half decibels for each doubling of distance.

Time variations in noise exposure are typically expressed in terms of a steady-state energy level equal to the energy content of the time varying period (called  $L_{eq}$ ), or, alternately, as a statistical description of the sound pressure level that is exceeded over some fraction of a given observation period. Finally, because community receptors are more sensitive to unwanted noise intrusion during the evening and at night, State law requires that, for planning purposes, an artificial dB increment be added to quiet time noise levels in a 24-hour noise descriptor called the Community Noise Equivalent Level (CNEL) or Day-Night Noise Level (Ldn). CNEL and Ldn apply a penalty to noise that occurs at night.

#### Baseline Noise Levels

The proposed project site is a predominately undeveloped parcel of land. The ambient noise environment at the project site and local vicinity is dominated by noise from transportation sources, primarily Rice Ranch Road to the south of the site. Secondary noise includes traffic from other nearby roadways and stationary source noise generated at the surrounding uses including a partially constructed single-family development to the west, and the Oasis Senior Center and OUSD offices and a bus storage/maintenance yard to the east.



Noise from motor vehicles is generated by engine vibrations, the interaction between tires and the road, and the exhaust system. Reducing the average motor vehicle speed reduces the noise exposure of receptors adjacent to the road. Each reduction of five miles per hour reduces noise by about 1.3 dBA. In order to assess the potential for mobile-source noise impacts, it is necessary to determine the noise currently generated by vehicles traveling on the roadways surrounding the project area. This can be modeled utilizing procedures and methodologies as specified by Caltrans and the Federal Highway Administration (FHWA).

Traffic volumes (average daily trips, ADT) were provided in the Traffic Report prepared for this project (see Appendix F). Based on this data, average noise levels along Rice Ranch Road in the project vicinity currently range from approximately 61-62 dB CNEL as calculated at a distance of 50 feet from the centerline of the road. Noise levels for existing conditions along Rice Ranch Road and other analyzed arterial segments are presented in **Table 4.8-1**. Closer to SR-135 traffic noise levels hover near 70 dB CNEL, but farther away from SR-135 traffic noise levels are in the low to mid-60 dB CNEL range.

**Table 4.8-1**  
**Existing Traffic Noise Levels**

Segment		Existing Noise at 50 feet from Centerline (dB CNEL)
<b>Rice Ranch Rd/</b>	N of Clark	62.3
	S of Clark	61.0
	N of Orcutt	61.9
	S of Orcutt	63.5
<b>Orcutt Rd/</b>	N of Clark	64.5
	S of Clark	62.4
	N of Rice Ranch	62.1
	S of Rice Ranch	62.0
<b>Clark Ave/</b>	W of Rice Ranch	63.2
	E of Rice Ranch	64.4
	W of SR-135 SB Ramps	68.6
	SR-135 SB - SR-135 NB	69.5
	SR-135 NB-Orcutt	70.7
	E of Orcutt	70.9

## Noise Regulations and Standards

An interior CNEL of 45 dB is mandated for residential dwellings in Title 24 of the California Code of Regulations. In 1988, the State Building Standards Commission recommended that the 45 dB CNEL interior standard be expanded to include all habitable rooms for all residential occupancy. The County of Santa Barbara requires a 45 dB (A) Ldn/CNEL interior standard for all residential occupancies. Since noise attenuation within residential structures with closed windows is at least 20 dB, an exterior noise exposure of 65 dB CNEL is generally the noise/land use compatibility guideline for new residential dwelling units in California. A 65 dB CNEL exterior level is also the noise threshold where noise begins to substantially interfere with enjoyment of any outdoor recreational amenity such as a yard, patio, spa/pool, etc. In the planning of land use in Santa Barbara County, 65 dB (A) Ldn/CNEL is regarded as the maximum exterior noise exposure compatible with noise-sensitive uses unless noise mitigation

features are included in project designs. A level of 65 dB (A) CNEL exterior and 45 dB (A) CNEL interior is therefore the applicable noise standard for residential uses within the project site.

### OCP Development Standards

The OCP includes the following applicable development standards:

- DevStd NSE-0-1.2:** Noise sensitive uses proposed in areas exceeding 65 dB(A) CNEL shall be designed so that exterior living spaces do not exceed 65 dB(A) CNEL and interior noise levels attributable to exterior sources do not exceed 45 dB(A) CNEL when doors and windows are closed. Noise insulation construction techniques may include installation of air conditioning for all units and double-paned windows and wall insulation for all window and wall locations with lines of sight to the noise source. Building design and construction specifications shall meet the interior noise standard set forth in California Administrative Code, Title 25, as demonstrated through an acoustical analysis prior to project approval.
- DevStd NSE-0-1.3:** Project design shall use a combination of vegetated berms, unit orientation or other methods to reduce noise affecting interior and exterior living spaces. The developer should retain a County-approved noise consultant to conduct a study determining the design and effectiveness of proposed noise reduction measures. Soundwalls shall only be used if alternative noise reduction measures are ineffective. If found necessary soundwalls shall be decorative masonry or wood walls planted with fast-growing vines and shrubs.
- DevStd NSE-0-2.1:** Standard construction working hours (i.e., 7 a.m. to 4:00 p.m., Monday-Friday) shall be required for development activities. Flexibility to allow extended hours on weekdays and/or occasional working hours on Saturdays should be determined on a case-by-case basis.
- DevStd NSE-0-2.2:** Noise attenuation barriers, muffling of grading equipment and additional mitigation where deemed appropriate should be required for development where construction equipment generates noise levels in excess of 95 dB(A).

### 4.8.2 Thresholds of Significance

The County of Santa Barbara Environmental Thresholds and Guidelines Manual (2008) provides the following thresholds of significance for assisting in the determination of significant noise impacts, noting that the thresholds are intended to be used with flexibility, as each project must be viewed in its specific circumstances.

- a. A proposed development that would generate noise levels in excess of 65 dBA CNEL and could affect sensitive receptors would generally be presumed to have a significant impact.
- b. Outdoor living areas of noise sensitive uses that are subject to noise levels in excess of 65 dBA CNEL would generally be presumed to be significantly impacted by ambient noise. A significant impact would also generally occur where interior noise levels cannot be reduced to 45 dBA CNEL or less.
- c. A project will generally have a significant effect on the environment if it will increase substantially the ambient noise levels for noise-sensitive receptors adjoining areas. Per item a.,

this may generally be presumed when ambient noise levels affecting sensitive receptors are increased to 65 dBA CNEL or more.

- d. Noise from grading and construction activity within 1,600 feet of sensitive receptors, including schools, residential development, commercial lodging facilities, hospitals or care facilities, would generally result in a potentially significant impact. To mitigate this impact, construction within 1,600 feet of sensitive receptors shall be limited to weekdays between the hours of 8 AM to 5 PM only. Noise attenuation barriers and muffling of grading equipment may also be required. Construction equipment generating noise levels above 95 dB (A) may require additional mitigation.

There are no firm guidelines on what constitutes a substantial increase as per item c, above. In practice, people cannot clearly perceive noise level changes of 3 dB or less, particularly if they occur over an extended time period. An increase of more than 3 dB, however, requires a doubling of traffic volumes or other source of noise generation over existing conditions. Few projects individually double traffic volumes on already moderately traveled streets. Traffic noise impacts in areas already exceeding standards are therefore most often of a cumulative nature rather than individually significant. For the purposes of this analysis, however, an increase of more than 3 dB CNEL over ambient noise levels is presumed to result in a significant impact.

### 4.8.3 Project Impacts and Mitigation Measures

The proposed project would result in the potential for noise impacts during construction and operational phases. Construction activities, especially operation of heavy equipment, would create short-term noise increases near the project site. During operation of the project, project-generated traffic would cause an incremental increase in area-wide noise levels throughout the project area. The proposed senior housing units are not expected to generate substantial sources of noise that could impact the neighboring environment. Traffic noise impacts are generally analyzed to ensure that the project does not adversely impact the acoustic environment of the surrounding community, as well as to ensure that the project site is not exposed to an unacceptable level of noise resulting from the ambient noise environment acting on the project. Other surrounding noise sources are also examined to ensure a suitable noise environment for noise sensitive uses. Construction and operational noise impacts are assessed below.

#### Construction Noise Impacts (Impact NSE-3)

Impact Number	Related OCP EIR Impact	Impact Description	Significance Before Mitigation
N/A	N/A	<b>Construction activity on the project site would generate short-term noise that could affect sensitive receptors in the vicinity of the project site.</b>	<b>Less Than Significant</b>

N/A - Not applicable, impact numbers are not assigned to less than significant impacts.

The County's Environmental Thresholds and Guidelines Manual addresses construction noise and identifies typical restrictions to help reduce this potential impact. These Guidelines generally consider construction noise impacts to be potentially significant for any residences or sensitive receivers located within 1,600 feet of construction activity. This is based on the assumptions that the average noise levels from construction equipment range from 80-90 dB at 50 feet and that a distance of 1,600 feet is necessary to reduce these levels to 65 dB.

Construction noise impacts vary markedly because the noise strength of construction equipment ranges widely as a function of the equipment used which changes during the course of the project. Construction noise tends to occur in discrete phases dominated initially by demolition and/or earth-moving sources and later for finish construction. Heavy equipment noise can exceed 90 dB (A) and averages about 85 dB (A) at 50 feet from the source when the equipment is operating at typical loads. Most heavy equipment operates with varying load cycles over any extended period of time.

Construction noise exposure can be further worsened when several pieces of equipment operate in close proximity. Because of the logarithmic nature of decibel addition, two equally loud pieces of equipment will be +3 dB louder than either one individually. Three simultaneous sources are +5 dB louder than any single source. Thus, while average operational equipment noise levels are perhaps 5 dB less than at peak power, simultaneous equipment operation can still yield an apparent noise strength equal to any individual source at peak noise output. Whereas the average heavy equipment reference noise level is 85 dB (A), short-term levels from either peak power or from several pieces operating in close proximity can be as high as 90 dB (A).

Point sources of noise emissions are atmospherically attenuated by a factor of 6 dB per doubling of distance. Residential uses exist within 1,600 feet to the north and west of the project site; the closest existing residences are approximately 50 feet from the site's northern boundary.

The OCP identifies the following general impact, which would apply to the proposed project:

Impact NSE-3: Construction related noise: Noise from grading and construction activity associated with development of Key Sites would result in *potentially significant* short-term, construction related noise impacts to sensitive noise receptors located within 1,600 feet of site preparation activities.

However, OCP Development Standards NSE-0-2.1 and NSE-0-2.2 would assure that potential impacts are reduced to a less than significant level. These standards limit construction working hours to 7 a.m. to 4:00 p.m., Monday-Friday and suggest that noise attenuation barriers, muffling of grading equipment, and additional mitigation where deemed appropriate should be required for development where construction equipment generates noise levels in excess of 95 dB(A). See above for full text of these development standards.

### ***Mitigation Measures***

Mitigation measures are not required.

### ***Residual Impacts***

The project's construction-period noise impacts would be less than significant before mitigation (**Class III**).

## Operational Noise Impacts

### *Project-Generated Vehicular Noise Impacts*

Impact Number	Related OCP EIR Impact	Impact Description	Significance Before Mitigation
N/A	N/A	<b>Development of the site would add to vehicular traffic on area roadways, which would increase associated noise levels.</b>	<b>Less Than Significant</b>

Long-term noise impacts associated with the introduction of residential uses at the project site center primarily on vehicular traffic added to project area roadways. These concerns were addressed using the California specific vehicle noise curves (CALVENO) in the federal roadway noise model (the FHWA Highway Traffic Noise Prediction Model, FHWA-RD-77-108). This model calculates the Leq noise level for a particular reference set of input conditions, and then makes a series of adjustments for site-specific traffic volumes, distances, speeds, or noise barriers. A travel speed of 45 mph was assumed as an average speed on non-freeway roadways.

**Table 4.8-2** summarizes the 24-hour CNEL level at 50 feet from the roadway centerline along 14 area roadway segments. The noise analysis utilizes data from the Traffic Report prepared for this project (see Appendix F). Four scenarios were evaluated: existing, existing “with project”, build-out, and build-out “with project”. The build out scenarios are used for the cumulative impacts analysis (Section 4.8.4).

Project impacts are defined as the difference between existing and existing with project scenarios. As show in **Table 4.8-3**, noise increases attributable to project-generated traffic would not exceed the +3 db CNEL threshold along any roadway segment. The largest traffic noise impact attributed to project implementation is +0.2 dB CNEL at 50 feet from roadway centerline. This impact is acoustically imperceptible. Therefore, the project’s vehicular noise impact would be less than significant.

### Mitigation Measures

Mitigation measures are not required.

### Residual Impacts

The project’s vehicular noise impacts would be less than significant before mitigation (**Class III**).

**Table 4.8-2**  
**Traffic Noise Impact Analysis**  
**(dBA CNEL at 50 feet from centerline)**

Segment		Existing	Existing w/Project	Build-Out	Build-Out w/Project
<b>Rice Ranch Rd/</b>	N of Clark	62.3	62.3	64.2	64.2
	S of Clark	61.0	61.0	63.3	63.3
	N of Orcutt	61.9	62.0	63.1	63.2
	S of Orcutt	63.5	63.5	64.4	64.5
<b>Orcutt Rd/</b>	N of Clark	64.5	64.5	64.2	64.2
	S of Clark	62.4	62.4	63.1	63.1
	N of Rice Ranch	62.1	62.1	62.8	62.8
	S of Rice Ranch	62.0	62.0	62.1	62.1
<b>Clark Ave/</b>	W of Rice Ranch	63.2	63.2	65.9	65.9
	E of Rice Ranch	64.4	64.4	65.1	65.1
	W of SR-135 SB Ramps	68.6	68.8	68.9	69.1
	SR-135 SB - SR-135 NB	69.5	69.7	69.4	69.5
	SR-135 NB-Orcutt	70.7	70.7	71.0	71.0
	E of Orcutt	70.9	70.9	71.4	71.4

**Table 4.8-3**  
**Traffic Noise Impact Analysis**  
**(dBA CNEL at 50 feet from centerline)**

Segment		Project Increase Above Existing	Project Increment at Build-Out	Cumulative <sup>a</sup>
<b>Rice Ranch Rd/</b>	N of Clark	0.0	0.0	2.0
	S of Clark	0.0	0.0	2.3
	N of Orcutt	0.1	0.1	1.3
	S of Orcutt	0.0	0.0	1.0
<b>Orcutt Rd/</b>	N of Clark	0.0	0.0	-0.3
	S of Clark	0.0	0.0	0.7
	N of Rice Ranch	0.0	0.0	0.7
	S of Rice Ranch	0.0	0.0	0.1
<b>Clark Ave/</b>	W of Rice Ranch	0.1	0.0	2.7
	E of Rice Ranch	0.0	0.0	0.8
	W of SR-135 SB Ramps	0.2	0.2	0.5
	SR-135 SB - SR-135 NB	0.1	0.1	0.0
	SR-135 NB-Orcutt	0.1	0.0	0.3
	E of Orcutt	0.1	0.0	0.5

<sup>a</sup> Build-out w/project compared to existing.



### *Noise Impacts on Proposed Uses*

Noise sources that could negatively impact the proposed senior residential dwellings include noise from adjacent roadways and from the adjacent bus storage/maintenance yard. Each of these is assessed below.

#### Roadway Noise

Impact Number	Related OCP EIR Impact	Impact Description	Significance Before Mitigation
N/A	N/A	<b>Development of the site may expose residents to noise generated by vehicular traffic on surrounding roadways.</b>	<b>Less Than Significant</b>

The most significant roadway surrounding the site is Rice Ranch Road. As shown in Table 4.8-1, existing traffic noise on Rice Ranch Road adjacent to the project site is approximately 61-62 dB CNEL at 50 feet from the centerline. At build-out, and with the proposed project, noise levels are expected to increase to just over 63 dB CNEL. The project boundary is 50 feet from the Rice Ranch Road centerline. Therefore, noise levels within the site meet the exterior standard of 65 dB CNEL.

An interior CNEL of 45 dB is mandated for residential dwellings. Typical noise attenuation with closed, double-paned windows in modern frame and stucco construction is about 25-30 dB. Double-paned windows are a standard requirement for new residential construction in California. With less than a 65 dB CNEL noise loading and with standard dual-paned windows, interior noise levels can be maintained at 45 dB CNEL or less as required by the building code as well as OCP Development Standard NSE-0-1.2. No enhanced structural features would be required for the proposed residences. However, it is noted that supplemental ventilation, in conjunction with air conditioning, is required in any livable space where window closure to shut out roadway noise is needed to meet interior standards.

Based on the existing noise environment and construction requirements set forth in the building code and in the OCP, exterior and interior noise levels at the proposed residences are expected to meet the 65 dB and 45 dB noise standards, respectively. Therefore, noise impacts on the proposed project would be less than significant.

#### *Mitigation Measures*

Mitigation measures are not required.

#### *Residual Impacts*

On-site noise impacts associated with traffic-generated noise would be less than significant before mitigation (**Class III**).

Noise from Adjacent OUSD Facility

Impact Number	Related OCP EIR Impact	Impact Description	Significance Before Mitigation
NSE 1	N/A	<b>Development of the site may result in a noise nuisance impact related to the introduction of residential uses in proximity to a bus maintenance/storage yard.</b>	<b>Potentially Significant</b>

N/A - Not applicable, impact numbers are not assigned to less than significant impacts.

The southern portion of the project site is bordered on the east by an OUSD school bus maintenance/storage yard. Typical noises that may be generated by these land uses are associated with bus operations, alarm systems, maintenance activities, and truck deliveries. There are no numeric thresholds by which to characterize the potential significance of intermittent “single-event” noise associated with maintenance activity noise. The County Code prohibits “loud and unreasonable” noise, but that definition is subjective.

Complaints about bus storage and maintenance facilities generally do not center on any violations of numerical standards, but rather that site noise generation is a perceived nuisance because of time, character, or other noise parameters. The main source of complaints is often single-event noise occurrences. Such single event noise might be generated by refuse trucks banging "dumpsters" before sunrise, loudspeakers paging drivers or other employees, late night or early morning tire change "air guns" when a flat is discovered, safety back-up alarms from equipment being readied for daily operation very early in the morning, or bus start-up and idling. Back-up alarms, which are required as a safety measure, generally do not cause average numerical noise standards to be exceeded because of their short-term nature. However, they are intended to produce a loud and frequent noise while a bus is backing up. Noise levels generated at the facility adjacent to the project site have not been measured. However, as an example, single event noise from air guns is typically 80 dB at 50 feet. They attenuate at a rate of 6 dB per distance doubling (74 dB at 100 feet, 68 dB at 200 feet, etc.).

Bus start-up and idling is one activity that would occur at a consistent time and on a regular basis. Most of the school buses are diesel vehicles. Diesel start-up and idle is typically 65 dB Leq at 50 feet (Noise-Con 2007, A Comparison of Green and Conventional Diesel Bus Noise Levels). Most of the bus activity occurs closest to Dyer Street, away from the proposed project site and at a distance of almost 250 feet. However, the project site abuts the bus yard and it is possible for noise to be generated at a closer location.

There are 13 school buses parked at the yard on a regular basis. It is assumed that each bus idles for 5 minutes during start-up in the morning as they ready for school route pick-up and in the afternoon as they ready for school route drop-offs. The buses begin operation between 6:00 and 6:30 AM. Noise generated during this time period is weighted heavily in the CNEL (average daily noise) calculation. A daily CNEL was calculated assuming there is a steady 65 dB noise level between 6-7 AM and between 2-3 PM. The resultant CNEL is almost 62 dB at 50 feet from the source, which less than the 65 dB CNEL significance level. In addition, as noted above school bus idling would likely occur at a distance greater than 50 feet from the closest residential structure.

Although bus maintenance and storage activities are not expected to cause any quantitative standards to be exceeded, noise sources associated with these activities have the potential to result in noise nuisance impacts given the nature, timing, and frequency of noise typically generated by these activities.

OCP Development Standard NSE-0-1.3 requires that development of the site incorporate design features to reduce noise affecting interior and exterior living spaces. It also requires that the developer retain a County-approved noise consultant to conduct a study determining the design and effectiveness of proposed noise reduction measures. Soundwalls shall only be used if alternative noise reduction measures are ineffective. If found necessary soundwalls shall be decorative masonry or wood walls planted with fast-growing vines and shrubs. (See above for full text of this development standard.) Implementation of this measure would assure that noise impacts would be addressed during project design. However, it is not clear as to whether this development standard was intended to apply to a noise nuisance impact such as the potential issue described above. Therefore, the project's potential noise nuisance impact related to the development of residential uses near a bus maintenance and storage facility is considered a potentially significant impact prior to mitigation.

#### *Mitigation Measures*

**Mitigation NSE 1-1:** The County shall amend the OCP to add a Key Site 17 development standard stating that: The noise study required by OCP DevStd NSE-0-1.3 shall address potential noise nuisance issues associated with the adjacent bus maintenance and storage yard. The study shall include measurements of noise levels generated at the bus yard and identify measures to minimize potential noise nuisance impacts to the extent feasible. Such measures may include requiring a site plan design that places less sensitive uses in locations closest to the bus maintenance and storage yard and places buildings housing sensitive uses in locations that would be removed from and/or shielded from the yard by intervening buildings; structural designs to achieve enhanced noise attenuation; and, if necessary, construction of a sound wall.

#### *Residual Impacts*

On-site noise impacts associated with the adjacent OUSD facility would be less than significant after mitigation (**Class II**).

### **4.8.4 Cumulative Impacts**

The cumulative noise impact analysis assesses whether or not noise generated by project-generated traffic in combination with traffic generated by other development and general growth in the area would cause a substantial increase in roadway noise. As shown in Table 4.8-2, above, cumulative noise increases would be less than 3 dB. Therefore, cumulative noise impacts would be less than significant.

## 4.9 PUBLIC SERVICES

### 4.9.1 Fire Protection

#### 4.9.1.1 Existing Conditions

##### *Existing Fire Protection Facilities and Staffing*

The Santa Barbara County Fire Department (SBCFD) provides fire protection services to the County, including the unincorporated community of Orcutt. SBCFD currently serves over 165,000 residents within approximately 1,441 square miles, from 15 fire stations throughout the County. Stations 21 and 22 provide fire protection and emergency response services to the Orcutt community and surrounding unincorporated Santa Maria Valley area, including an estimated population of 35,000<sup>1</sup> persons and 609,000 square feet of non-residential development. Stations 21 and 22 are staffed with a of total seven on-duty firefighters. A summary of the personnel and equipment at Stations 21 and 22 is provided in **Table 4.9.1-1**.

**Table 4.9.1-1**  
**Orcutt Fire Protection Services**

Station	Location	Personnel	Equipment
21	335 Union Avenue	<u>3 Per Shift</u> Captain Engineer Firefighter	1 Engine 1 Brush Engine 1 Reserve Engine
22	1596 Tiffany Park Court	<u>4 per shift</u> Captain Engineer Firefighter Firefighter/Paramedic	1 Engine 1 Brush Engine 1,500 Gallon Water Tender

Backup fire protection for this area is provided through automatic aid agreements with the Santa Maria City Fire Department. Under these agreements, City of Santa Maria firefighters provide services where they can more quickly reach an emergency within County jurisdiction. Similarly, County personnel will respond to an incident within City jurisdiction if the County personnel are more readily available. The closest City station that provides mutual aid to Orcutt is Station 3, located on Carmen Lane.

Both Station 21 and 22 are staffed with paramedics and can provide advanced life support for the Orcutt area. All firefighters serving Orcutt are trained as Emergency Medical Technicians (EMTs) for the delivery of basic life support. However, through a contract with the County, American Medical Response (AMR) provides the delivery of advanced life support paramedic service in the project area. Should the SBCFD respond more quickly and determine that transport to a hospital is not necessary, AMR services could be cancelled on a case-by-case basis. Historically, emergency medical treatment has made up the majority of calls that Stations 21 and 22 receive.

At the time the OCP EIR was certified (1995), a Volunteer Fire Department, located at 335 Union Avenue, provided fire protection services to Orcutt and County Station 21 was located further north

<sup>1</sup> Santa Barbara County Regional Growth Forecast 2005-2040, Santa Barbara County Association of Governments, August 2007.

within the Santa Maria Airport property. Since that time, County Station 21 has relocated into the 335 Union Avenue facility. The County had been considering locating a new station, Station 25, at the then Volunteer facility to improve services in the west and south areas of Orcutt to better meet the 5-minute response criteria. However, the facility is now Station 21, and no new stations have been established since the OCP was approved.

### ***Existing Service Levels***

#### Staffing

The National Fire Protection Association (NFPA) and the International City Managers Association (ICMA) recommend an ideal service ratio of one on-duty fire fighter per 2,000 population served. SBCFD utilizes a countywide service ratio maximum of one on-duty fire fighter per 4,000 population served.

At the time the OCP EIR was certified (1995), the Orcutt area had experienced a steadily increasing demand for fire protection service, and the level of service was slightly below the County standard of 1 fire fighter/4,000 residents. At that time, volunteer firefighter staff was available in addition to County firefighter staff, for a total of 9 firefighters on duty at any given time. Currently there are a total of seven firefighters on duty at any given time with additional volunteers available to augment staff. The current service ratio is estimated at one firefighter per 5,000 population (1/5,000) based on 7 firefighters on-duty and approximately 35,000 people in the service area.

#### Response Times

Response times include the time it takes for a unit to arrive at an emergency and set up the appropriate equipment. The SBCFD aims to achieve a five-minute response time. Emergency response time for fire protection service throughout the majority of the urban area is typically four to five minutes. Outside of the urban area, response time increases proportionately with distance and lack of accessibility. The Orcutt area is largely within a five-minute response time. The current Station 21 location is more centralized and can better serve the western and southern portions of Orcutt, as compared to its previous location near the airport. The project site is located three blocks south of Station 21 and is within the five-minute response time.

#### Access and Water Supply

As described in the OCP EIR, the Orcutt Planning area generally has adequate access for fire equipment. Difficulties are typically limited to Southeast Orcutt where there are many dead-end roads and cul-de-sacs, and in areas near Orcutt Creek, which presents a barrier to access, as only a few streets cross it. Golden State Water Company (formerly Cities Water Company) provides water used for firefighting purposes in the Orcutt area. The project area is served by existing water main infrastructure.

### ***High Fire Hazard Areas***

The OCP identifies High Fire Hazard areas, which are predominantly located in areas south of Clark Avenue, south of Highway 1, and east of Highway 101. Fire hazard severity is based principally on three factors: fuel loading, topography, and fire weather as these factors represent the potential for dangerous wildfire occurrences. Developments within a designated high fire hazard area are required to comply with fire resistant development standards outlined in the OCP. Areas of Orcutt that are already urbanized do not warrant the high fire designation. The project site is within an already urbanized area, described as the Urban Core Sub-Area, and is not within a designated High Fire Hazard area.

### ***OCP Development Standards***

The OCP contains the following fire protection development standard that would apply to the proposed project:

**DevStd FIRE-2.2:** The County shall require two routes of ingress and egress for development unless waived by the Fire Department.

Other development standards of the OCP are limited to High Fire Hazard Areas and foothills, and as such do not apply to the project site.

### ***Fire Code Requirements***

SBCFD and the California Fire Code require certain design standards in site planning, building design, and water plans. These include requirements that specify building materials, fire flow and pressure, and requirements for automatic sprinkler systems. Attainment of fire flow standards ensures that adequate flow and pressure exist with a maximum daily water demand also pulling from the system simultaneously. Site plan designs are reviewed for compliance with fire access standards, including width of roadways, setbacks between structures, and adequate areas for equipment to turn around.

### ***Fire Protection Mitigation Fee (County Santa Barbara Code Chapter 15 Article III)***

Per Ordinance 3632, the County adopted the Mitigation Fee Ordinance to collect mitigation fees for the funding of fire protection capital improvements, such as structures, fire apparatus, and equipment. Ordinance 4236 narrowed the scope of the mitigation fee to fund only a pro-rata share of the replacement costs of fire apparatus and equipment.

#### **4.9.1.2 Thresholds of Significance**

The County's Environmental Thresholds and Guidelines Manual does not include significance thresholds pertaining to fire hazards. The following significance threshold is based on CEQA Guidelines Appendix G.

The proposed project would result in a significant impact if it would cause service ratios to fall below acceptable levels (or to fall further below levels that are already unacceptable), cannot be accommodated within an acceptable response time, or would not meet any other performance objectives or fire protection standards necessary to provide adequate fire protection. The project would also result in a significant impact if it results in the need for, or provision of, new or physically altered facilities and the construction of these facilities would result in a substantial physical impact on the environment.

#### **4.9.1.3 Project Impacts and Mitigation Measures**

The proposed project would allow for the construction of 257 senior housing units on a vacant site within an urbanized area of Orcutt. The potential for impacts related to fire protection service are described below.



***Response Time***

Impact Number	Related OCP EIR Impact	Impact Description	Significance Before Mitigation
N/A	N/A	<b>Development at the site would be within a five-minute response time from the nearest fire station.</b>	<b>Less Than Significant</b>

N/A - Not applicable, impact numbers are not assigned to less than significant impacts.

The project site is within the five-minute response time of Station 21, which is located approximately three blocks north of the project site. Station 22 would provide secondary fire service as backup to Station 21. Station 22 is located approximately 3 miles west of the project site and would have an approximately a four- to six-minute response time to the project site. Given the proximity of Station 21 to the project site, potential impacts related to response time would be adverse, but less than significant.

**Mitigation Measures**

Mitigation measures are not required.

**Residual Impacts**

The project's impacts related to fire department response time would be less than significant before mitigation (**Class III**).

***Fire Protection Staffing***

Impact Number	Related OCP EIR Impact	Impact Description	Significance Before Mitigation
N/A	<b>FIRE 1, FIRE 4, KS17-FIRE-1</b>	<b>Development of the site would generate demand for fire protection staffing.</b>	<b>Less Than Significant</b>

As described above, the existing number of firefighters on-duty at any one time falls below the County's standard of one on-duty fire fighter per 4,000 population served. The project's additional population would incrementally decrease the firefighter ratio, causing it to fall further below the County fire protection standard and contributing to the need to increase firefighter-staffing levels. An increase of 385 residents would decrease the fire protection service ratio for the unincorporated Santa Maria Valley from one firefighter per 5,000 people to one firefighter per 5,055 people.

The OCP EIR identified the following impacts related to firefighter staffing levels:

- Impact FIRE-1: Inadequate number of Firefighters. At buildout, current substandard ratio of firefighters to residents served would increase from 1/1,400 to 1/1,600, resulting in potentially significant impacts to public health and safety due to fewer responding firefighters, potentially longer response times and the potential for conflicting calls without adequate back up.
- Impact KS17-FIRE-1: Reduction in level of fire protection services. The development of 135 units with approximately 400 residents would worsen the firefighter/resident ratio, causing it to fall further below County fire protection standards. This would be considered a potentially significant impact.

- **Impact FIRE-4: Fiscal Impacts to Fire District.** When combined with ongoing budget shortfalls, the inadequate revenue stream generated by new development would create potentially significant impacts to public health and safety as the Fire Protection District may have inadequate funding to hire new firefighters.

The development of 257 new senior units accommodating approximately 385 new residents at the site would contribute to the significant impacts previously identified in the OCP EIR and has the potential to exacerbate the previously identified impacts. The project would increase the number of units that could be built on the site and the associated population. Under its current zoning, the site can be developed with 77 single-family residential units, generating approximately 220 residents (2.87 residents per unit x 77 units). However, under the proposed project, 257 senior housing units would generate approximately 385 new residents (based on 1.5 people per unit). In addition, senior housing tends to be more labor intensive in the event of a fire involving evacuations and generally generates a higher call volume than other types of housing (Glenn Fidler, Captain SBCFD, July 15, 2010).

However, future development on Key Site 17 (and all other development under the OCP) would be required to pay the Orcutt Planning Area fire mitigation fees, which were adopted following approval of the OCP. These fees are collected to mitigate impacts to fire services by providing funding for additional firefighters and equipment. With the payment of the required fair share development fees, the project's potential environmental impacts to fire protection would be less than significant.

#### Mitigation Measures

Mitigation measures are not required.

#### Residual Impacts

The project's impacts on fire protection staffing would be less than significant before mitigation (**Class III**).

#### ***Compliance with Fire Department Requirements***

Impact Number	Related OCP EIR Impact	Impact Description	Significance Before Mitigation
N/A	N/A	<b>Development of the site would be subject to fire protection requirements pertaining to building materials, access, fire flow, etc.</b>	<b>Less Than Significant</b>

Access to the project site would be provided via Soares Avenue and/or Rice Ranch Road. These and other roads serving the project site are easily accessible by fire trucks. The area surrounding the site is developed and served by existing water supply lines. When a specific development plan for the project site is proposed, it will be reviewed for compliance with applicable SBCFD and Uniform Fire Code requirements for building design, materials, fire flow, access, etc. Given this required review and approval of project plans, potential impacts related to compliance with fire department requirements would be less than significant.

#### **4.9.1.4 Cumulative Impacts**

As identified in Section 3.0 Related Projects, there are current development proposals within the Orcutt area, which could increase demands on fire protection services in the immediate future. These proposals include 1,670 new residential units and 749,258 square feet of commercial area. The residential units

would generate approximately 4,776 new residents. The proposed project in combination with these related projects would result in significant cumulative impacts on fire protection services. However, given the required payment of fair share development fees, the project's contribution to cumulative impacts would be considered less than significant. While the need for a new station has been identified, SBCFD has not selected a specific site for the new fire station. The fire station would be subject to CEQA environmental analysis and any identified mitigation measures. A precise evaluation of environmental impacts would be speculative because the location of such a facility is unknown at this time.

## **4.9.2 Health Care and Emergency Medical Services**

### **4.9.2.1 Existing Conditions**

The Santa Barbara County Public Health Department's Emergency Medical Services Agency (SBCEMSA) coordinates emergency medical services in Santa Barbara County. This agency integrates police, fire, ambulance, and emergency departments, to provide care for victims of abrupt and serious injury or illness.

The project site is located in the County's Ambulance Service Area 1, which is served by American Medical Transport (AMR) ambulance service. Santa Barbara County Fire Station 21, located at 335 Union Ave, also provides a paramedic on duty at all times, and is 0.25 miles away from the project site. Upon receiving a 911 call for a medical emergency at the project site, both Fire Station 21 and an AMR ambulance would be dispatched to the scene.

If a patient within the Orcutt area requires hospital care, they are taken to the Marian Medical Center for treatment. Located at 1400 East Church Street in Santa Maria, the Marian Center is the nearest receiving hospital to the project site. Currently, the hospital facility has 167 beds and treats approximately 130,000 patients per year. The bed count will double with the completion of an expansion facility that is under construction and expected to open in 2011. The new expansion facility will include 188 new beds and a larger Emergency Room.<sup>2</sup>

### **4.9.2.2 Thresholds of Significance**

The County's Environmental Thresholds and Guidelines Manual does not include significance thresholds pertaining to healthcare and emergency medical services. The following significance threshold is based on CEQA Guidelines Appendix G.

The proposed project would result in a significant impact if it would cause service levels to fall below acceptable levels (or to fall further below levels that are already unacceptable), cannot be accommodated within an acceptable response time, or would not meet any other applicable performance objectives or standards. The project would also result in a significant impact if it results in the need for, or provision of, new or physically altered facilities and the construction of these facilities would result in a substantial physical impact on the environment.

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<sup>2</sup> Marian Medical Center webpages, <http://www.chwcareers.org/Facilities/Marian-Medical-Center/Careers/index.htm>, [http://www.marianmedicalcenter.org/Who\\_We\\_Are/193820](http://www.marianmedicalcenter.org/Who_We_Are/193820), accessed July 2010.

### 4.9.2.3 Project Impacts and Mitigation Measures

Impact Number	Related OCP EIR Impact	Impact Description	Significance Before Mitigation
N/A	N/A	<b>Development of the site would generate demand for health care and emergency medical services.</b>	<b>Less Than Significant</b>

The additional 385 residents generated by the project would add to the demand for AMR ambulance service and SBCFD paramedics. Furthermore, the additional residents would add to the demand for hospital and emergency medical services provided by the Marian Medical Center. The population of a senior housing project may require a higher demand for emergency medical services as the service needs for seniors is typically higher than that of the typical population. However, should the senior housing development include on-site nursing and/or medical care, this would help to offset the demand generated at the project site. In terms of response times, as discussed above in Section 4.9.1 Fire Protection, the project site is located within a five-minute response time from Fire Station 21, which is staffed with a paramedic at all times. AMR ambulances are dispatched from locations throughout the County. The proposed project is not expected to result in the need for new physical facilities to accommodate ambulance service demand generated at the project site. Furthermore, Marian Medical Center will complete its hospital expansion in 2011, which will double its current patient capacity will adequately accommodate increased demand generated at the project site.

Based on the above, the project impacts related to health care and emergency medical services would be less than significant.

#### Mitigation Measures

Mitigation measures are not required.

#### Residual Impacts

The project's impacts on healthcare or emergency medical services would be less than significant before mitigation (**Class III**).

### 4.9.2.4 Cumulative Impacts

The proposed project in combination with other currently planned projects in the area would increase the demands for healthcare and emergency medical services in the area. The Santa Barbara County Public Health Department oversees AMR ambulance and other emergency health care services within the County to ensure adequate service are being provided to County residents. It is anticipated that AMR, a private company, would increase its equipment and staffing to meet growing demand for its services. In addition the Marian Medical Center hospital expansion is planned to meet future demand expected through the year 2020. Therefore, significant cumulative impacts related to health care and emergency medical services are not expected.

### 4.9.3 Wastewater

At the time the OCP EIR was certified (1995), the project site was not within the Laguna County Sanitation District (LCSD), the wastewater system was operating at capacity, and the LCSD was constrained in expanding its service until the issue of high-salt effluent was resolved. These conditions

have changed since that time. The following describes current conditions and assesses the impacts of the proposed project based on these conditions.

### 4.9.3.1 Existing Conditions<sup>3</sup>

The proposed project site is within the LCSD service area. In 2005, all of Keysite 17, including the project site, was annexed into the Laguna County Sanitation District, County Service Area 5, per LAFCO Resolution 05-18.

The Laguna County Sanitation District (LCSD) operates a water reclamation plant that provides wastewater treatment for Orcutt and portions of the unincorporated southern Santa Maria Valley area. Due to topographic effects, the plant also accepts a limited amount of wastewater from the City of Santa Maria service area through a “Swap Agreement.” These services include collection of wastewater, wastewater treatment, and distribution of recycled water. Effluent is treated to disinfected tertiary levels and includes screening, primary clarification, biofiltration, secondary clarification, membrane filtration (including reverse osmosis for a portion of the flow), and ultraviolet irradiation. Treated effluent used in recycling is discharged for pasture, agricultural production, and industrial uses. All of the effluent is reused, rather than discharged to other bodies of water, such as creeks or the ocean. As such, capacity can be constrained by collection, treatment, storage, and discharge capacities within the wastewater treatment system.

The LCSD water reclamation plant has a rated treatment capacity of 3.7 mgd and is regulated by the Regional Water Quality Control Board (RWQCB) in San Luis Obispo under Waste Discharge Requirements and Master Reclamation Permit Order 01-042. The plant currently serves approximately 11,700 connections and processes approximately 2.0 million gallons per day (mgd) on average. Recently approved development projects in within the service area that have not yet been brought on-line will increase the flow to 2.2 mgd.

Wet season storage capacity is currently 300 million gallons. This will accommodate the flow of 2.2 mgd but needs to be increased slightly to accommodate currently proposed developments (including this project). LCSD currently has a capital project planned to expand the existing reservoir and is working with the US Fish & Wildlife Service on mitigation issues.

Discharge capacity is currently 2.4 mgd. LCSD is currently working on additional irrigation discharge projects that will increase discharge capacity to approximately 3.0 mgd in the next few years. Other irrigation projects are planned as needed.

LCSD’s collection system includes approximately 129 miles of pipelines distributed throughout the service area, one lift station, and one force main. The natural topography splits the flow of wastewater in the area between two trunk lines, the North (Airport) Trunkline and the South (Solomon Creek) Trunkline. The project site would be served by the South Trunkline. The existing average daily flow through the South Trunkline is 0.54 mgd.

The area’s water supply is considered fairly “hard” due to moderately high dissolved mineral content. As a result, many residents have installed regenerating softeners, which resulted in issues related to the level of Total Dissolved Solids (TDS) in wastewater effluent. The LCSD was under a regulatory requirement

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<sup>3</sup> The information provided in this section was obtained from the County of Santa Barbara Public Works Department website, [http://www.countyofsb.org/pwd/rrwmd/laguna\\_county\\_sanitation\\_district.htm](http://www.countyofsb.org/pwd/rrwmd/laguna_county_sanitation_district.htm), accessed June 15, 2010; Martin Wilder, District Manager, Laguna County Sanitation District, e-mail communication to Envicom, July 2, 2010; and LCSD Sewer Collection System Master Plan, Penfield and Smith, June 2009).

to meet Central Coast RWQCB Basin Plan objectives for salt parameters in its effluent per its permit waste discharge requirements. To achieve these treatment requirements, upgrades to the plant improved treatment from undisinfected secondary to disinfected tertiary using membrane filtration, reverse osmosis, and ultraviolet disinfection. To date, effluent limits for sodium and total dissolved solids are met. Levels for chloride are slightly above the limit but LCSD is working on measures to better bring this into compliance.

### ***OCP Development Standards***

The following OCP development standards pertaining to wastewater collection and treatment are applicable to the proposed project:

- DevStd WW-O-2.1:** Prior to the discretionary approval of new development, the developer shall identify all additional facilities required to adequately collect, convey, treat and dispose of the sewage effluent from the development.
- DevStd WW-O-2.2:** At the time of discretionary approval, the County shall condition recordation of the final map or issuance of LUPs on provision of an adequate “Can and Will Serve” letter from LCSD.
- DevStd WW-O-2.3:** A “Can and Will Serve Letter” from LCSD will be found adequate for recording of maps or issuance of land permits (including permits for development of preexisting lots) if the letter demonstrates:
- LCSD’s effluent, including the effluent from the proposed project will not exceed the discharge standards established by the Regional Water Quality Control Board;
  - Adequate disposal capabilities exist at the plant or through agreement with the City of Santa Maria (providing that treatment and disposal by the City does not further degrade the underlying groundwater quality) to serve the project(s); and
  - Existing or planned and funded transmission lines have available capacity to serve the project(s).

#### **4.9.3.2 Thresholds of Significance**

The following significance criterion is based on Appendix G of the CEQA Guidelines. The project would have a significant impact on sewer treatment if it would:

- Require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

#### **4.9.3.3 Project Impacts and Mitigation Measures**

##### ***Impact on Wastewater Treatment Capacity***

Impact Number	Related OCP EIR Impact	Impact Description	Significance Before Mitigation
N/A	N/A	<b>Development of the site would generate demand for wastewater treatment.</b>	<b>Less Than Significant</b>



Using a wastewater factor of approximately 90 gallons per person per day, the proposed project would generate approximately 34,695 gallons per day (gpd) of effluent (90 gpd x 257 units x 1.5 residents/unit). The existing LCSD treatment plant is operating at capacity in terms of wastewater storage. The additional demand generated by the proposed project would exceed this capacity, contributing to the need for expansion to the existing storage capacity. However, as described above, LCSD currently has a capital project planned to expand the existing reservoir and is working with the US Fish & Wildlife Service on mitigation issues. Thus, it is anticipated that sufficient capacity will be available to accommodate the proposed project.

Given the above, the proposed project's impacts related to wastewater treatment are expected to be less than significant.

#### Mitigation Measures

Mitigation measures are not required.

#### Residual Impacts

The project's impacts on wastewater treatment would be less than significant before mitigation (**Class III**).

#### ***Impacts Related to Wastewater Conveyance***

Impact Number	Related OCP EIR Impact	Impact Description	Significance Before Mitigation
N/A	N/A	<b>Development of the site would require wastewater conveyance lines.</b>	<b>Less Than Significant</b>

It is anticipated that proposed development on the project site would connect to the 12-inch sewer main extension constructed for the Stonegate development just west of the site. However, this sewer main extension is privately owned. Conveyance of the wastewater generated by the proposed project requires converting the sewer easement from private to public across the Stonegate property. Wastewater generated at the project site would be conveyed to the South Trunkline before being delivered to the treatment plant. According to the LCSD Sewer Collection System Master Plan (2009), no upgrades to the South Trunkline are required as a result of anticipated development on Key Site 17. The collection system capacity has been evaluated by LCSD and the sewer system has adequate capacity to accommodate the flow from the proposed project.<sup>4</sup> Therefore, sewer conveyance impacts would be less than significant.

#### Mitigation Measures

Mitigation measures are not required.

#### Residual Impacts

The project's impacts related to wastewater conveyance would be less than significant before mitigation (**Class III**).

<sup>4</sup> Martin Wilder, District Manager, Laguna County Sanitation District, e-mail communication to Envicom, July 2, 2010.

### 4.9.3.4 Cumulative Impacts

The proposed project in combination with currently proposed projects would increase flow to the LCSD treatment plant to approximately 2.6 mgd. Full buildout of development anticipated under the Orcutt Community Plan, would require the LCSD to expand their facilities to accommodate 4.5 mgd.<sup>5</sup> As described above, the treatment plant's current capacity is 3.7 mgd. In light of these projections, LCSD has commissioned CH2MHill to prepare a master plan to address future infrastructure and financial (user rates and developer impact fee structure) needs to accommodate this projected demand. The report is in draft form and will be used to derive LCSD's rate recommendations beginning fiscal year 2011-2012. The plan provides a series of projects and their costs on a schedule to address the future development needs. It is anticipated that implementation of this plan will address potential cumulative wastewater treatment impacts. Therefore, cumulative wastewater treatment impacts would be less than significant.

## 4.9.4 Water Supply

### 4.9.4.1 Existing Conditions

Golden State Water Company (formerly California Cities Water Company) is the retail water purveyor for the Orcutt area, including the project site. Golden State's primary source of water is groundwater from the Santa Maria Groundwater Basin. At the time the OCP was certified (1995), the Basin was in overdraft. A basin is in overdraft when the amount of groundwater extracted exceeds the safe yield for the basin. As a result of a lawsuit filed by the Santa Valley Water Conservation District in 1997 (Santa Maria Valley Water Conservation District vs. City of Santa Maria, et. al.), the Santa Maria Groundwater Basin was adjudicated (a final court decision was reached in 2008). An adjudication determines a water basin's safe yield and assigns water use rights.

According to its 2005 Urban Water Management Plan, Golden State currently has four sources of water: local groundwater from the Santa Maria Groundwater Basin, purchased water from the State Water Project (SWP) and the associated return flows that may be recaptured from the Basin, purchased or assigned rights to water from the City of Santa Maria, and a share of the yield of the Twitchell Reservoir operations that recharges the Basin. The 2005 UWMP for Golden State states that water supplies will be in excess of anticipated demands through 2030. However, as a result of the adjudication, all new development in Orcutt must provide "supplemental water" which comes from a source other than groundwater pumped from the Santa Maria Groundwater Basin. The only source of supplemental water at this time is the State Water Project (SWP). Presently, all of Golden State's imported SWP water is committed to other projects. However, the City of Santa Maria has excess SWP water and has agreed to sell to developers in GSWC's service area.<sup>6</sup>

According to the City of Santa Maria's 2005 Urban Water Management Plan, 13,706 AFY of the of the City's 49,710 AFY total water supply is purchased from the SWP. The 2005 UWMP for the City of Santa Maria projects that demand for the year 2010 will be 19,129 AFY, or approximately 39% of the available supplies. The usage estimates for 2030 increase to 24,780 AFY, which is approximately 50% of the City's total supply, leaving an available supply in excess of the projected demands through 2030.

<sup>5</sup> Martin Wilder, District Manager, Laguna County Sanitation District, e-mail communication to Envicom, July 2, 2010.

<sup>6</sup> Terry N. Maughmer, P.E., Operations Engineer, Golden State Water Company, email communications to Envicom, July 2010.

Potable water supply mains that could serve this project include an 8-inch water main in Rice Ranch Road that ends at approximately the southerly projection of Pacific Street, and an 8-inch water main in Soares Street between Dyer and First Street.<sup>7</sup>

### ***OCP Development Standards***

The OCP includes the following development standards pertaining to water supply that would be applicable to the proposed project:

**DevStd Wat-O-2.1:** Prior to discretionary action by any County decision-maker on new development, the applicant shall provide one of the following:

1. A “Can and Will Serve” letter from California Cities Water Company dated before July 1997;
2. An “Intent to Serve” letter from California Cities Water Company or other water purveyor(s) including draft contract(s), if any, demonstrating to the County’s satisfaction that the development’s net water demand will be offset by a long-term supplemental water supply and that the development will have a continuing right to obtain water equal to that of the water purveyor’s other customers. Contract(s), if any, must include terms consistent with the requirements of DevStd Wat-O-2.2.

**DevStd Wat-O-2.3:** Prior to map recordation or land use clearance, the developer must provide a Can and Will Serve letter and necessary final contract(s) consistent with the conditions of the discretionary permits and terms of the draft contract(s).

#### **4.9.4.2 Thresholds of Significance**

Based on the Santa Barbara County Environmental Thresholds and Guidelines Manual and Appendix G of the CEQA Guidelines the proposed project would result in a significant impact if:

- It would result in the over-commitment or overdraft of a groundwater basin or significantly increase the existing overdraft or over-commitment of a groundwater basin;
- There is not a sufficient long-term water supply to serve the project; or
- The project would require or result in the construction of new water facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

#### **4.9.4.3 Project Impacts and Mitigation Measures**

##### ***Water Supply***

Impact Number	Related OCP EIR Impact	Impact Description	Significance Before Mitigation
N/A	N/A	<b>Development of the site would generate demand for water.</b>	<b>Less Than Significant</b>

<sup>7</sup> Terry N. Maughmer, P.E. , Operations Engineer, Golden State Water Company, Email communications to Envicom, July 2010.

The project's water demand was estimated based on the water usage rates provided in the County of Santa Barbara Environmental Thresholds and Guidelines Manual (Table 8a, p. 106). A rate of 0.0737 AFY/person and 2 AFY for landscape areas was used. The estimate also assumes 3 acres of landscaped areas. The proposed project would generate a demand for 28.4 AFY for indoor usage (0.0737 AFY x 257 units x 1.5 persons/unit) and 6 AFY for outdoor usage (3 acres landscaped x 2 AFY) for a combined estimate of 32.4 AFY.

The impacts identified in the OCP EIR pertain to the overdraft of the Santa Maria Groundwater Basin. As described above, this basin has since been adjudicated. This assures protection of the Basin from overdraft. The proposed project will, however, be required to secure water from the Golden State Water Company and/or City of Santa Maria.

The OCP includes development standards (DevStd Wat-O-2.1 and Wat-O-2.2, listed above) that require an applicant for a new development to demonstrate an adequate water supply for the project that will not contribute to long-term overdraft of the Santa Maria Basin. Development Standard Wat-O-2.1 will require the applicant to obtain an "Intent to Serve" letter from Golden State Water Company including draft contract(s), if any, demonstrating to the County's satisfaction that the development's net water demand will be offset by a long-term supplemental water supply and that the development will have a continuing right to obtain water equal to that of the water purveyor's other customers. Development Standard Wat-O-2.2 will require that, prior to map recordation or land use clearance, the applicant must provide a Can and Will Serve letter and necessary final contract(s) consistent with the conditions of the discretionary permits and terms of the draft contract(s). Given these requirements, the proposed project's impacts related to assuring an adequate water supply would be less than significant.

### Mitigation Measures

Mitigation measures are not required. However, the following measure, which was also included in the OCP EIR (as Mitigation WAT-4), is recommended to assure that future development at the project site incorporates water conservation measures to the extent feasible.

**WAT-1** The County shall amend the OCP to add a Key Site 17 development standard stating that: The maximum feasible water conservation measures shall be included in development of the site. Landscaping shall consist of drought-tolerant native and/or Mediterranean type species.

### Residual Impacts

The project's water supply impacts would be less than significant before mitigation (**Class III**).

#### **4.9.4.4 Cumulative Impacts**

The proposed project in combination with other development projects within the Golden State Water Company service area would increase demand for water supplied by Golden State. As discussed above, due to the Santa Maria Groundwater Basin adjudication, all water for new development must come from supplemental (non-groundwater) water sources. The adjudication limits and allocates use of water from the Basin, protecting it from overdraft. In addition, OCP development standards DevStd Wat-O-2.1 and Wat-O-2.2) that require an applicant for a new development to demonstrate an adequate water supply for the project that will not contribute to long-term overdraft of the Santa Maria Basin. Therefore, significant cumulative impacts related to groundwater depletion and water supply are not anticipated.

## 4.10 RECREATION

### 4.10.1 Existing Conditions

#### Existing Public Parks

##### *Orcutt Community Plan Area*

The OCP area has approximately 189 acres of public parkland, with approximately 82 percent located at the northern end in Waller Park, which serves as a regional park for the Santa Maria Valley. Existing public parks and open space in Orcutt are listed below in **Table 4.10.1-1** and mapped on **Figure 4.10-1**.

**Table 4.10.1-1**  
**Existing Orcutt Public Parks and Open Space**

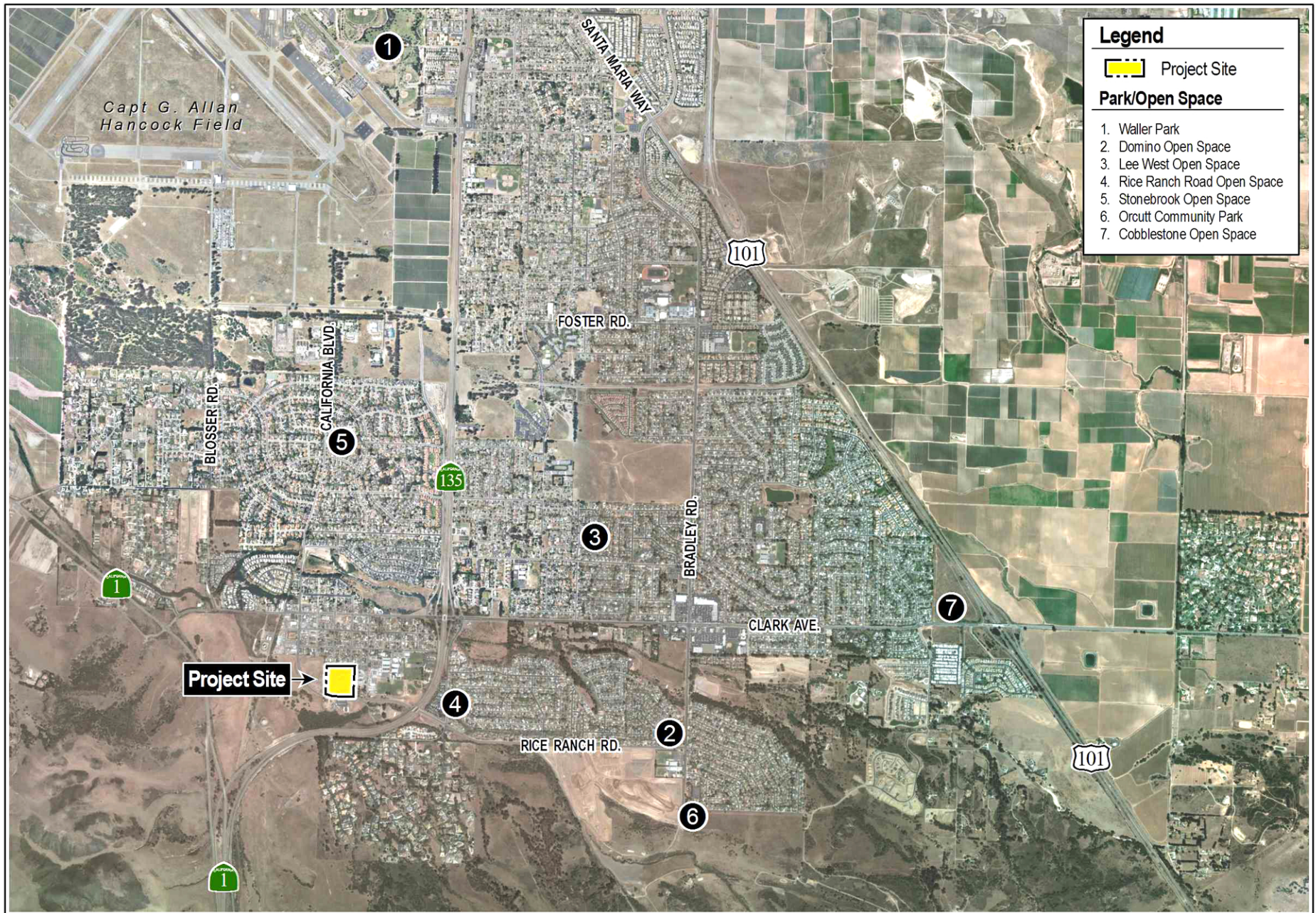
<b>Park/Open Space</b>	<b>Size (acres)</b>	<b>Facilities</b>
Waller Park	154.4	Regional Park consisting of 2 ponds, 153 acres of lawn, picnic areas, playgrounds, basketball and volleyball courts, Frisbee disc golf course, biking and hiking trails.
Domino Open Space	1.1	Grass area, concrete path, playground.
Lee West Open Space	1.7	Lawn area, playground, ball backstop.
Rice Ranch Road Open Space	0.8	Lawn area, concrete ramp.
Stonebrook Open Space	3.0	Lawn area, playground, volleyball court, ball backstop
Orcutt Community Park	26	Baseball and soccer fields, passive play area, playground, off-leash dog parks and picnic areas, open space with trails.
Cobblestone Open Space	2.0	Lawn area, playground.
Source: County Santa Barbara, Parks Department, June 20, 2010 <a href="http://www.countyofsb.org/parks">http://www.countyofsb.org/parks</a> .		

Parks listed above, encompassing a combined area of approximately 189 acres, are considered generally accessible to the overall community. Neighborhood parks are not readily accessible in many cases to the general community at large. Orcutt also contains numerous private neighborhood parks, which tend to be distributed disproportionately within the newer neighborhoods. Other recreation opportunities in the community consist of equestrian facilities (e.g. Vic Diamond Stables, Fletcher Farms, etc.); informal hiking/equestrian trails, and off-road bike paths with connections to Orcutt Creek and the Solomon Hills in South Orcutt; public schools that offer formal and informal recreational activities; and Country Clubs, such as the Lake Marie Valley Club.

Orcutt currently has a deficiency in recreational facilities. Deficiencies include an overall lack of developed parkland and dedicated trails, shortages of certain types of specialized facilities, poor distribution of parks, a lack of organized recreation programs, and a lack of neighborhood parks. Public schools also play an important role as recreational facilities in the community. However, these facilities are not as accessible to the public as parks, due to the fact that they may only be used during nonschool hours and in the summer. The majority of Orcutt's active recreational facilities are located on public school grounds.

The OCP EIR provides an inventory of the recreation facilities within the Orcutt community to serve its existing population. Excluding consideration of recreation opportunities at schools, the OCP EIR finds that there are current deficits for each activity analyzed (e.g. baseball, basketball, volleyball, soccer,





Source: Aerial Photography, August 2008.

ORCUTT UNION SCHOOL DISTRICT KEY SITE 17 PROJECT

# Orcutt Community Public Parks and Recreation

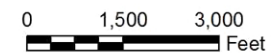


FIGURE 4.10-1



tennis, pools, recreation centers). The analysis was based on national standards and city average demands of specific types of uses.

### ***Central Urban Core***

The project site is within the OCP Central Urban Core “sub-area” which encompasses the area south of the City of Santa Maria, including Old Town Orcutt. The project site is along the inside of the southerly boundary of Old Town Orcutt. Central Urban Core sub-area recreational opportunities are limited to Waller Park, which is a regional park, and Stonebrook and Lee West Open Space, which are both neighborhood parks (see Table 4.10.1-1 for descriptions). The Central Urban Core also contains informal recreation in the form of trails on undeveloped private properties within the Orcutt open space corridor, including Key Sites 23, 26, 27, and 30, and the southern portion of the airport.

Other recreational opportunities are provided at the Santa Maria Valley YMCA, Righetti High School, and the Orcutt Recreation Center. The YMCA provides a public pool, handball courts, eight rooms, aerobics, and therapeutic activities, which are available to members and guests only. Righetti High School contains a pool available to the community when not in use by the school. The Orcutt Recreation Center is operated by Your Orcutt Youth Organization and is available to community groups for barbecues and indoor events.

### ***Old Town Orcutt***

Park, open space, and recreational opportunities are also not well dispersed throughout the community. According to the OCP EIR (Volume II), there are no parks within Old Town Orcutt. A large portion of Orcutt's developed park and recreational space is located within Waller Park at the far northern end of the community, leaving most of the community without locally accessible facilities. Waller Park provides regional recreation and is not considered to meet the needs of Orcutt's neighborhood growth. Most neighborhoods in Orcutt have no local public parks. Because the Parks Department's mission is the provision and maintenance of facilities rather than active recreation programs, and due to a lack of funding, the County Park Department currently provides no recreational activities in the community. Residents must rely upon locally organized City of Santa Maria programs and private organizations. Most recently, the Orcutt Community Park was opened in March 2009, bringing approximately 26 acres of parkland and recreational opportunities to the community and helping to balance the dispersal of parkland. However, this park was developed as part of the Rice Ranch 580-acre Master Planned Community, which also added new residents and demand on local park and recreational facilities.

An approximately 0.5-acre park was recently constructed within Key Site 17 as part of the Stonegate residential development. This park fronts along Soares Avenue and includes a children's playground.

### **Existing Trails**

There are no dedicated public hiking/equestrian trails or off-road bikepaths in Orcutt with the exception of a portion of the Orcutt Creek bikeway and recreational trail. However, there are unofficial hiking/equestrian trails, and off-road bikepaths available throughout the community. Although an extensive network of “unofficial” trails exists in the community's undeveloped areas, urbanization has substantially diminished the extent of this unofficial network (e.g., “Mud Lake” at the east end of Bradley Road). The trail system remains extensive in northern Orcutt and the Airport Approach Zone and in the south along Orcutt Creek and the Solomon Hills. These informal trails provide a substantial recreational outlet for the general public.

## OCP Proposed Parks and Trails, and Applicable Development Standards

The OCP identifies a deficiency in parkland and recreational opportunities in the community and identifies proposed park locations along with policies, action items, and development standards to address this deficiency.

In order to meet future growth of the community under the OCP, several major public recreation parks are proposed, including: Union Valley Park (41.26 acres), Orcutt Creek Park (11.09 acres) and Oak Knolls Park (11.3 acres). In addition, the OCP proposed new neighborhood parks such as Foxenwood Drive (1.42 acres), Terrazo Way (4.44 acres), Shilo Court (3.18 acres), and Orcutt Canyon Ridge (10.46 acres).

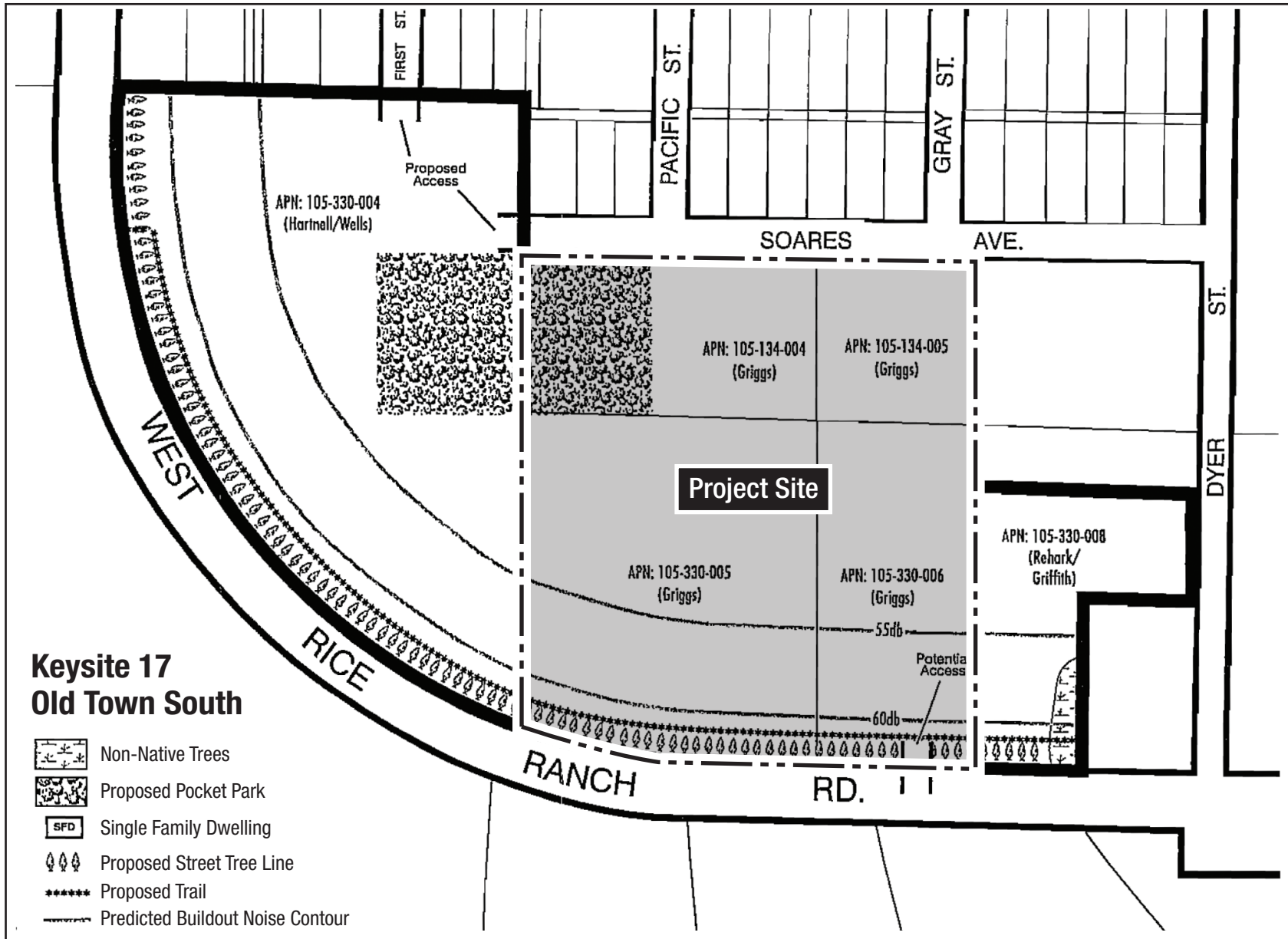
The OCP identifies a proposed neighborhood park within Key Site 17, as shown in the OCP Parks, Recreation and Trails map (OCP Figure 14) and Figure KS17-1, which is reproduced herein as **Figure 4.10-2**. These figures also identify a proposed multi-use trail along the southern perimeter of Key Site 17, parallel to Rice Ranch Road. The trail would provide a link between Old Town Orcutt and the southern foothill trails.

Applicable OCP development standards are as follows:

- DevStd PRT-O-1:** To the maximum extent feasible and consistent with applicable law, development on sites with identified proposed public parks shall dedicate and, where appropriate, construct such facilities.
- DevStd PRT-O-2.1:** Except for active recreation areas and other essential lawn space, park landscaping should consist of drought tolerant species. Appropriate native plants shall be utilized along park boundaries adjacent to passive undeveloped open space areas.
- DevStd PRT-O-4.2:** Development shall comply with the Trail Siting Guidelines as set forth in the Orcutt Multiple Use Trails Plan.
- DevStd PRT-O-4.3:** Development on sites with identified trail corridors (PRT-6 map) shall include, where appropriate, the construction and assurance of the fitness of designated trails for two years, at which time the County Park Department would assume maintenance responsibility. Where immediate construction is not required, a construction bond shall be required.

Volume II of the OCP EIR states that Key Site 17 is an excellent location for a neighborhood park to serve existing residents of Old Town, future residents of development on Key Site 17 and would help to preserve the scenic view corridor that exists across Key Site 17. Specific to Key Site 17, OCP DevStd KS17-3 states:

*Any discretionary development shall provide for the dedication and construction of a 1-2 acre public neighborhood park fronting along the western portion of Soares Avenue as conceptually depicted on Figure KS17-2. Parcels 105-330-004 and 105-134-004 shall each contribute at least  $\frac{3}{4}$  of an acre to this park and the park shall be a minimum of 100 feet wide where it fronts Soares Avenue.*



Source: Orcutt Community Plan, amended 2004.



As noted above, Figure 4.10-2 provides the conceptual location of the park area as depicted in the OCP Figure KS17-2. The intention of this development standard is to provide the opportunity for complementary recreational uses provided by each development to provide a viable neighborhood park in this location for Old Town as well as future residents.

In accordance with DevStd KS17-3, the adjacent Stonegate residential development, including Parcel No.105-330-004, included construction of an approximately 0.5-acre park along approximately 150 feet fronting on Soares Avenue as well as a multi-use trail along its Rice Ranch Road boundary. The remaining park requirement (0.75 acre) is to be provided on Parcel 105-134-004, which is owned by the Orcutt Union School District and is within the proposed project site.

### County Parks Department Fee Structure

The County of Santa Barbara Parks Department assesses a Quimby fee (per the Quimby Act, California Government Code § 66477) requiring developers to set aside land, donate conservation easements, or pay for park improvement fees. Ordinance 3339/3656 (“The Quimby Ordinance”) of the Santa Barbara County Code provides for the dedication of parkland and the collection of fees to create new park land to accommodate increased demands generated from new subdivisions. Government Code Section 66477 allows the County to require any subdivision creating over 50 or more new units to dedicate land for park services. Any new subdivision would be required to pay the fee in effect at the time of approval, which would be an amount per each new residential unit. Since the project is not a single-family residential subdivision, the Quimby fee would not apply.

Future development of the project site under the rezone, would be required to pay a Park Development Mitigation Fee. Park Development Mitigation Fees are collected for multi-family developments per County Ordinance 3339/3656.

### 4.10.2 Thresholds of Significance

The County’s Environmental Thresholds and Guidelines Manual does not provide a significance threshold for park and recreation impacts. However, the Board of Supervisors has established a minimum standard ratio of 4.7 acres of recreation/open space per 1,000 people to meet the needs of a community (per the adopted County Recreation Element). (Note that the demand created by persons living outside of the County is not included in this figure.)

In accordance with CEQA Guidelines Appendix G, the proposed project would result in a significant impact if it would:

- (a) 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; or
- (b) include recreational facilities or requires the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

The project’s potential to reduce the ratio of parkland to population to below the County’s standard of 4.7 acres of parkland per 1,000 residents, or to reduce an existing ratio that is already below this standard, is used in assessing the project’s impacts under thresholds (a).

With regard to threshold (b), future development of the project site would include the construction of on-site recreational facilities; however, this component is assessed as part of the project throughout the impact analyses in this document.

The proposed project is also assessed below in terms of its consistency with DevStd KS17-3, provisions for an on-site recreational facility. For this analysis, in accordance with CEQA Guidelines Appendix G, the proposed project would result in a significant impact if it would 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.

### 4.10.3 Project Impacts and Mitigation Measures

#### Demand for Recreational Facilities

Impact Number	Related OCP EIR Impact	Impact Description	Significance Before Mitigation
REC 1	REC-1, REC-2, REC-4	Development of the site would increase the demand for recreational facilities in Orcutt.	Less than Significant

Based on an average occupancy of 1.5 persons per unit, a 257-unit senior care facility would generate an estimated 385 residents. Using the County standard of 4.7 acres of parkland per 1,000 residents, the project's 385 residents would generate a need for approximately 1.81 acres of parkland. While the proposed project would construct a 0.75-acre park within the project site, per DevStd KS17-3, there would remain a deficit of approximately 1.06 acres of parkland to service the increased demand. There is no proposal to construct a park at this time, however, development impact mitigation fees would be assessed on any new residential development, and these fees would be used to develop new parklands elsewhere in the Orcutt area. With payment of these fees, the project's impact on parks and recreational facilities is considered less than significant.

The OCP EIR identified significant impacts on the community's parks, recreational facilities, and trails network associated with buildout under the OCP. It identified a deficiency of parks, recreational facilities, and publicly designated trails and estimated the need for an additional 85 acres of parkland space at build-out of the OCP. While some new parkland has been created since the OCP was approved (e.g. 26-acre Orcutt Community Park), there still remains the need to provide additional parkland to meet the 85 acres of total demand generated under the OCP.

The impacts identified in the OCP EIR that are applicable to the proposed project are:

Impact REC-1: Intensification of Use in Existing Recreational Facilities. Increased population associated with buildout of the community plan could result in *significant and unavoidable* recreational impacts to the existing recreational facilities in the community through overuse and increased overcrowding, leading to unavailability of facilities to existing and future residents.

Impact REC-2: Increased Demand for Recreational Facilities. The increased population associated with buildout of the community plan would worsen the existing recreational facility deficit in the community and cause a substantial increase in demand for parks, hiking trails, bike paths, and active recreational facilities of all types resulting in a *potentially significant impact* to the public welfare and a lack of recreational opportunities for youth.

Impact REC-4: Increased Demand for Neighborhood Parks. Buildout of the community plan would reduce the amount of undeveloped open space in the urban area while substantially increasing the

population in neighborhoods with no established or proposed neighborhood parks, resulting in *potentially significant* recreational impacts to the community.

The proposed project would increase the density of residential development permitted at the project site as compared to the OCP. Under the site's existing general plan land use designation, approximately 77 single-family homes could be built; with an estimated household size of 2.87 people, a total population of 221 would be generated. This would increase the population generated at the site by 164 residents, as compared to the population that would be generated under the existing OCP (18,000 new residents at buildout of the OCP). Based on the County standard of 4.7 acres of parkland per 1,000 residents, the additional project population associated with the proposed project as compared to the population generated by development under the existing OCP (164) would increase the OCP's projected need for 85 acres by 0.77 acres.

The proposed project would also change the type of residential units to be developed at the site (senior housing rather than single-family housing). An increase in the number of residents at the site would increase the demand for recreational facilities generated at the site; however the introduction of senior housing may result in the need for different types of recreational facilities (e.g., a less intensive need for active recreational facilities.)

### ***Mitigation Measures***

Mitigation measures are not required.

### ***Residual Impacts***

The proposed project's impacts on parks and recreational facilities would be less than significant without mitigation (**Class III**).

### **Proposed Revisions to Development Standard KS 17-3**

Impact Number	Related OCP EIR Impact	Impact Description	Significance Before Mitigation
<b>REC 2</b>	<b>REC-4</b>	<b>The proposed revisions to DevStd KS 17-3 would alter the on-site park requirement.</b>	<b>Significant</b>

The proposed project would change DevStd KS 17-3 to eliminate the provisions for a contiguous park along Soares Avenue. Under the proposed project, there would be greater flexibility in where the required 0.75-acre park could be provided within the project site; i.e., the park would not be limited to Parcel No. 105-134-004 or along the Soares Avenue frontage. The proposed project would allow the 0.75-acre parkland to be constructed anywhere on the project site, which could result in two separate smaller parks (0.5 acre on the adjacent Stonegate property and 0.75-acre within the project site), as opposed to one contiguous park.

The OCP EIR notes that regional recreation areas are not a substitute for the periodic and/or daily short-term recreational uses provided by neighborhood facilities. Public neighborhood parks and open spaces are increasingly important as undeveloped open spaces within the community are converted to residential and commercial uses. Private parks, while useful in meeting the recreational needs of certain residents, cannot be depended on to provide for the general public.



Development of two smaller parks would not meet the intentions of DevStd KS 17-3 for two main reasons. First, the intent of DevStd KS 17-3 is to create a 1-2 acre contiguous neighborhood park to serve the Old Town area and to provide complementary recreational uses. Under the proposed project, the additional 0.75-acre park could be located anywhere within the project site. Should the park be located further south (i.e. not along Soares Avenue) and behind future senior living structures or along Rice Ranch Road, it would be less accessible from the Old Town area. If the park is not readily visible or directly accessible from a public street, it may not appear to be available to the public. According to discussions County Planning staff has had with County Parks Department staff, the development of two smaller park areas would not provide the same community benefit of one large contiguous neighborhood park (personal Communication, County Parks - Claude Gaciacelay, December 2009).

Secondly, two smaller individual parks would not meet the intentions of DevStd KS 17-3, in terms of the identified needs for future recreation opportunities within the Orcutt area. Although the development of a senior housing project may change the type of recreational facilities demanded by the population at the project site, the neighborhood park was intended to meet the general needs of the Old Town community. County Parks Department staff believes that the development of two smaller park areas on Key Site 17 would lessen the opportunity for viable recreational facilities to be developed in this portion of Orcutt (personal communication between County Planning and County Parks - Claude Gaciacelay, December 2009). Smaller parks would offer less opportunity to provide complementary recreation uses such as open play fields or group picnic facilities, which require larger contiguous spaces to be viable.

Given the above, the proposed revisions to DevStd KS 17-3 would result in a significant impact on to the County's plan for providing neighborhood parkland in the Old Town Orcutt area.

### ***Mitigation Measures***

No mitigation measures are available.

### ***Residual Impacts***

The proposed revision to DevStd KS17-3 would result in a significant unavoidable impact (**Class I**). Section 6.0 of this EIR (see Alternative 2) assesses an alternative that would maintain the requirement to create a public park along Soares Avenue within the project site.

## **4.10.4 Cumulative Impacts**

According to the OCP EIR, increased urbanization in the region is expected to lead to development of approximately 20,000 new homes and a projected 5,000,000 to 10,000,000 square feet of commercial and/or industrial space on 6,000 to 7,000 acres of existing undeveloped or agriculturally- productive open space. This anticipated urbanization is expected to occur within large "infill" sites throughout the community, as well as large tracts of undeveloped open spaces along the community's "urban perimeters." This regional growth in Orcutt, the City of Santa Maria, and at the Santa Maria Airport, would lead to a substantial increase in demand for recreational facilities to meet the daily needs of urban residents, which cannot be provided through regional recreational opportunities.

Development of Key Site 17 is a component of this cumulative impact. The proposed project's population increase would slightly increase the OCP's contribution to this cumulative impact. However, the required payment of fees would reduce the project's contribution to this impact to a less than significant level.

## 4.11 TRAFFIC AND CIRCULATION

Traffic and circulation impacts were evaluated as part of the Orcutt Community Plan (OCP) EIR for the Orcutt Community Plan Area as a whole and for Key Site 17 (OCP EIR Section 5.9 and Volume II Key Site 17 analysis). To assess traffic and circulation impacts associated with potential development anticipated under the currently proposed project and in light of current conditions, a new traffic and circulation study was conducted for this EIR by Associated Transportation Engineers (ATE) (June 21, 2010). This section is based on that study. A full copy of the traffic study is provided in Appendix F.

### 4.11.1 EXISTING CONDITIONS

#### Street Network

The project site is served by a network of arterial and collector streets, as illustrated in **Figure 4.11-1**. The following text provides a brief discussion of the major components of the study-area street network.

State Route 135 (SR 135), located east of the project site, is a north-south arterial that extends as a four-lane freeway from Route 1 south of Orcutt to the Foster Road intersection; and as four- to six-lane arterial from Foster Road to U.S. Highway 101 near the north end of the City of Santa Maria. This state highway serves as the primary north-south route through the Orcutt-Santa Maria area. The roadway is named the "Orcutt Expressway" in the Orcutt area and "Broadway" in the City of Santa Maria. Regional access to the project site is provided via a full-access diamond interchange at SR 135/Clark Avenue.

Clark Avenue, located north of the project site, is an east-west arterial road that extends from U.S. 101 on the east to SR 1 on the west in Orcutt. The roadway is a four-lane arterial east of SR 135 and narrows to a two-lane arterial west of SR 135. The segment within the Old Town Orcutt area contains two travel lanes (one in each direction) with on-street angled parking.

Rice Ranch Road, located along the project site's southern frontage, is a two-lane roadway that extends east of Orcutt Road as East Rice Ranch Road and west of Orcutt Road as West Rice Ranch Road. West Rice Ranch Road turns northerly just west of the project site, where it continues as Broadway Street into the Old Town Orcutt area.

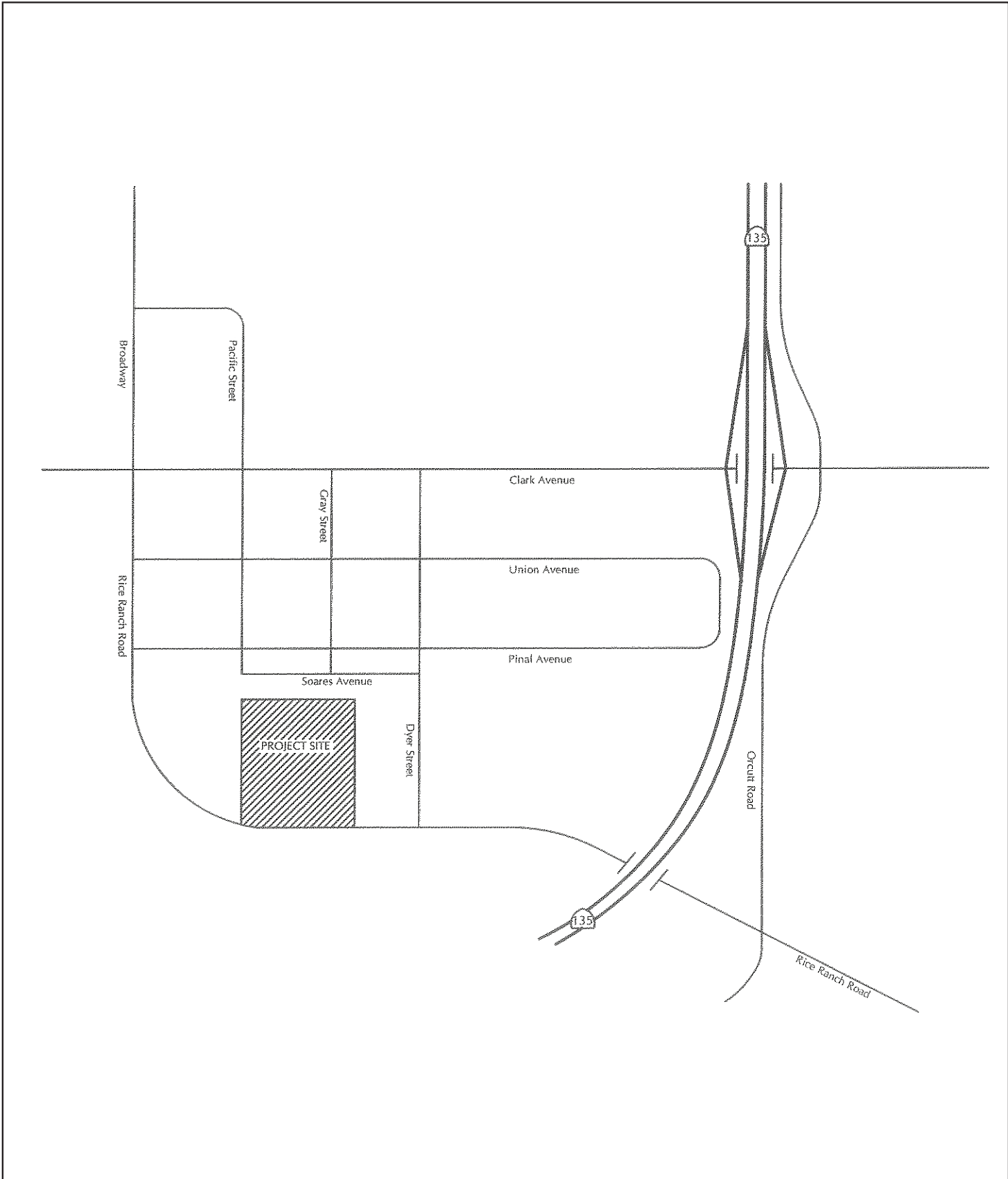
Broadway Street is a two-lane roadway that extends from just south of Clark Avenue to Foster Road on the north. The northern segment of this roadway is named California Boulevard.

Orcutt Road is a two-lane frontage road that parallels the east side of SR 135 from Rice Ranch Road on the south to Goodwin Road on the north.

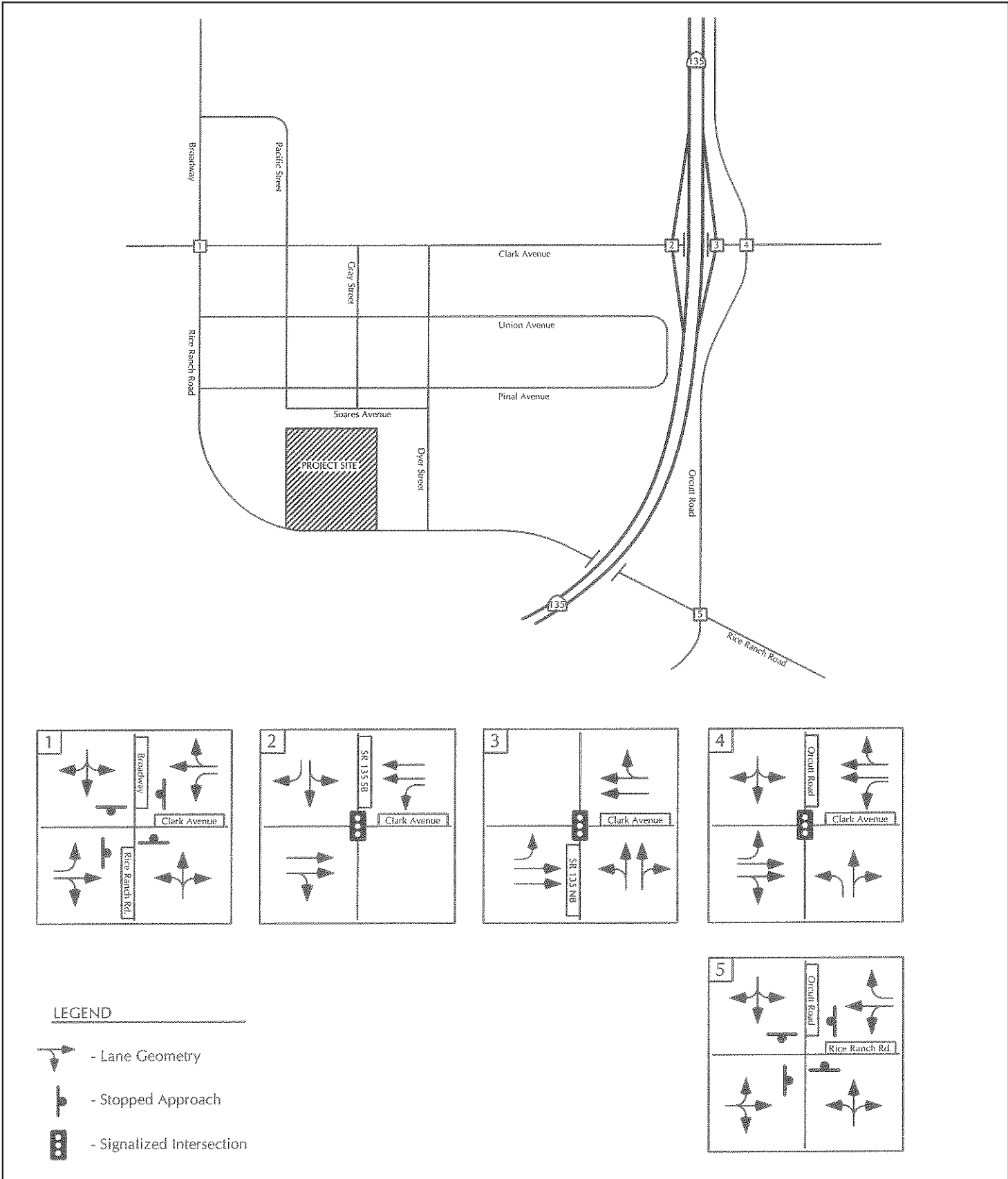
#### Intersection Operations

Because traffic flow on urban arterials is most constrained at intersections, detailed traffic flow analyses focus on the operating conditions of critical intersections during peak travel periods. "Levels of Service" (LOS) A through F are used to rate intersection operations, with LOS A indicating very good operation and LOS F indicating poor operation (more complete definitions are contained in the Technical Appendix for reference). The County of Santa Barbara considers LOS C acceptable for intersections operations.

**Figure 4.11-2** presents the study-area intersections and illustrates the existing lane geometries and traffic controls. Existing P.M. peak hour traffic volumes for the study-area intersections were obtained from traffic counts conducted in May 2010 for this study and from count data contained in the Old Town



Source: Associated Transportation Engineers, June 21, 2010.



Source: Associated Transportation Engineers, June 21, 2010.

Orcutt Traffic, Circulation, and Parking Study<sup>1</sup> (traffic count data is contained in the Technical Appendix for reference). **Figure 4.11-3** presents the existing P.M. peak hour traffic volumes for the study-area intersections.

Levels of service for the signalized intersections were calculated using the intersection capacity utilization (ICU) methodology, which is the level of service method adopted by the County. This "critical movement analysis" models the traffic flows and attributes of signalized intersections (saturation flow rates, heavy vehicles, signal timing, etc.). Pursuant to the ICU method, levels of service were calculated and reported based on the ICU ratio. The ICU ratio, which is expressed as a percentage, is the proportion of an intersection's capacity used to accommodate the traffic demands. For example, if an intersection is operating at 80% of capacity (ICU = 0.80), then 20% of the capacity is not being used.

Levels of service for stop-sign controlled intersections were calculated using the methodology outlined in the Highway Capacity Manual (HCM).<sup>2</sup> Each constrained movement at unsignalized intersections (movements required to stop or yield) has a level of service rating and there is an overall level of service rating for the intersection. Pursuant to the HCM methods, levels of service were calculated and reported based on the average seconds of delay per vehicle for the constrained movements. The unsignalized levels of service assume the lane geometries at the intersections as well as the HCM recommended inputs values for other attributes of the intersection (e.g., % heavy vehicles, flared approaches, etc.). **Table 4.11-1** lists the existing traffic control and levels of service for the study-area intersections.

**Table 4.11-1**  
**Existing Intersection Operations**

Intersection	Control	P.M. Peak Hour	
		ICU or Delay	LOS
Clark Avenue/Broadway Street <sup>(a)</sup>	Stop-Sign	9.3 Sec.	LOS A
Clark Avenue/SR 135 SB Ramps <sup>(b)</sup>	Signal	0.55	LOS A
Clark Avenue/SR 135 NB Ramp <sup>(b)</sup>	Signal	0.67	LOS B
Clark Avenue/Orcutt Road <sup>(b)</sup>	Signal	0.61	LOS B
Rice Ranch Road/Orcutt Road <sup>(a)</sup>	Stop-Sign	8.9 Sec.	LOS A
<sup>(a)</sup> Stop controlled intersection. LOS based on average delay per vehicle in seconds.			
<sup>(b)</sup> Signalized intersection. LOS based on ICU.			

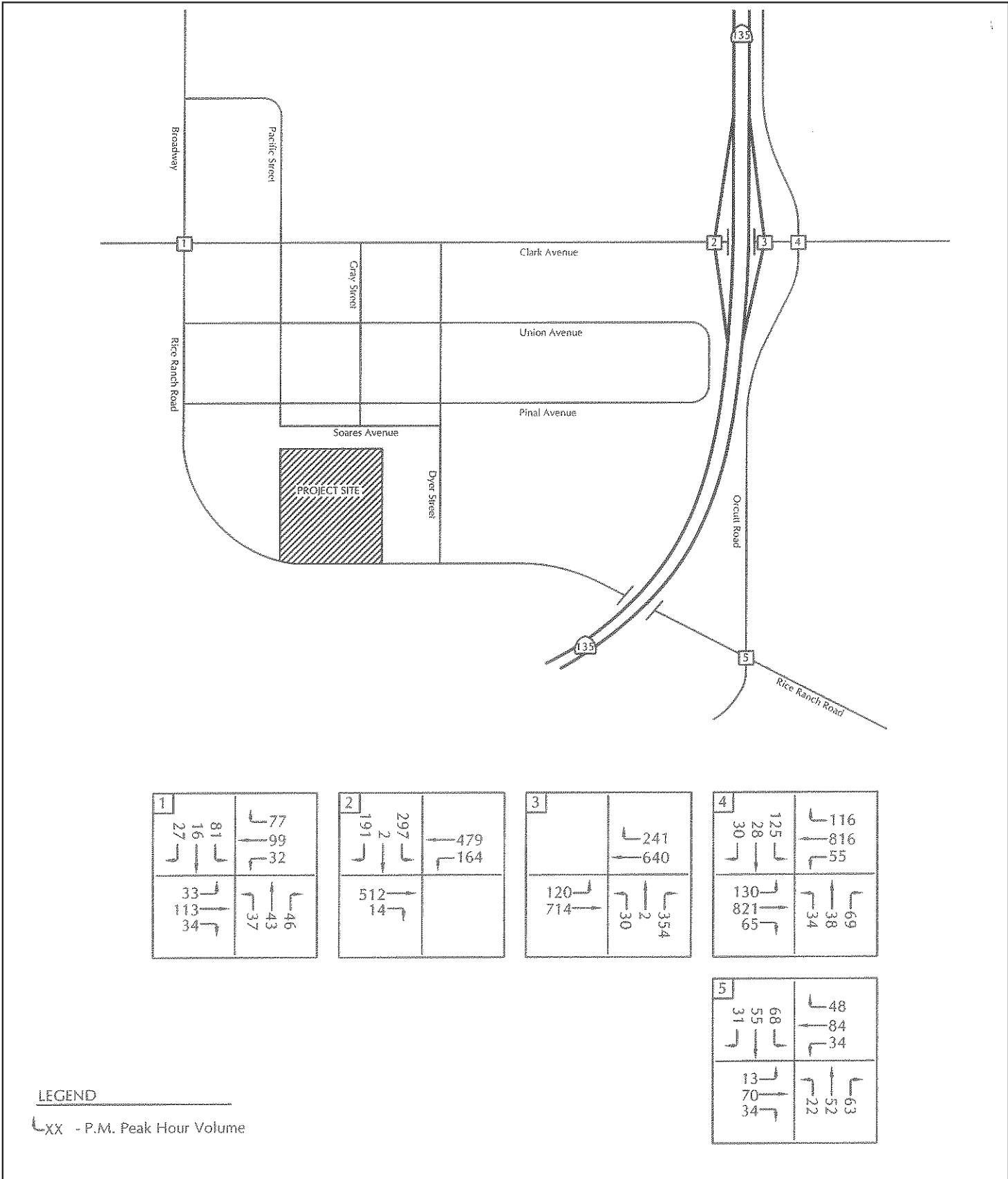
As shown in Table 4.11-1, the study-area intersections currently operate at LOS A and LOS B, which meet the County's LOS C standard.

### 4.11.2 Thresholds of Significance

The County uses the Intersection Capacity Utilization (ICU) methodology for calculating level of service for signalized intersections. Furthermore, the County's CEQA thresholds are based on V/C ratios and changes to the V/C ratios based on the ICU calculations. Based upon the County's Environmental Thresholds and Guidelines Manual, traffic impacts are considered significant in the following instances:

<sup>1</sup> Old Town Orcutt Traffic, Circulation, and Parking Study, Penfield & Smith, February 2008.

<sup>2</sup> Highway Capacity Manual, Transportation Research Board, National Research Council, 2000.



Source: Associated Transportation Engineers, June 21, 2010.



## Traffic Congestion

- A. If the addition of project traffic to an intersection increases the (V/C) ratio by the values listed in the following table, then it is considered a significant project-specific impact.

<b>Significant Changes in Levels of Service</b>	
<b>Intersection Level of Service (Including Project)</b>	<b>Increase in V/C or Trips Greater Than</b>
LOS A	0.20
LOS B	0.15
LOS C	0.10
LOS D	15 Trips
LOS E	10 Trips
LOS F	5 Trips

- B. The project's access to a major road or arterial road would require access that would create an unsafe situation, a new traffic signal or major revisions to an existing traffic signal.
- C. The project adds traffic to a roadway that has design features (e.g., narrow width, road-side ditches, sharp curves, poor sight distance, inadequate pavement structure) that would become a potential safety problem with the addition of project traffic.
- D. Project traffic would utilize a substantial portion of an intersection's capacity where the intersection is currently operating at acceptable LOS (A-C) but with cumulative traffic would degrade to or approach LOS D (V/C 0.80) or lower. Substantial is defined as a minimum change of 0.03 for an intersection which would operate from 0.80 to 0.85, a change of 0.02 for an intersection which would operate from 0.86 to 0.90 and a change of 0.01 for an intersection which would operate greater than 0.90.

## Congestion Management Program (CMP)

The Santa Barbara County Association of Governments (SBCAG) has developed a set of traffic impact thresholds to assess the impacts of land use decisions made by local jurisdictions on regional transportation facilities located within the Congestion Management Program (CMP) roadway system. The following guidelines were developed by SBCAG to determine the significance of project-generated traffic impacts on the regional CMP system.

1. For any roadway or intersection operating at Level of Service (LOS) A or B, a decrease of two levels of service resulting from the addition of project-generated traffic.
2. For any roadway or intersection operating at LOS C, project-added traffic that results in LOS D or worse.
3. For intersections within the CMP system with existing congestion, the following table defines significant impacts.

<b>Level of Service</b>	<b>Project-Added Peak Hour Trips</b>
LOS D	20
LOS E	10
LOS F	10

4. For freeway or highway segments with existing congestion, the following table defines significant impacts.

Level of Service	Project-Added Peak Hour Trips
LOS D	100
LOS E	50
LOS F	50

### 4.11.3 Project Impacts and Mitigation Measures

#### Traffic Congestion

Impact Number	Related OCP EIR Impact	Impact Description	Significance Before Mitigation
N/A	N/A	<b>Operation of the project would result in additional traffic within roadways and intersections in the project area.</b>	<b>Less Than Significant</b>

N/A - Not applicable, impact numbers are not assigned to less than significant impacts.

The following describes the traffic impact analysis that was conducted in order to assess whether or not traffic generated by the project would result in a significant impact according to County significance thresholds.

#### *Trip Generation*

Since the type and mix of senior housing that would be developed on the project site has not been defined, trip generation estimates were developed for several scenarios using the various senior housing rates published in the Institute of Transportation Engineers (ITE) Trip Generation report.<sup>3</sup> **Table 4.11-2** shows the trip generation estimates for each of the senior housing categories contained in the ITE report.

**Table 4.11-2**  
**Project Trip Generation**

ITE Land Use Category	ITE Land Use Code	Size	ADT		P.M. Peak	
			Rate	Trips	Rate	Trips
Continuing Care Retirement Community	255	257 Units	2.81	722	0.29	75
Assisted Living	254	257 Units	2.74	704	<del>0.29</del> <u>0.22</u>	<del>75</del> <u>57</u>
Congregate Care Facility	253	257 Units	2.15	553	0.19	44
Senior Adult Housing (Attached)	252	257 Units	3.48	894	0.16	41
Senior Adult Housing (Detached)	251	257 Units	3.71	953	0.27	69

<sup>3</sup> Trip Generation, Institute of Transportation Engineers, 8<sup>th</sup> Edition, 2008.

As shown, the trip estimates that are based on ITE rates for Continuing Care Retirement Community generate the highest traffic levels during the P.M. peak hour period (the critical time period for analysis). ATE and County staff agreed to use those estimates for assessing potential impacts for the project. Development of the site with a 257-unit Continuing Care Retirement Community would generate 722 ADT, with 75 trips occurring during the P.M. peak hour.

### ***Trip Distribution***

Project trip distribution percentages were developed based on existing traffic patterns and consideration of the population, employment and retail centers in the area. **Table 4.11-3** and **Figure 4.11-4** show the project trip distribution percentages. Figure 4.11-4 also shows the assignment of project traffic at the study-area intersections. The assignment of project traffic assumes access via connections to Soares Avenue as well as one connection to Rice Ranch Road at the southeast corner of the site.

**Table 4.11-3  
Project Trip Distribution**

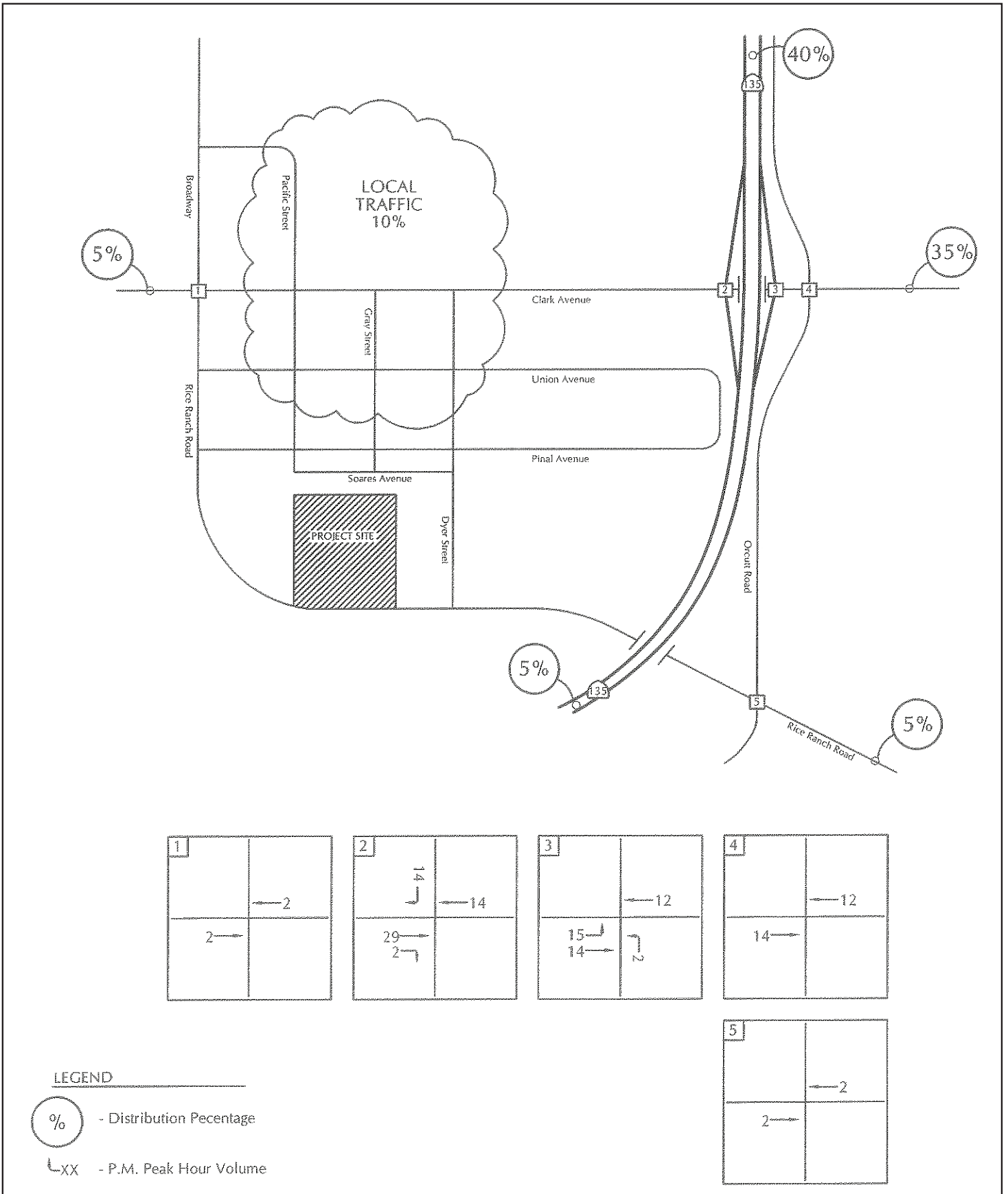
<b>Origin/Destination</b>	<b>Direction</b>	<b>Distribution %</b>
SR 135	North	40%
	South	5%
Clark Avenue	East	35%
	West	5%
Rice Ranch Road	East	5%
Local Old Town Area w/o SR 135	-	10%
<b>Total</b>		<b>100%</b>

### ***Intersection Impacts***

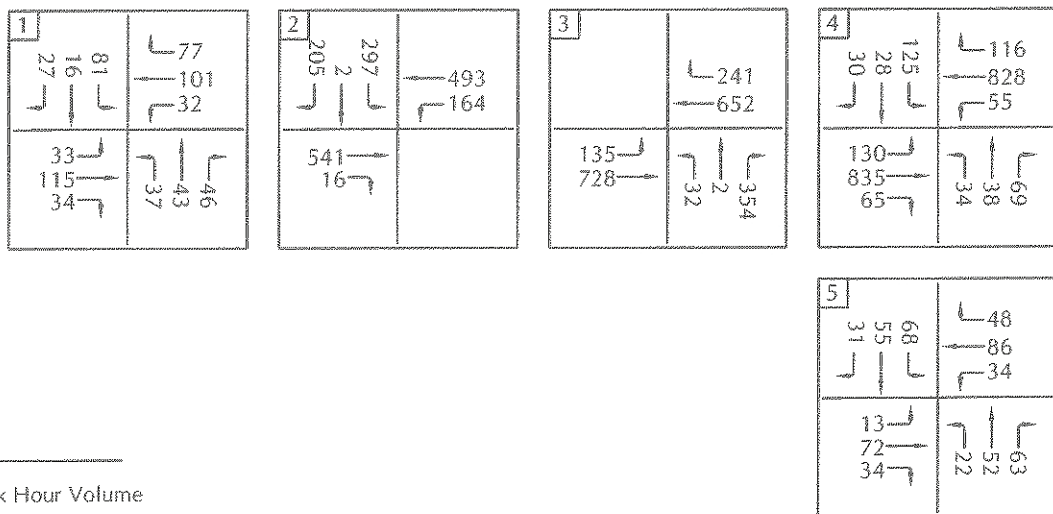
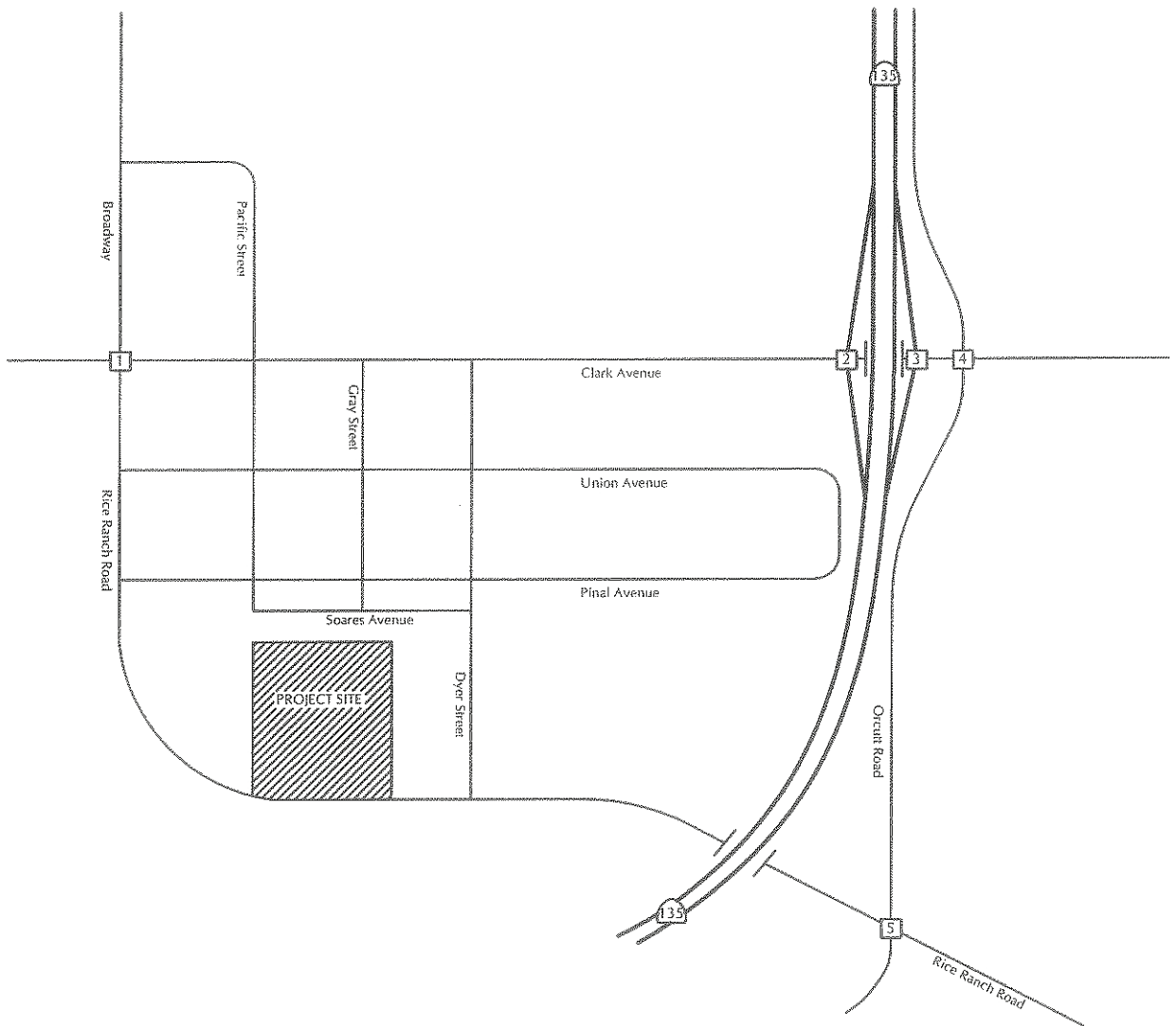
Levels of service were calculated for the study-area intersections assuming the Existing + Project volumes shown on **Figure 4.11-5**. **Table 4.11-4** compares the Existing and Existing + Project intersection levels of service and identifies the significance of traffic added by the project.

**Table 4.11-4  
Existing + Project Intersection Operations**

<b>Intersection</b>	<b>P.M. Peak Hour ICU or Delay / LOS</b>		<b>Change in V/C or Delay</b>	<b>Project Added P.M. Trips</b>	<b>Impact?</b>
	<b>Existing</b>	<b>Existing + Project</b>			
Clark Avenue/Broadway Street <sup>(a)</sup>	9.3 Sec. LOS A	9.3 Sec. LOS A	No Change	4	NO
Clark Avenue/SR 135 SB Ramp <sup>(b)</sup>	0.55 LOS A	0.56 LOS A	0.01	59	NO
Clark Avenue/SR 135 NB Ramp <sup>(b)</sup>	0.67 LOS B	0.68 LOS B	0.01	43	NO
Clark Avenue/Orcutt Road <sup>(b)</sup>	0.61 LOS B	0.61 LOS B	No Change	26	NO
Rice Ranch Road/Orcutt Road <sup>(a)</sup>	8.9 Sec. LOS A	8.9 Sec. LOS A	No Change	4	NO
<sup>(a)</sup> Stop controlled intersection. LOS based on average delay per vehicle in seconds.					
<sup>(b)</sup> Signalized intersection. LOS based on ICU.					



Source: Associated Transportation Engineers, June 21, 2010.



LEGEND

↙XX - P.M. Peak Hour Volume

Source: Associated Transportation Engineers, June 21, 2010.

The data presented in Table 4.11-4 indicate that the study-area intersections are forecast to operate at LOS A and LOS B with Existing + Project traffic volumes (no change from Existing Conditions). The project would generate less than significant impacts to the study-area intersections based on County impact thresholds.

### ***Congestion Management Program Analysis***

The following study-area intersections are located on the CMP roadway network:

- Clark Avenue/SR 135 SB Ramps
- Clark Avenue/SR 135 NB Ramps

As shown in Tables 4.11-4, the Clark Avenue/SR 135 SB on-ramp and the Clark Avenue/SR 135 NB on-ramp CMP intersections are forecast to operate at LOS A and LOS B under Existing + Project conditions. Based on the CMP impact criteria, the project would result in an adverse but less than significant impact on CMP facilities in the project vicinity.

### ***Comparison with OCP EIR***

The OCP EIR Key Site 17 analysis (Volume II) concluded that proposed development of Key Site 17 would not result in significant project-specific traffic impacts. (See the cumulative impacts discussion below for plan-level impacts to which development of Key Site 17 would contribute.) The currently proposed project would change the type of development that could occur on a portion of Key Site 17 from single-family residential to senior housing. The project would reduce peak hour trip generation at the site relative to that associated with development currently permitted under the OCP (see Section 67.0 Alternatives for further discussion), and therefore would slightly reduce impacts as compared to those anticipated in the OCP EIR.

### ***Mitigation Measures***

Mitigation measures are not required.

### ***Residual Impacts***

The project's traffic congestion impacts would be less than significant without mitigation (**Class III**).

### **Site Access**

Impact Number	Related OCP EIR Impact	Impact Description	Significance Before Mitigation
N/A	N/A	<b>Development of the site would create new access points to local roadways.</b>	<b>Less Than Significant</b>

Since there currently is no development plan for the site, potential access connections were reviewed. At a minimum, two access connections will be required to meet fire department requirements. Access to the project site is available from Soares Avenue to the north and Rice Ranch Road to the south. The concept plan in the Orcutt Community Plan shows two access connections to Soares Avenue (one opposite of Pacific Street and one opposite of Gray Street) and one connection to Rice Ranch Road at the southeast corner of the site. Development Standard KS17-5 in the Orcutt Community Plan states, "Any access to Rice Ranch Road from this site shall be limited to one point from APN 105-330-006 and shall be coordinated to the greatest degree feasible with access to Site 13." Providing the access point in

accordance with this development standard (i.e., aligned with the eastern driveway that serves the parking lot within Site 13, south of APN 105-330-006) would assure adequate site distance given the speeds along Rice Ranch Road and the horizontal curve to the west of the site. ATE field verified that sufficient sight distance is available at this location.

The second access would be from Soares Avenue. One or two connections could be provided. The Soares Avenue connection should be aligned opposite Pacific Street and/or opposite Gray Street to provide conventional four-way intersections in order to maximize safety. Providing two connections to Soares Avenue would increase the dispersion of project traffic on the neighborhood streets in the project vicinity (1st Street, Pacific Street, Gray Street, Dyer Street). Providing only one connection opposite Pacific Street would increase loading on Pacific Street or providing one connection opposite Gray Street would increase the loading on that road. However, not all of the traffic would use the street where the access connection is provided, since some of the traffic would use the other neighborhood streets when traveling to/from the site (1st Street, Pacific Street, Gray Street, Dyer Street).

Most of the project's traffic would use Soares Avenue, since the majority of project traffic (80-90%) would be oriented to/from the regional street network to the north, east and west. Depending upon the type of senior housing developed, the project could add up to 850 ADT at the Soares Avenue access. These volumes would disperse through the neighborhood street system (1st Street, Pacific Street, Gray Street, Dyer Street). Given the relatively low volumes on the neighborhood streets, providing one or two connections to Soares Avenue would not generate significant impacts since the neighborhood streets would carry volumes within their capacities.

Given the above, site access issues associated with the proposed project would be less than significant. The proposed project would not alter site access conditions or impacts relative to those discussed in the OCP EIR.

### ***Mitigation Measures***

Mitigation measures are not required.

### ***Residual Impacts***

The project's site access impacts would be less than significant without mitigation (**Class III**).

### **Parking Demands**

Impact Number	Related OCP EIR Impact	Impact Description	Significance Before Mitigation
N/A	N/A	<b>Development of the site would generate demand for parking.</b>	<b>Less Than Significant</b>

Since the type and mix of senior housing has not been defined, the following zoning ordinance requirements and parking demand forecasts are presented for informational purposes only. Further review of parking requirements should be conducted as part of the development plan approval process when a specific project is proposed.



### ***Zoning Ordinance Parking Requirements***

**Table 4.11-5** shows the County's Zoning Ordinance parking requirements that may be applicable to a senior housing project developed at the site. The appropriate requirements would depend on the type of housing (e.g., independent living, assisted living, skilled nursing, continuing care, congregate care, etc.). The actual parking requirement was not calculated for the project since the type of housing, number of guest rooms, and number of employees has not been defined.

**Table 4.11-5**  
**Zoning Ordinance Parking Requirements**

<b>Land Use Category</b>	<b>Parking Requirement</b>
Retirement & Special Care Homes <sup>(a)</sup>	1 Space/Guest Room & 1 Space/2 Employees
Medical Services - Extended Care	1 Space/3 Beds & 1 Space/3 Employees
<sup>(a)</sup> Does not apply to special care homes serving 6 or fewer clients that are permitted as a one-family dwelling. Source: Santa Barbara County Land Use & Development Code, Sections 35.36.050 & 35.36.060, County of Santa Barbara, May 2008.	

### ***Peak Parking Demands***

Since the type and mix of senior housing has not been defined, parking demands were forecast for a range of senior housing types, as shown in **Table 4.11-6**. The peak parking demand estimates were developed using senior housing rates contained in the Institute of Transportation Engineers Parking Generation report.<sup>4</sup>

**Table 4.11-6**  
**Project Peak Parking Demand Forecasts**

<b>ITE Land Use Category</b>	<b>ITE Land Use Code</b>	<b>Size</b>	<b>Peak Parking Demands</b>	
			<b>Rate</b>	<b>Spaces</b>
Continuing Care Retirement Community	255	257 Units	0.83	213
Assisted Living	254	257 Units	0.36	93
Congregate Care Facility	253	257 Units	0.41	106
Senior Adult Housing (Attached)	252	257 Units	0.50	129

As shown, the Continuing Care Retirement Community senior housing type would generate the highest parking demand (213 spaces). The Assisted Living senior housing type would generate the lowest parking demand (93 spaces).

A future development at the proposed project site would be required to meet County parking requirements on-site, or if a modification to these requirements is requested, demonstrate the adequacy of proposed

<sup>4</sup> Parking Generation, Institute of Transportation Engineers, 3<sup>rd</sup> Edition, 2004.

parking facilities. Parking facilities would be required to accommodate residents, employees, and visitors. As such, the proposed project is not expected to result in off-site parking demands or otherwise result in significant parking impacts. Therefore, potential parking impacts are less than significant. The OCP EIR did not include an analysis of parking impacts.

### ***Mitigation Measures***

Mitigation measures are not required.

### ***Residual Impacts***

The project's parking impacts would be less than significant without mitigation (**Class III**).

### **Transit**

Impact Number	Related OCP EIR Impact	Impact Description	Significance Before Mitigation
N/A	N/A	<b>Development of the site would generate demand for transit services.</b>	<b>Less Than Significant</b>

Santa Maria Area Transit (SMAT), operated by the City of Santa Maria, provides public transit service within the Santa Maria-Orcutt area. SMAT Routes 1A, 1B, and 61 would serve the project site. The stop for these routes is located at the Orcutt Road/Rice Ranch Road intersection just east of the project site. Routes 1A and 1B provide service during the daytime periods, with buses running each hour from approximate 6:00 A.M. to 6:30 P.M. on weekdays and from 8:30 A.M. to 4:30 P.M. on Saturdays. Route 61 provides service during weekday evenings, with buses running every 45 minutes between 7:45 A.M. and 10:30 P.M. Curb-to-curb service is available for persons with disabilities.

Development of senior housing with up to 257 units would generate additional demands for transit. Given the small size of the proposed development, the additional transit demands would not generate the need for new routes or transit service in the area. Also, development of a senior housing project would be required to comply with Development Standard DevStd KS17-4 requiring coordination with SMAT for the location and construction of a bus turn-out pocket or bus stop, if required by SMAT. If so, it would occur along the project frontage of Rice Ranch Road. Therefore, the proposed project would result in an adverse but less than significant impact on transit services. It is noted that retirement communities, assisted living facilities, etc., often operate private shuttle bus services for residents to travel to local places of interest, shop, make doctor visits, etc. Thus, some of the transit demands would be satisfied by such services if provided by the future senior development, further reducing the project's impact.

The OCP EIR Key Site 17 analysis (Volume II) did not include a transit impact analysis specifically related to Key Site 17. See the cumulative impacts discussion below for plan-level impacts to which development of Key Site 17 would contribute.

### ***Mitigation Measures***

Mitigation measures are not required.

### ***Residual Impacts***

The project's impacts on transit would be less than significant without mitigation (**Class III**).

## 4.11.4 Cumulative Impacts

### Traffic Congestion

#### *Traffic Forecasts*

Cumulative traffic volumes were forecast for the study-area intersections using data provided in the Old Town Orcutt Traffic, Circulation, and Parking Study. The cumulative forecasts contained in that study were generated by the Orcutt Traffic Model. The cumulative model assumes the City of Santa Maria and Orcutt 10-year land use scenarios as well as street network improvements planned within the 10-year horizon period. The planned improvement that will have a significant affect on traffic flows in the study area is the Union Valley Parking Extension Project, which includes the construction of a new interchange at U.S. Highway 101 and the extension of the Union Valley Parkway as a four-lane arterial between U.S. Highway 101 and Blosser Road. The Union Valley Parking Extension Project will relieve traffic loads on other east-west arterials, such as Clark Avenue. **Figure 4.11-6** illustrates the cumulative traffic forecasts. Project traffic was then layered onto the cumulative forecasts in order to assess Cumulative + Project conditions. **Figure 4.11-7** illustrates the Cumulative + Project traffic forecasts.

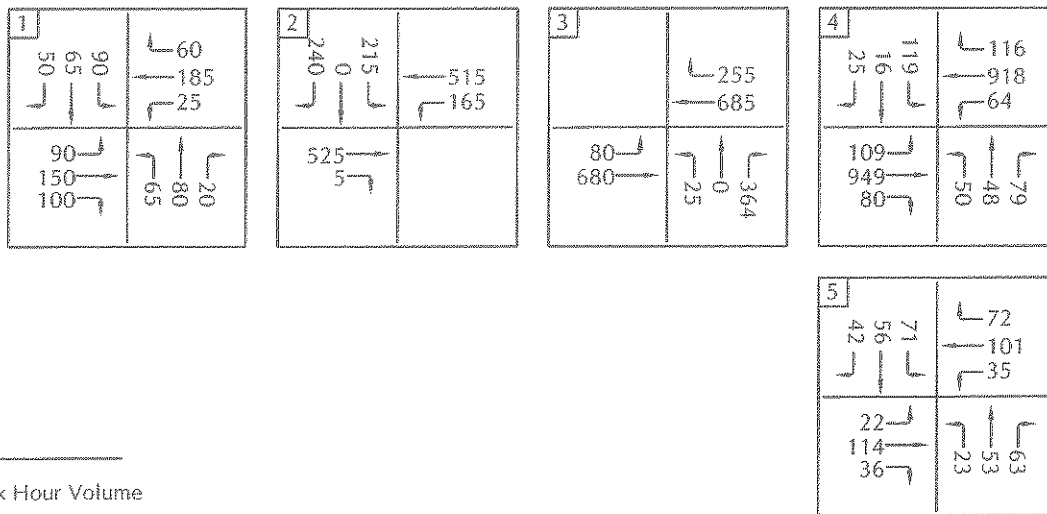
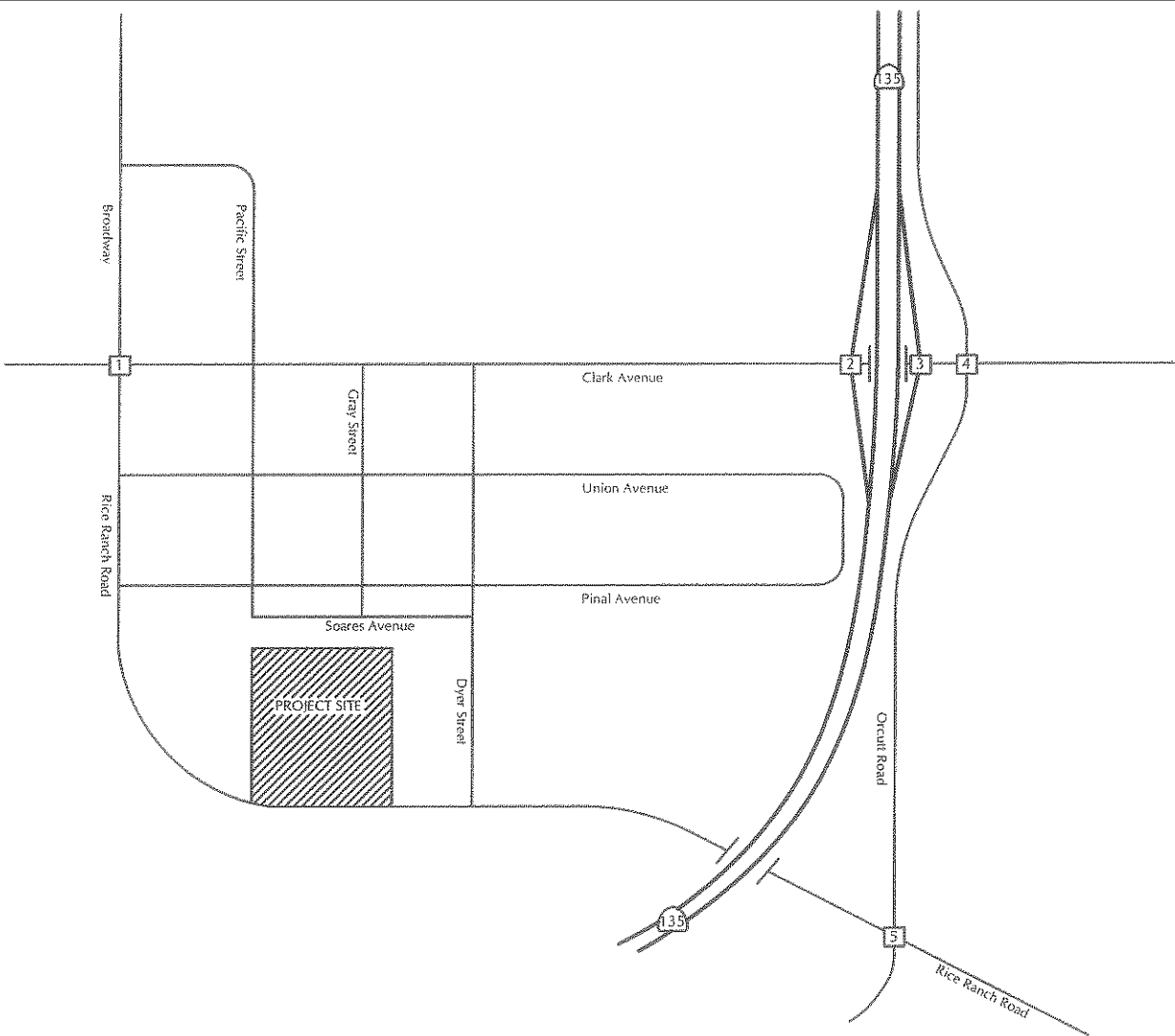
#### *Intersection Impacts*

**Table 4.11-7** compares the Cumulative and Cumulative + Project levels of service for the study-area intersections and identifies impacts based on County thresholds.

**Table 4.11-7**  
**Cumulative and Cumulative + Project Intersection Operations**

Intersection	P.M. Peak Hour ICU or Delay / LOS		Change in V/C or Delay	Project Added P.M. Trips	Impact?
	Cumulative	Cumulative + Project			
Clark Avenue/Broadway Street <sup>(a)</sup>	12.1 Sec. LOS B	12.2 Sec. LOS B	0.1 Sec.	4	NO
Clark Avenue/SR 135 SB Ramp <sup>(b)</sup>	0.50 LOS A	0.51 LOS A	0.01	59	NO
Clark Avenue/SR 135 NB Ramp <sup>(b)</sup>	0.67 LOS B	0.69 LOS B	0.02	43	NO
Clark Avenue/Orcutt Road <sup>(b)</sup>	0.62 LOS B	0.63 LOS B	0.01	26	NO
Rice Ranch Road/Orcutt Road <sup>(a)</sup>	9.5 Sec. LOS A	9.5 Sec. LOS A	No Change	4	NO

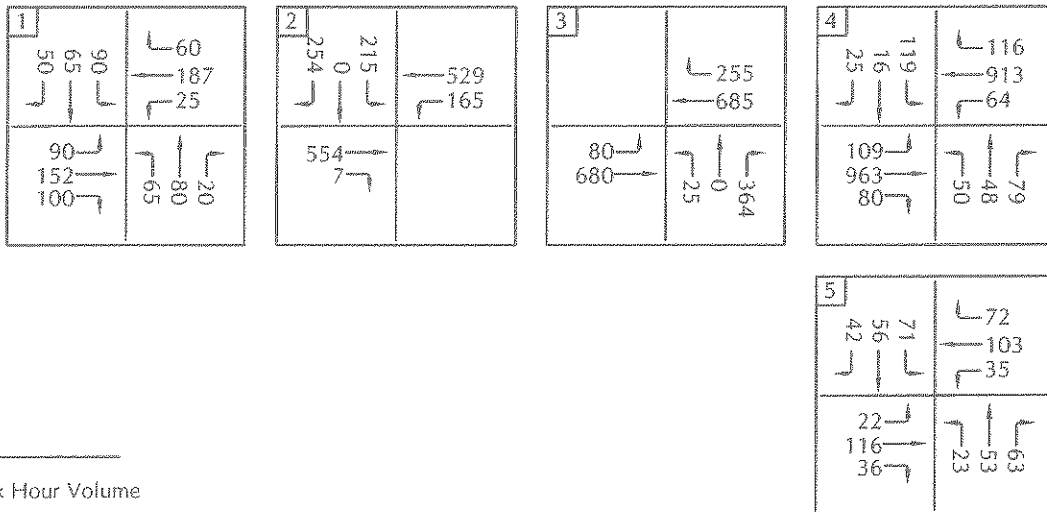
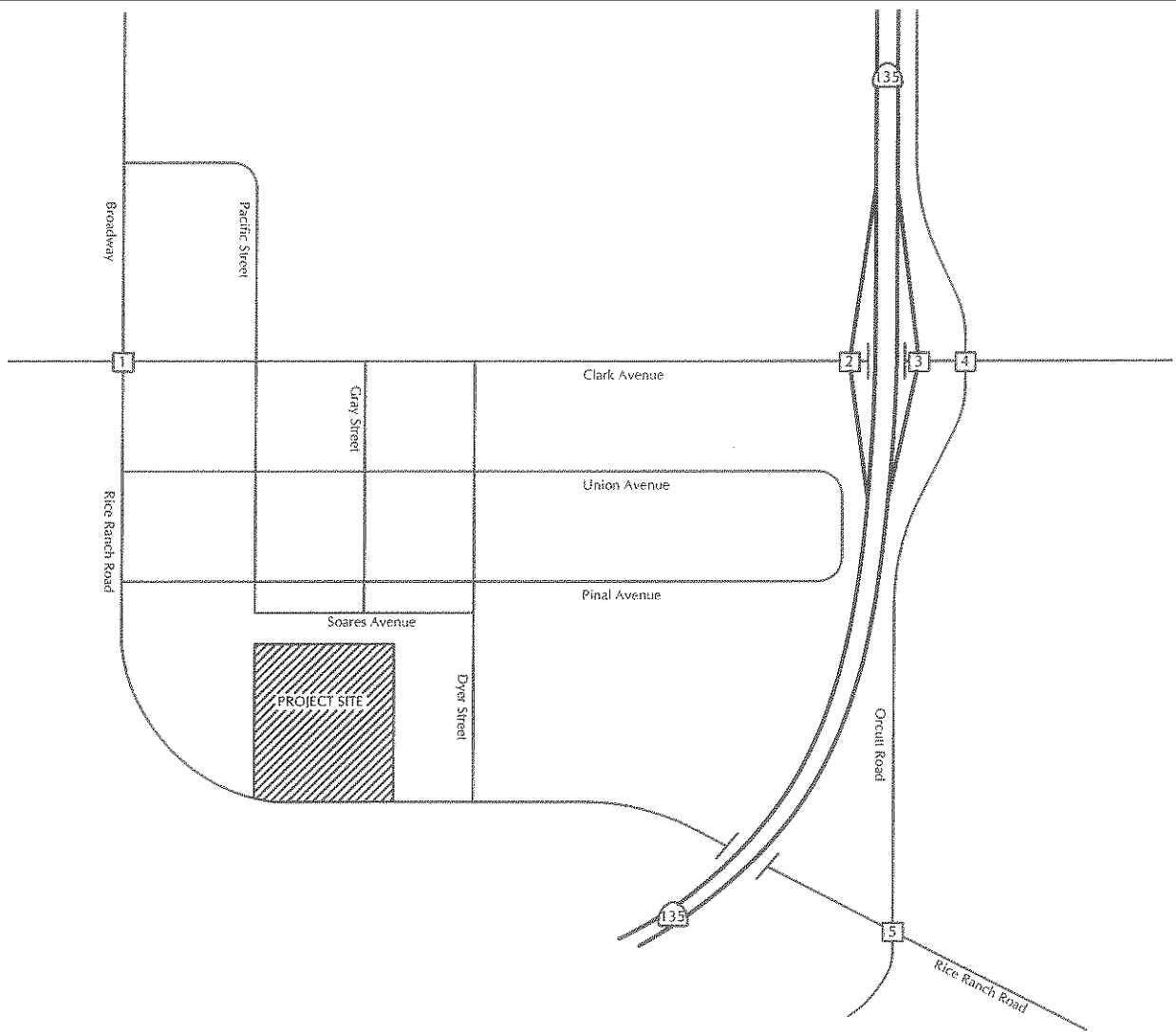
As shown in Table 4.11-7, the study-area intersections are forecast to operate at LOS A and LOS B with Cumulative and Cumulative + Project traffic, which meet the County's LOS C standard. The project would result in adverse but less than significant contributions to cumulative impacts at the study-area intersections based on County thresholds. Therefore mitigation measures would not be required. The proposed project would, however, be required to contribute to the County's traffic mitigation fee program to offset its contribution to cumulative affects in the region.



LEGEND

-XX - P.M. Peak Hour Volume

Source: Associated Transportation Engineers, June 21, 2010.



LEGEND

↳XX - P.M. Peak Hour Volume

Source: Associated Transportation Engineers, June 21, 2010.

### ***Congestion Management Program Analysis***

The following study-area intersections are located on the CMP network:

- Clark Avenue/SR 135 SB Ramps
- Clark Avenue/SR 135 NB Ramps

As shown in Table 4.11-7, the CMP intersections are forecast to operate at LOS A and LOS B under Cumulative + Project conditions. Based on the CMP impact criteria, the project would result in less than significant impacts on CMP facilities in the project vicinity.

### ***Comparison with OCP EIR***

The OCP EIR Key Site 17 analysis (Volume II) concluded that proposed development of Key Site 17 would contribute to general impacts anticipated to result from buildout of the OCP. These include:

- Impacts CIRC-1 and CIRC-15: Significant overall increases in traffic volumes/delays (overall substantial increase in traffic relative to existing traffic load and capacity of the street system, associated with 10-year and full buildout of the OCP, respectively);
- Impacts CIRC-2 and CIRC-16: Traffic volume increase to unsignalized intersections (exceedances of P.M. peak hour traffic signal warrant thresholds, associated with 10-year and full buildout of the OCP, respectively);
- Impact CIRC-36: U.S. 101/Santa Maria River Bridge widening (contribution to the cumulative need to widen the existing bridge over the Santa Maria River associated with buildout of the OCP, associated with full buildout of the OCP);
- Impact CIRC-37: Regional traffic increases on Hwy 135 through Los Alamos. (substantial traffic increase in relation to the existing traffic load and capacity of the street system, associated with full buildout of the OCP); and
- Impact CIRC-38: Regional traffic increase on Hwy 154: (substantial traffic increase in relation to the existing traffic load and capacity of the street system, associated with full buildout of the OCP).

Traffic generated by future development at the project would contribute to these impacts. The currently proposed project would change the type of development that could occur on a portion of Key Site 17 from single-family residential to senior housing. The project would reduce peak hour trip generation at the site relative to that associated with development currently permitted under the OCP (see Section 6.0 Alternatives for further discussion), and therefore would slightly reduce P.M. peak-hour impacts as compared to those anticipated in the OCP EIR. However, depending on the type of senior housing provided, the project may decrease or increase the average daily trip levels. Therefore, the project's changes to the above impacts associated with general traffic growth cannot be determined until a specific development project is proposed.

The OCP EIR includes a number of mitigation measures to address the overall impacts of buildout under the OCP, which are to be undertaken by the County.

### **Transit**

The OCP EIR Key Site 17 analysis (Volume II) concluded that proposed development of Key Site 17 would contribute to the following general impacts anticipated to result from buildout of the OCP:

- Impacts CIRC-14 and CIRC-35: Alternative Transportation Mode deficit: The increase in residential units (more than 3,000 residential units for the 10-year buildout and more than 6,300

residential units by full buildout) would create potentially significant impacts to existing alternative transportation mode facilities, including transit service.

Traffic generated by future development at the project would contribute to these impacts. The change in demand for transit services generated at the project site under the proposed project as compared to the existing OCP cannot be estimated without knowing the specific type of senior housing to be provided. However, if there is an increase, it is expected to be small as compared to the overall number of units proposed as part of OCP.

The OCP EIR identifies a number of mitigation measures, including DevStd KS17-4, to address these impacts and improve the transit system. These are measures that would be undertaken by the County in coordination with Santa Maria Area Transit and funded through the traffic mitigation fee program.



## 4.12 GREENHOUSE GAS EMISSIONS/CLIMATE CHANGE

The OCP EIR did not include an analysis of greenhouse gas emissions/climate change impacts. At the time the OCP was certified (1995) global climate change was not recognized as an issue requiring analysis under CEQA. This section provides a new analysis specific to the currently proposed project.

### 4.12.1 Existing Conditions

#### Introduction/Background

Climate change refers to any significant change in measures of climate (such as temperature, precipitation, or wind) lasting for an extended period (decades or longer). The Earth's climate has changed many times during the planet's history due to natural conditions, with events ranging from ice ages to long periods of warmth. However, beginning late in the 18th century, human activities associated with the Industrial Revolution have also changed the composition of the atmosphere and therefore very likely are influencing the Earth's climate.<sup>1</sup>

The temperature on Earth is regulated by a system commonly known as the greenhouse effect. Climate change pollutants (greenhouse gases), primarily water vapor, carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O), absorb heat radiated from the Earth's surface. As the atmosphere warms, heat is radiated back to the surface to create the greenhouse effect. Greenhouse gases (GHG) emitted by human activity are implicated in global climate change, commonly referred to as global warming. Greenhouse gases contribute to an increase in the temperature of the Earth's atmosphere by transparency to incoming short wavelength visible sunlight, but near opacity to outgoing terrestrial long wavelength heat radiation. In the United States, energy-related activities account for over three-quarters of human-generated greenhouse gas emissions, mostly in the form of CO<sub>2</sub> emissions from burning fossil fuels. More than half the energy-related emissions come from large sources such as power plants and factories, while about a third comes from transportation. Industrial processes (such as the production of cement, steel, and aluminum), agriculture, other land use, and waste management are also important sources of greenhouse gas emissions in the United States.<sup>2</sup>

#### Primary Greenhouse Gas Emissions

The California Climate Action Registry (CCAR) is a voluntary GHG registry program designed to provide GHG reporting standards and tools for measuring and reporting GHG emissions. The six gases identified in the CCAR General Reporting Protocol, Version 3.1 (January 2009) are CO<sub>2</sub>, N<sub>2</sub>O, CH<sub>4</sub>, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>). CO<sub>2</sub> equivalent (CO<sub>2</sub>e) is a measure that compares CO<sub>2</sub> with other greenhouse gas emissions [which generally have a higher global warming potential (GWP)], based on the amount of those other gases multiplied by the appropriate GWP factor. GHG emissions are commonly expressed as metric tons of carbon dioxide equivalents (MTCO<sub>2</sub>e). CO<sub>2</sub>e is calculated by multiplying the metric tons of a gas by the appropriate GWP. Below is a description of each greenhouse gas emission, as described by the CCAR General Reporting Protocol.

#### *Carbon Dioxide (CO<sub>2</sub>)*

Consisting of a single carbon and two oxygen atoms, CO<sub>2</sub> is the most common of the six primary GHG emissions, and provides the reference point for the GWP of other gases. (Thus, the GWP of CO<sub>2</sub> is equal to one.)

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<sup>1</sup> Environmental Protection Agency. <http://www.epa.gov/climatechange/fq/science.html#2> and <http://www.epa.gov/climatechange/basicinfo.html>, accessed May 6, 2008.

<sup>2</sup> Environmental Protection Agency. <http://www.epa.gov/climatechange/fq/emissions.html#q3>, accessed December 24, 2009.

***Nitrous Oxide (N<sub>2</sub>O)***

Consisting of two nitrogen atoms and a single oxygen atom, N<sub>2</sub>O possesses a GWP of 310, and is typically generated as a result of soil cultivation practices, particularly the use of commercial and organic fertilizers, fossil fuel combustion, nitric acid production, and biomass burning.

***Methane (CH<sub>4</sub>)***

Consisting of a single carbon atom and four hydrogen atoms, CH<sub>4</sub> possesses a GWP of 21, and is produced through the anaerobic decomposition of waste in landfills, animal digestion, decomposition of animal wastes, production and distribution of natural gas and petroleum, coal production, and incomplete fossil fuel combustion.

***Hydrofluorocarbons (HFCs)***

Primarily used as refrigerants, HFCs consist of a class of gases containing hydrogen, fluorine, and carbon. They possess a range of high and very high GWP values from 120 to 12,000.

***Perfluorocarbons (PFCs)***

PFCs consist of a class of gases containing carbon and fluorine, are originally introduced as alternatives to ozone depleting substances. They are typically emitted as by-products of industrial and manufacturing processes, and possess GWPs ranging from 5,700 to 11,900.

***Sulfur Hexafluoride (SF<sub>6</sub>)***

SF<sub>6</sub> consists of a single sulfur atom and six fluoride atoms, possessing a very high GWP of 23,900, and primarily used in electrical transmission and distribution systems.

**Human Activity and Global Change Effects**

The current warming trend is of particular importance because most of it is very likely human-induced and is likely proceeding at a rate that is unprecedented in the past 1,300 years.<sup>3</sup> Human activities are exerting a major and growing influence on some of the key factors that govern climate by changing the composition of the atmosphere and by modifying the land surface. This increase has resulted from the burning of coal, oil, and natural gas (which generates greenhouse gases, including carbon dioxide) and the depletion of forests (which absorb carbon dioxide) around the world to provide wood products and space for agriculture and other human activities.<sup>4</sup>

According to the Intergovernmental Panel on Climate Change (IPCC), global greenhouse gas emissions due to human activities have grown since pre-industrial times, with an increase of 70 percent between 1970 and 2004. Human activities result in emissions of four long-lived greenhouse gases: carbon dioxide, methane, nitrous oxide, and halocarbons (a group of gases containing fluorine, chlorine or bromine). The global atmospheric concentrations of carbon dioxide, methane, and nitrous oxide have increased markedly as a result of human activities since 1750 and now far exceed pre-industrial values, which has been determined from ice cores spanning many thousands of years.

The IPCC asserts that most of the observed increase in global average temperatures since the mid-20th century is very likely due to the observed increase in anthropogenic greenhouse gas concentrations. The

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<sup>3</sup> Environmental Protection Agency. <http://www.epa.gov/climatechange/fq/emissions.html#q3>, accessed December 24, 2009. ~~Ibid.~~

<sup>4</sup> California Climate Action Team, Climate Action Team Report to Governor Schwarzenegger and the Legislature, March 2006.

observed widespread warming of the atmosphere and ocean, together with ice mass loss, support the conclusion that it is extremely unlikely that global climate change of the past 50 years can be explained without external forcing and very likely that it is not due to known natural causes alone.<sup>5</sup>

The California Climate Action Team (CAT)/California Environmental Protection Agency (Cal EPA) March 2006 Report to Governor Arnold Schwarzenegger and the Legislature states that end-of-century projected climate change impacts may include Sierra snow pack loss, a rise in sea level, a rise in the number of critically dry years, increased large fire risk, increased electricity demand, a rise in the amount of urban area heat waves and heat related deaths, decreased forest yields, and an increase in days meteorologically conducive to ozone formation.<sup>6</sup>

## Greenhouse Gas Emissions Inventory

In 2004, total worldwide greenhouse gas emissions were estimated to be 20,135 Teregrams (Tg)<sup>7</sup> CO<sub>2</sub>e, excluding emissions/removals from land use, land use change, and forestry.<sup>8</sup> In 2004, greenhouse emissions in the U.S. were 7074.4 Tg CO<sub>2</sub>e.<sup>9</sup> California is a substantial contributor of greenhouse gas as it is the second largest contributor in the U.S. and the sixteenth largest in the world.<sup>10</sup> In 2004, California produced 492 Tg CO<sub>2</sub>e, which is approximately seven percent of U.S. emissions.<sup>11</sup> The major source of greenhouse gas in California is transportation, contributing 41 percent of the State's total greenhouse emissions. Electricity generation is the second largest source, contributing 22 percent of the State's greenhouse gas emissions.<sup>12</sup>

The County of Santa Barbara is currently developing an inventory of GHG emissions within the County.

## Regulatory Framework

### *Federal*

The United States Federal government has established a comprehensive policy to address climate change. This policy has three basic objectives, which are to: slow the growth of emissions; strengthen science, technology and institutions; and enhance international cooperation. The Federal government is implementing this policy through voluntary and incentive-based programs.

In April 2007, the U.S. Supreme Court ruled that in the *Massachusetts et al. v. Environmental Protection Agency et al.*,<sup>13</sup> the USEPA is authorized by the Clean Air Act to regulate carbon dioxide emissions from new motor vehicles. In response to this decision, in May 2007, the Bush Administration issued an executive order (EO) directing the USEPA and Departments of Transportation and Energy to work together to establish regulations to reduce greenhouse gas emissions from motor vehicles, non-road vehicles, and non-road engines. The USEPA has not yet promulgated federal regulations limiting GHG emissions. On June 30, 2009, the U.S. EPA granted California the authority to implement GHG emission reduction standards for new passenger cars, pickup trucks and sport utility vehicles.

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<sup>5</sup> Intergovernmental Panel on Climate Change,- Climate Change 2007: Synthesis Report.

<sup>6</sup> California Climate Action Team, Climate Action Team Report to Governor Schwarzenegger and the Legislature, March 2006.

<sup>7</sup> One teragram equals approximately 984,206 metric tons.

<sup>8</sup> Association of Environmental Professionals, Alternative Approaches to Analyzing Greenhouse Gas Emissions and Global Climate Change in CEQA Documents, Final – June 29, 2007,- Page 7.

<sup>9</sup> Ibid.

<sup>10</sup> California Energy Commission, Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004. Staff Final Report (CEC-600-2006-013-SF) December 2006, Page 25.

<sup>11</sup> Ibid, Page 8.

<sup>12</sup> Ibid.

<sup>13</sup> 549 U.S. 497; 127 S. Ct. 1438.

## *State*

### California's Energy Efficiency Standards for Residential and Nonresidential Buildings

Although not originally intended to reduce GHG emissions, California's Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6) were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. The latest amendments were made in October 2005. The premise of the standards is that energy efficient buildings require less electricity, natural gas, and other fuels. Electricity production from fossil fuels and on-site fuel combustion (typically for water heating) results in GHG emissions. Therefore, increased energy efficiency in buildings results in lower GHG emissions on a building-by-building basis.

### Assembly Bill 1493

In 2002, Assembly Bill (AB) 1493 passed and set forth a proactive approach in addressing greenhouse gas emissions and climate change. AB 1493 requires the California Air Resources Board (CARB) to set emission standards for greenhouse gases emitted by passenger vehicles and light duty trucks. Regulations adopted by ARB apply to 2009 and later model year vehicles. ARB estimates that the regulation will reduce GHG emissions from the light-duty/passenger vehicle fleet by an estimated 18% in 2020 and by 27% in 2030, compared to today (AEP 2007, June). AB 1493 also requires the ARB to:

- Consider economic impacts, including impacts on jobs, businesses (including agriculture), and California business competitiveness with other states;
- Provide "maximum flexibility" and be economical to consumers; and
- Consider cost-effectiveness, technological feasibility, economic impacts and mandate maximum flexibility to manufacturers.

California has passed several additional bills since AB 1493, and the Governor has signed at least seven EOs regarding greenhouse gases. Greenhouse gas statutes and executive orders include AB 32, Senate (SB) 1368, EO S-03-05, EO S-20-06, EO S-01-07, EO S-13-08, EO S-14-08 (which establishes a target that all retail sellers of electricity shall serve 33 percent of their load with renewable energy by 2020), and EO S-21-09.

### California Renewables Portfolio Standard

Established in 2002 under Senate Bill 1078 and accelerated in 2006 under Senate Bill 107, California's Renewable Portfolio Standard is one of the most ambitious renewable energy standards in the country. The Renewable Portfolio Standard requires electric corporations to increase procurement from eligible renewable energy resources by at least one percent of their retail sales annually, until they reach 20 percent by 2010. As mentioned above, Executive Order S-14-0 requires retail sellers of electricity to serve 33 percent standard of their load with renewable energy by 2020.

### Assembly Bill 32

AB 32 of 2006 is one of the most significant pieces of environmental legislation that California has adopted regarding greenhouse gas reduction. Among other things, it is designed to maintain California's reputation as a "national and international leader on energy conservation and environmental stewardship." It will have wide-ranging effects on California businesses and lifestyles as well as far reaching effects on other states and countries. A unique aspect of AB 32, beyond its broad and wide-ranging mandatory provisions and dramatic greenhouse gas reductions are the short time frames within which it must be implemented. The primary goal of AB 32 requires the reduction of GHG emissions to 1990 levels by

2020. Reducing GHG emissions to 1990 levels means cutting approximately 29 percent from business-as-usual emission levels projected for 2020, or about 15 percent from today's levels. Major components of the AB 32 require the following actions:

- Monitoring and reporting of GHG emissions beginning with sources or categories of sources that contribute the most to statewide emissions;
- Immediate "early action" control programs on the most readily controlled GHG sources; and
- Complementing efforts to achieve and maintain Federal and State ambient air quality standards and to reduce toxic air contaminants.

Statewide, the framework for developing the implementing regulations for AB 32 is under way. In 2007 the CARB approved the 2020 emission limit of 427 million metric tons of CO<sub>2</sub>e of greenhouse gases. The scoping plan, approved by CARB on December 12, 2008, provides the outline for actions to reduce greenhouse gases in California. The approved scoping plan indicated how these emission reductions would be achieved from significant greenhouse gas sources via regulations, market mechanisms, and other actions. The CARB identified nine discrete early action measures including regulations affecting landfills, motor vehicle fuels, refrigerants in cars, tire pressure, port operations and other sources in 2007 that included ship electrification at ports and reduction of high GWP gases in consumer products. Regulatory development for the remaining measures is ongoing. As described above, through the CCAR, general and industry-specific protocols for assessing and reporting GHG emissions have been developed. Greenhouse gas sources are categorized into direct sources (i.e. company owned) and indirect sources (i.e. not company owned). Direct sources include combustion emissions from on-and off-road mobile sources, and fugitive emissions. Indirect sources include purchased and consumed electricity, district heating or cooling, and non-company owned mobile sources.

### Senate Bill 97

The California legislature passed Senate Bill 97 in 2007, which called for an amendment to CEQA in order to establish that impacts associated with greenhouse gas emissions be a subject for CEQA analysis. The Bill directed the State's Office of Planning and Research (OPR) to develop CEQA guidelines pertaining to the effects of greenhouse gas emissions and mitigation measures for those effects. These guidelines have been adopted as amendments to the CEQA Guidelines and became effective on March 18, 2010. These amendments are described below, in Section 4.7.2 Thresholds of Significance.

### Senate Bill 375

In September of 2008, Senate Bill 375 was passed, requiring the CARB to develop regional greenhouse gas emission reduction targets to be achieved from the automobile and light truck sectors for 2020 and 2035. Since the single-largest source of greenhouse gas emissions in California is from passenger vehicles, the State's goal is to work on reducing Californians' vehicle-miles traveled (VMTs). SB375 requires that Metropolitan Planning Organizations (MPOs) in California prepare and include sustainable communities strategies as part of regional transportation plans to reduce the amount of vehicle miles traveled (VMT). SB 375 enhances the CARB's ability to reach AB 32 goals. SB 375 aligns three critical policy areas of importance to local government, which include 1) regional long-range transportation plans and investments; 2) regional allocation of the obligation for cities and counties to zone for housing; and 3) a process to achieve greenhouse gas emissions reductions targets for the transportation sector.

## **Existing On-site Greenhouse Gas Emissions**

Currently the project site is undeveloped. With the exception of minor emissions generated by intermittent weed abatement activities, there are no greenhouse gas emissions associated with the project site.

### 4.12.2 Thresholds of Significance

As directed by SB97, the Natural Resources Agency adopted amendments to the CEQA Guidelines for greenhouse gas emissions that became effective on March 18, 2010. According to the amendments made to Appendix G of the CEQA Guidelines, the proposed project would have a significant impact if it would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

The adopted CEQA amendments require a lead agency to make a good-faith effort based, to the extent possible, on scientific and factual data in order to describe, calculate, or estimate the amount of greenhouse gas emissions resulting from a project. They give discretion to the lead agency whether to:

- 1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use; and/or
- 2) Rely on a qualitative analysis or performance-based standards.

In addition, a lead agency should consider the following factors, among others, when assessing the significance of impacts from greenhouse gas emissions on the environment:

- 1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting;
- 2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and
- 3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions.

The amendments call on lead agencies to establish significance thresholds for their respective jurisdictions and clarify that the effects of greenhouse gas emissions are cumulative, and should be analyzed in the context of CEQA's requirements for cumulative impact analysis.

The County of Santa Barbara is presently working to develop an inventory of current GHG emissions and a Climate Action Strategy and Climate Action Plan based on this data. The County has developed interim guidance for evaluating GHG emissions in CEQA documents for projects in the County until such time as County-specific data becomes available and significance thresholds applicable to GHG emissions are developed and formally adopted.

The County's interim guidance uses the Bay Area Air Quality Management District (BAAQMD) adopted thresholds of significance for GHG emissions as a guideline for evaluating Santa Barbara County projects. According to the applicable threshold for this project, the proposed project would result in a significant impact if:

- The project generates more than 4.6 MT CO<sub>2</sub>e/SP/yr (SP=service population, including residents and employees).

Thresholds for construction-related emissions are not provided.

### 4.12.3 Project Impacts

Given the global nature of climate change resulting from GHG emissions, GHG emission impacts are inherently cumulative in nature. As such, the determination of whether a project's GHG emissions impacts are significant depends on whether emissions would be a cumulatively considerable contribution to the significant cumulative impact. This is assessed in the following subsection.

### 4.12.4 Cumulative Impacts and Mitigation Measures

Impact Number	Related OCP EIR Impact	Impact Description	Significance Before Mitigation
N/A	N/A	<b>Development of the site would generate GHG emissions.</b>	<b>Less than Significant</b>

N/A - Not applicable, impact numbers are not assigned to less than significant impacts.

Implementation of the proposed project would contribute to long-term increases in GHGs as a result of traffic increases (mobile sources) and minor secondary fuel combustion emissions from water heating, space heating, etc. Development occurring as a result of the proposed project would also result in secondary operational increases in GHG emissions as a result of electricity generation to meet project-related increases in energy demand. Electricity generation in California is mainly from natural gas-fired power plants. However, since California imports about 20 to 25 percent of its total electricity (mainly from the northwestern and southwestern states), GHG emissions associated with electricity generation could also occur outside of California. Short-term GHG emissions would also occur from use of equipment and vehicles during construction; however, County guidelines do not require their quantification because they are a temporary source.

The General Reporting Protocol (GRP) in the California Climate Action Registry (CCAR) divides project-related operational GHG emissions into three categories (scopes). These three scopes include the following:

*Scope 1-* On-site combustion of fossil fuels (space and water heating, fireplaces, landscape utility equipment, etc.)

*Scope 2-* Consumption of purchased energy (electricity)

*Scope 3-* Indirect emissions (transportation, solid waste disposal, fresh-and wastewater conveyance and treatment)

For general residential development projects, such as the proposed project, Scope 3 is typically a much larger contributor to the GHG burden than Scopes 1 and 2. For convenience, project-related GHG emissions were aggregated into transportation and non-transportation sources. The transportation and natural gas components are calculated and reported in the URBEMIS2007 computer model output provided in Appendix B of this EIR. The other non-transportation source (electricity) requires additional analysis, as shown below.

The input assumptions for operational GHG emissions calculations, and the GHG conversion from consumption to annual regional CO<sub>2</sub>e emissions are summarized in **Table 4.12-1**. Annual GHG emissions associated with residential development are shown in **Table 4.12-2**. These include emissions from transportation (project generated vehicle miles travelled) and non-transportation sources, including



electricity and natural gas consumed by the project. Annual project-related GHG emissions are calculated to be 1,815–705 MT/year as shown in **Table 4.12-3**. In the following consumption/generation tables, estimated project electricity usage per dwelling unit is reduced from the County’s interim guidance factor of 5.84 MWhr/dwelling unit, based on the project’s proposed use as a senior housing facility with an expected occupancy of 1.5 residents/dwelling unit. As it was determined that a two-person household consumed 50% more electricity than a one-person household,<sup>14</sup> linear interpolation suggests a 1.5 person household consumes 25% less than a two or more person household which is the SBCAPCD default factor. Therefore, an electricity consumption rate estimate for this project would be 4.38 MWhr/dwelling unit as shown in Table 4.12-1. A 1.5 person household was also found to use 15% less natural gas than a two-person household, however, as senior citizens use more natural gas for space heating than the average population, no reduction was made for the project’s lower number of residents per dwelling unit.<sup>15</sup>

~~Conservatively assuming~~Based on a senior occupancy rate of 1.5 residents per dwelling unit, the annual operational emissions would be 4.4224 MT CO<sub>2</sub>e per resident per year (1,705,637/386 residents). The County’s interim significance threshold for GHG is 4.6 MT CO<sub>2</sub>e per person per year. Therefore, the proposed project’s GHG/climate impacts would be less than significant.

**Table 4.12-1  
Annual Non-Transportation Energy Consumption/Generation and Conversion Factors**

Land Use	Unit	Electricity (MWhr)	Nat. Gas (10 <sup>6</sup> cu ft)
Residential (Santa Barbara County average household size)	Dwelling Unit	5.84 <sup>a</sup>	**
Residential - Senior Housing Facility (1.5 persons/unit)	Dwelling Unit	4.38 <sup>b</sup>	

<sup>a</sup> \*Santa Barbara County interim guidance  
<sup>b</sup> ~~adjusted~~ Reduced by -25% for 1.5 person household size, vs based on PG&E average increase in electricity usage from 1 to 2 person households.<sup>+</sup>  
 \*\*Based on URBEMIS model calculation (provided in Appendix B), ~~adjusted by -15% for 1.5 person household vs PG&E average~~ A 1.5 person household uses 15% less natural gas than the PG&E average, but senior citizens use more for space heating so no adjustment was made<sup>+</sup>

<sup>+</sup>~~Economic and Demographic Factors Affecting Residential California Energy Use, 2002 (PG&E electricity and natural gas use), Figure 3, page 13. The slope of the consumption curves shows a 50% increase from a one person to a two person household. Linear interpolation suggests a 1.5 person household consumes 25% less than a two or more person household which is the SBCAPCD default factor~~

<sup>14</sup> Marcus, William B., et. al. Economic and Demographic Factors Affecting California Residential Energy Use, 2002 (PG&E electricity and natural gas use), Figure 3, page 13.

<sup>15</sup> Ibid.

**Table 4.12-2**  
**Project-Related GHG Emissions**

Use	Transportation (tons)	Electricity (MWHR)	Nat. Gas (10 <sup>6</sup> cu ft)
Residential (257 DU)	914.2	1125.7	-
<i>Conversion Factor</i> (metric ton/unit)	-	0.291	-
CO <sub>2</sub> <u>metric tons/yr</u>		327.6	<u>451.6383.9</u>
CO <sub>2</sub> (e) Conversion Factor*	1.011	1.002	1.0026
CO <sub>2</sub> (e) <u>metric tons/year</u>	924.3	328.2	<u>452.8384.9</u>
* To include emissions from methane and nitrous oxide.			

**Table 4.12-3**  
**Estimated Annual Operational GHG Emissions**

Source	CO <sub>2</sub> e (metric tons/year)
<b>Direct Emissions</b>	
Point-source & fugitive emissions	n/a
Large reduction in reflectivity	n/a
Large reduction in sequestration	n/a
Vehicle Miles Traveled	924
<b>Indirect Emissions</b>	
Energy Use	
• Natural Gas	<u>453385</u>
• Electricity	328
<b>Total GHG Operational Emissions</b>	<u>1,705637</u>

### ***Mitigation Measures***

The proposed project is not expected to result in significant GHG impacts according to the County's interim significance thresholds, and therefore mitigation is not required. However, the following measure is recommended to assure that the project's GHG emissions, along with its energy consumption and other air emissions, are minimized.

**GHG 1-1 (Recommended):** The County shall amend the OCP to add a Key Site 17 development standard stating that:

Future development plans for the site shall incorporate the following to the extent practicable:

- Construct the new residential buildings to exceed minimum California Title 24 energy efficiency requirements;
- Utilize green buildings and roofs;
- Use water conserving landscaping in residential and common areas;
- Promote solid waste recycling and minimization; and
- Create a pedestrian and bicycle-friendly community.

### ***Residual Impacts***

The proposed project's GHG/climate change impacts are less than significant prior to and following mitigation (**Class III**).

# Policy Consistency Analysis

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# SECTION 5

## 5.0 POLICY CONSISTENCY

This section provides a preliminary analysis of project consistency with County plans and policies. A final determination of consistency with plans and policies will be made by County decision-makers.

### 5.1 SANTA BARBARA COUNTY COMPREHENSIVE GENERAL PLAN

The County's Comprehensive General Plan (General Plan) is a long-range plan that serves as a guide for the physical development of Santa Barbara County. The General Plan is comprised of several topical parts or elements, such as the Land Use Element, Noise Element, Circulation Element, Housing Element, etc. The General Plan also includes the various Community Plans, including the Orcutt Community Plan, which applies to the project site. The General Plan includes goals, policies, and implementation measures that provide a general framework for Countywide development. The following table shows the proposed project's consistency or inconsistency with the Santa Barbara County General Plan goals, policies, actions, and development standards.

REQUIREMENT	DISCUSSION
<b>ORCUTT COMMUNITY PLAN – KEY SITE 17 POLICIES</b>	
<p><b>Policy KS17-1:</b> <i>Key Site 17 is designated Res 8.0 and zoned SLP. Any proposed development on Key Site 17 shall comply with the following development standards.</i></p>	<p><b>Consistent:</b> The proposed project would amend this policy in accordance with the requested change in the site's General Plan land use designation and zoning. This request is consistent with and implements Action Item KS17-6 and therefore is consistent with the intent of the General Plan. The potential environmental impacts associated with future development under the requested General Plan land use designation and zone change are analyzed in Chapter 4 of this EIR.</p>
<p><b>DevStd KS17-1:</b> <i>Any discretionary development shall include a landscape buffer consisting of drought-tolerant trees and shrubs of sufficient density to partially screen the proposed development from Rice Ranch Road, Soares Avenue, and Dyer Street. The buffer along Soares shall be integrated with the planned park (see Figure KS17-1). A meandering trail as shown on Figure KS17-1 shall also be developed.</i></p>	<p><b>Consistent:</b> The proposed project would amend this development standard to eliminate the reference to Figure KS17-1 as it relates to the planned park along Soares Avenue. This is consistent with other proposed development standards amendments that remove the requirement to locate the park along Soares Avenue. This amendment does not change the requirement that a future development project must include a landscape buffer along Soares Avenue and Rice Ranch Road, an onsite park, and a meandering trail along the project frontage on Rice Ranch Road. Therefore, the proposed amendment would not be inconsistent with the intent of this standard.</p>
<p><b>DevStd KS17-2:</b> <i>Homes located on the periphery of the site and those adjacent to the neighborhood park shall be one-story, except as noted in Action KS17-6. Any two story development shall be visually compatible with, and shall not significantly block long-range southerly views from, Old Town Orcutt.</i></p>	<p><b>Potentially Inconsistent:</b> The requested revisions to this development standard would limit the height of buildings to one story along Soares Avenue only, rather than along the entire site perimeter and adjacent to the neighborhood park. Although the requirement for future development to be visually compatible with and not block long-range southerly views from Old Town Orcutt would be retained, the proposed project would result in the potential for visual compatibility impacts that result in part due to potential building heights. Therefore, the proposed change to DevStd KS17-2 may not be consistent with the intent of the General Plan in this regard.</p>

REQUIREMENT	DISCUSSION
<p><b>DevStd KS17-3:</b> Any discretionary development shall provide for dedication and construction of a 1-2 acre public neighborhood park fronting along the western portion of Soares Avenue as conceptually depicted on Figure KS-17-2. Parcels 105-330-004 and 105-134-004 shall each contribute at least 3/4 of an acre to this park and the park shall be a minimum of 100 feet wide where it fronts Soares Avenue.</p>	<p><b>Inconsistent:</b> The plan identified a 1-2 acre park fronting Soares Avenue to be located on a portion of APN 105-330-004 and a portion to be located on APN 105-134-004 (Stonegate Development). As part of the future project development of at least a ¾ acre public park would be required on these parcels. However, as described in Section 4.10 Recreation, the development of two smaller, noncontiguous parks, as allowed by the proposed change to this development standard, would not provide the type of recreational facility intended by this standard. Therefore, the proposed amendment is considered inconsistent with the intent of this development standard.</p>
<p><b>DevStd KS17-4:</b> Development on the site shall facilitate pedestrian access to Old Town. The developer(s) shall coordinate with Santa Maria Area Transit (SMAT), and shall provide either a bus turn-out pocket along a public road (e.g., Rice Ranch Road), or a bus stop within the site, if requested by SMAT.</p>	<p><b>Potentially Consistent:</b> The proposed project would not amend this standard. Future development at the project site would be located adjacent to an existing residential neighborhood and within a development area identified in the OCP. The project has been reviewed by Santa Maria Area Transit and it was determined that the development was within walking distance to existing bus stops and no new transit stop or turnout would be required.</p>
<p><b>DevStd KS17-5:</b> Any access to Rice Ranch Road from this site shall be limited to one point from APN 105-330-06 and shall be coordinated to the greatest degree feasible with access to Site 13.</p>	<p><b>Consistent:</b> The proposed project does not involve a change to this development standard and would not otherwise interfere with its implementation. Therefore, the proposed project would be consistent with this standard.</p>
<p><b>Action KS17-6:</b> If an application is filed for a 100% senior housing project, as defined by California Civil Code § 51 et. seq, on Assessors Parcels 105-134-04, -05; 105-330-05, -06, or -08, the County should consider redesignating and rezoning affected parcels to Res. 20 and DR 14. However, to ensure neighborhood compatibility, the homes fronting Soares Ave. and the homes adjacent to the park should be single family on lots at least 6,000 s.f. in size. In addition, buildings on APNs 105-330-05, -06 and -08 may be two stories in height but should be of low profile and screened to the greatest degree feasible.</p>	<p><b>Potentially Inconsistent:</b> The proposed project includes the redesignation and rezoning of four of the identified parcels, consistent with this action item. However, it also eliminates the restrictions that homes fronting along Soares Avenue be single-family and that buildings in the southern lots be limited to two stories. As the elimination of these restrictions may contribute to significant visual compatibility impacts, they may not be consistent with the intent of the General Plan.</p>
<b>ORCUTT COMMUNITY PLAN – LAND USE</b>	
<p><b>Policy LU-O-3:</b> The County shall require that adequate resources and service capacity are available to accommodate the growth identified within this Plan.</p>	<p><b>Potentially Consistent:</b> Future development at the project site would be conditioned to ensure that adequate services are available to serve the site, including roads, water service, and sewage service. A Can and Will Serve Letter for both water and sewage service will be required. The proposed project is not expected to result in significant impacts with regard to the provision of public services, as discussed in Sections 4.9 of this EIR.</p>
<p><b>Policy LU-O-5:</b> To improve fiscal balance in both the development, operations, and maintenance of public infrastructure, the County shall pursue establishment of appropriate funding mechanisms to ensure that development pays its "fair share" of public infrastructure costs.</p>	<p><b>Potentially Consistent:</b> Future development at the project site will be required to join the Orcutt Community Facilities District and be assessed fees for the project's proportionate share of maintenance costs of landscaped and natural open space areas (including medians), trails, and drainage facilities. The District will include funding for this project's proportionate share of community-wide infrastructure maintenance, which</p>

REQUIREMENT	DISCUSSION
	includes certain flood control facilities, libraries, parks, and trails as identified by the Orcutt Community Plan.
<i>Policy LUR-O-2: Future growth and development shall occur in a manner which minimizes construction related impacts on the community.</i>	<b>Potentially Consistent:</b> Future development at the project site would be conditioned to minimize construction noise, dust, and traffic impacts associated with the project. The conditions would include the implementation of dust control measures and limited construction hours. As discussed in Sections 4.2 Air Quality and 4.8 Noise, construction-period impacts associated with future development of the site are expected to be less than significant.
<i>Policy LUR-O-6: In order to provide community cohesiveness, new neighborhoods should be designed to provide circulation, pedestrian, bicycle and public transportation linkage to existing neighborhoods, schools, parks, and commercial areas.</i>	<b>Potentially Consistent:</b> The design of future development at the project site would be required to conform to the design depicted in the Key Site 17 analysis in the OCP. This includes a public trail/sidewalk along Rice Ranch road that would connect the development to Old Town Orcutt.
<b>ORCUTT COMMUNITY PLAN – FIRE POLICIES</b>	
<p><i>Policy FIRE-O-2: Fire hazards in Orcutt shall be minimized in order to reduce the cost of/need for increased fire protection services and to protect the natural resources in undeveloped open space areas.</i></p> <p><i>DevStd FIRE-O-2.1: Development within or adjacent to high fire hazard areas should include the use of fire prevention measures such as perimeter roads, trails, Class A or B roofs, adequate access to the urban/rural interface and inclusion of structural setbacks per DevStd BIO 1.7. Fencing within the structural setback shall be comprised of fire-resistant material to minimize fire hazards.</i></p> <p><i>DevStd FIRE-O-2.2: The County shall require two routes of ingress and egress for development unless the Fire Department waives this requirement based upon substantial evidence that public safety will not be compromised. Emergency access and egress routes are not required to be paved or meet width standards for normal roadways.</i></p>	<b>Potentially Consistent:</b> Future development at the project site would be conditioned with the standard Fire Department conditions of approval ensure consistency with this policy and development standards. Two points of ingress and egress are provided. The site would be served with public water lines.
<b>ORCUTT COMMUNITY PLAN – LIBRARY POLICIES</b>	
<i>DevStd LIB-O-1.2: The County shall require a library mitigation fee on development to fund the cost of acquisition by purchase or lease, construction, and furnishing of a new library facility. The fee shall be determined upon completion of an infrastructure financing program. All development approved after adoption of the OCP shall be subject to this fee, which shall be paid prior to issuance of Building Permits or as determined by the infrastructure financing program.</i>	<b>Potentially Consistent:</b> The County has adopted the Library Fee and future development at the project site would be subject to this fee.
<i>DevStd LIB-O-1.4: If Mello Roos Community Facilities Districts are formed in the Orcutt Planning Area to fund</i>	<b>Potentially Consistent:</b> Future development at the project site would be conditioned to join the Community

REQUIREMENT	DISCUSSION
<p><i>operation and maintenance of a library, prior to discretionary project approval of projects which impact libraries, all applicants in the planning area must either agree to participate in the District's funding mechanisms for library services or otherwise demonstrate that the project is fully mitigating the increase in demand for library services caused by the project.</i></p>	<p>Facilities District as discussed above.</p>
<b>ORCUTT COMMUNITY PLAN – PARKS/RECREATION/TRAILS/OPEN SPACE POLICIES</b>	
<p><b>Policy PRT-O-1:</b> <i>Diverse passive and active recreational activities shall be developed in Orcutt.</i></p>	<p><b>Potentially Consistent:</b> Although there is no development proposed at this time, the development standards for Key Site 17 would require that an active park be located on site.</p>
<p><b>Policy PRT-O-2:</b> <i>Development of parks shall be consistent with the community's existing semi-rural character and landscaping.</i></p>	<p><b>Potentially Consistent:</b> Future development at the project site would be required to include a proposed park within the development and would be subject to conditions as designated by the Parks Department Condition letter.</p>
<p><b>Policy PRT-O-4:</b> <i>The County Park Department and other agencies or groups pursuing implementation of the trail system shall use the Orcutt Multiple Use Trails Plan and its Trail Siting and Design Guidelines to guide future trail development and implementation.</i></p>	<p><b>Potentially Consistent:</b> Future development at the project site would be required to develop a public trail/sidewalk along the project frontage of Rice Ranch Road in accordance with the OCP.</p>
<p><b>DevStd PRT-O-4.3:</b> <i>Development on sites with identified trail corridors (PRT-6 map of the OCP) shall include, where appropriate, the construction and assurance of the fitness of designated trails for two years, at which time the County Park Department would assume maintenance responsibility. Where immediate construction is not required, a construction bond shall be required.</i></p>	<p><b>Potentially Consistent:</b> Future development at the project site would be required to develop a trail along the project frontage of Rice Ranch Road which is identified as an appropriate location for a trail on the PRT-6 map of the OCP.</p>
<p><b>DevStd OS-0-4.4:</b> <i>Development adjacent to public trails, parks or other usable public open space areas shall include a combination of setbacks and landscaping within and/or outside of developable areas to avoid to the extent feasible or, if avoidance is not feasible, minimize the impacts of new development on users of such open space.</i></p>	<p><b>Potentially Consistent:</b> Adequate landscaping and setbacks would be required to ensure that the existing park at the Stonegate development and the future on-site park would not be impacted by the future development.</p>
<p><b>DevStd OS-O-7.3:</b> <i>If Mello Roos District is formed in the Orcutt Planning Area to fund operations and maintenance of parks, recreation, open space and trails, prior to discretionary project approval of projects which impact open space, all applicants in the planning area must either agree to participate in the Mello Roos District, or provide other mitigation of the project's impact on these services and demonstrate that a Homeowner's Association will be formed which will generate adequate revenues to provide long term operations and maintenance of any private services.</i></p>	<p><b>Potentially Consistent:</b> Future development at the project site would be conditioned to join the Orcutt CFD to ensure adequate funding and maintenance of the public open space, including the hiking trail.</p>



REQUIREMENT	DISCUSSION
<b>ORCUTT COMMUNITY PLAN – RESOURCE RECOVERY POLICIES</b>	
<i>Policy RR-O-1: Resource conservation and recovery shall be implemented in Orcutt to divert the waste stream from area landfills to the maximum extent feasible.</i>	<b>Potentially Consistent:</b> Future development at the project site would be conditioned to provide recycling bins during project construction. The project site is within the service area of Waste Management (formerly Health Sanitation Services), which has a curbside recycling program in place.
<b>ORCUTT COMMUNITY PLAN – SCHOOL POLICIES</b>	
<i>Policy SCH-O-1: The County shall strive to ensure that new development fully mitigates its impacts to school facilities and does not cause school overcrowding.</i>	<b>Potentially Consistent:</b> Future development at the project site is subject to all State mandated school fees.
<b>ORCUTT COMMUNITY PLAN – SEWER/WASTEWATER POLICIES</b>	
<i>Policy WW-O-1: The County shall strive to ensure development of adequate sewer facilities necessary to service projected growth.</i>	<b>Potentially Consistent:</b> Prior to Zoning Clearance approval, Future development at the project site must have a Can and Will Serve Letter from the Laguna County Sanitation District (LCSD) and all future sewer facilities must be in place or bonded for as part of the public improvements.
<p><i>Policy WW-O-2: Prior to discretionary approval of new development, the County shall make a finding that there will be adequate capacity and availability for LCSD to serve the new development.</i></p> <p><i>DevStd WW-O-2.1: Prior to the discretionary approval of new development, the developer shall identify all additional facilities required to adequately collect, convey, treat and dispose of the sewage effluent from the development.</i></p> <p><i>DevStd WW-0-2.2: At the time of discretionary approval, the County shall condition the recordation of the final map or issuance of LUPs on provision of an adequate “Can and Will Serve” letter from LCSD.</i></p> <p><i>DevStd. WW-0-2.3: A “Can and Will Serve” letter from LCSD will be found adequate for recording of maps or issuance of land use permits (including permits for development of preexisting lots) only if the letter demonstrates:</i></p> <ol style="list-style-type: none"> <li><i>1. LCSD’s effluent, including the effluent from the proposed project, will not exceed the discharge standards established by the Regional Water Quality Control Board;</i></li> <li><i>2 Adequate disposal capabilities exist at the plant or through agreement with the City of Santa Maria (providing that treatment and disposal by the City does not further degrade the underlying groundwater quality) to serve the project(s); and</i></li> <li><i>3. Existing or planned and funded transmission lines have available capacity to serve the project(s).</i></li> </ol>	<p><b>Potentially Consistent:</b> Future development at the project site would be served by Laguna County Sanitation District. The District is in the process of installing treatment plant improvements that will substantially reduce impacts associated with high levels of TDS, and allow the district to operate up to 3.7 mgd. Disposal of additional flows will be through irrigation of recycled water compatible with higher uses. The improvements are scheduled to be completed, operational, and fully permitted by the RWQCB by December 2003.</p> <p>Currently, Key Site 17 is located outside the LCSD boundary. Development on this site would require public sewer service, resulting in the district boundaries being amended to include the project site. In order for the LCSD to serve the proposed project a new line would be constructed connecting to a 12-inch trunk line located on Key Site 15 to the west.</p> <p>Prior to Zoning Clearance approval, a Can and Will Serve Letter from the LCSD must be provided that states that adequate sewage capacity is available, that the wastewater does not exceed RWQCB threshold levels, and that adequate sewer lines are available to serve the site.</p>

REQUIREMENT	DISCUSSION
<i>DevStd WW 0-2.4: Prior to final inspection, adequate collection, transmission, treatment and disposal facilities to serve the development must be operational.</i>	
<b>ORCUTT COMMUNITY PLAN – TRANSPORTATION POLICIES</b>	
<i><b>Policy CIRC-O-1:</b> The County shall adopt and implement an Orcutt Transportation Improvement Plan (OTIP) which includes long-term improvements to roadways and alternative transportation facilities targeted to provide for acceptable levels of service on roadways and intersections within the planning area. The OTIP shall be an integrated Plan for capital improvements of roads and intersections as well as alternative transportation facilities. The OTIP shall contain a list of transportation projects to be undertaken and include projected costs for each funded and unfunded improvement. The County shall also revise the Transportation Impact Fee based upon the projected cost of transportation system improvements identified in the OTIP.</i>	<b>Potentially Consistent:</b> The County has adopted the OTIP and the associated transportation impact fee. Future development at the project site would be subject to County Public Works Department recommended road improvements and the transportation impact fee.
<i><b>Policy CIRC-O-2:</b> The County shall serve to provide an efficient and safe circulation system to accommodate future growth in Orcutt. The County will use its best efforts to coordinate the timing of roadway, intersection and other transportation improvements with the completion of the development projects that the improvements are intended to serve.</i>	<b>Potentially Consistent:</b> The existing internal subdivision road system conforms to the OCP and OTIP.
<i><b>Policy CIRC-O-3:</b> The County shall maintain a minimum Level of Service (LOS) C or better on roadways and intersections within the Orcutt Planning Area, except that Minimum Level of Service for the Foster Road/Hwy 135 and Lakeview/Skyway Dr. intersections and Stillwell and Lakeview Roads shall be LOS D.</i>	<b>Potentially Consistent:</b> Traffic generated by Future development at the project site would not reduce any roadway and intersections levels of service below C.
<i><b>Policy CIRC-O-4:</b> A determination of project consistency with the standards and policies of the Orcutt Community Plan Circulation Section shall constitute a determination of consistency with LUDP#4 with regard to roadway and intersection capacity.</i>	<b>Potentially Consistent:</b> Since all roadways are currently operating at LOS C or better, Future development at the project site would be required to be consistent with the OCP Circulation Section, and therefore, would be required to be consistent with LUDP#4.
<i><b>Policy CIRC-O-9:</b> Development shall be sited and designed to provide maximum access to non-motor vehicle forms of transportation, including well designed walkways, paths and trails between residential development and adjacent and nearby commercial uses and employment centers, where feasible.</i>	<b>Potentially Consistent:</b> Future development at the project site would be required to include a trail/sidewalk along the project frontage on Rice Ranch Road. This proposed trail would provide a pedestrian connection to Old Town Orcutt where additional non-motor vehicle forms of transportation are located including transit stops.
<i><b>Policy CIRC-O-10:</b> Developers should be encouraged to pursue innovative measures to fully mitigate the transportation impacts associated with their projects.</i>	<b>Potentially Consistent:</b> Future development at the project site would be conditioned to require funding for long term operation and maintenance of project roadways. The public or private funding mechanism must be in place prior to Zoning Clearance approval.

REQUIREMENT	DISCUSSION
<p><b>DevStd CIRC-O-10.2:</b> <i>If an Assessment District is formed in the Orcutt Planning Area to fund and maintain internal subdivision roads, prior to discretionary project approval of projects which impact transportation systems all applicants in the Planning Area must agree to either develop and maintain internal subdivision roads through the Assessment District, or agree to maintain these roads privately and demonstrate that a Homeowners Association will be established which will generate adequate revenues to provide long term maintenance of the roads.</i></p>	<p><b>Potentially Consistent:</b> Future development at the project site would be conditioned to join the CFD which has been established in the Orcutt area.</p>
<b>ORCUTT COMMUNITY PLAN – WATER POLICIES</b>	
<p><i>Policy WAT-O-2: In order to be found consistent with Land Use Development Policy No. 4 (LUDP#4), the water demand of new discretionary development must be offset by long-term* supplemental** water supplies that do not result in further overdraft of the local groundwater basin and that are adequate to meet the project’s net water demand as determined by the County considering appropriate reliability factors as determined by County Water Agency. To demonstrate an adequate long-term supplemental water supply, projects must comply with the following development standards:</i></p> <p><i>DevStd WAT-O-2.1: Prior to discretionary action by any County decision-maker on new development, the applicant shall provide one of the following:</i></p> <ol style="list-style-type: none"> <li><i>1. A "Can and Will Serve" letter from California Cities Water Company dated before July 1997;</i></li> <li><i>2. An "Intent to Serve" letter from California Cities Water Company or other water purveyor(s) including draft contract(s), if any, demonstrating to the County’s satisfaction that the development’s net water demand will be offset by a long-term supplemental water supply and that the development will have a continuing right to obtain water equal to that of the water purveyor’s other customers. Contract(s), if any, must include terms consistent with the requirements of DevStd WAT-O-2.2.</i></li> </ol> <p><i>DevStd WAT-O-2.2: Prior to discretionary action on new development, the applicant must demonstrate adequacy of the water supply proposed to serve the project, unless the applicant has satisfied DevStd WAT-O-2.1 #1 above. This demonstration shall be based on the following information, which must be provided prior to application completeness:</i></p> <p><u><i>Resources</i></u>  <i>Provide information on project’s projected gross and net demand for water. The supplemental water supply must offset the project’s net water demand. Documentation of the reliability of the proposed water supply as projected</i></p>	<p><b>Potentially Consistent:</b> Currently, the Santa Maria Groundwater Basin (SMGB) is considered to be overdrafted. The basin underlies approximately 110,000 acres of land, including the entire community of Orcutt, and has a storage capacity of 1.5 million acre feet. Net groundwater demand is greater than the perennial yield for the basin resulting in a net overdraft. The County, in accordance with Orcutt Community Plan Development Standards, has required new development in the Orcutt area to be served by supplemental water only in order to protect the groundwater basin.</p> <p>The only supplemental supply recognized by the County to date has been the State Water Project entitlement held by the California Cities Water Company (Cal Cities). This entitlement of 550 AFY is equivalent to 413 AFY of long-term average annual yield, according to the most recent analysis by the California Department of Water Resources. (Note: The Department of Water Resources announced last Fall that the SWP reliability factor has been adjusted from 79.4% to the 75%. This reduction equates to a reduction in the amount of SWP entitlement safe yield that Cal Cities has for Orcutt development from the previously noted 437 AFY to 413 AFY.)</p> <p>The 413 AFY supplemental supply has been fully committed with none remaining to serve additional development in the Orcutt area or to serve approved development, which has not yet purchased water from Cal Cities and received land use clearance. Cal Cities, a private water company, has entered into contracts with owners of approved projects and other private parties that commit 426.3 AFY of the SWP supply. Thus, additional supplemental water supplies are required to support new development (and certain developments that were granted discretionary approval) as long as the Santa Maria Basin is considered by the County to be in a state of overdraft. The applicant has drafted a preliminary agreement with the City of Santa Maria to purchase additional State Water. The project will be conditioned to finalize the agreement so that additional</p>

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<p><i>by the Department of Water Resources (for State Water) and confirmed by the County Water Agency.</i></p> <p><i>A description of how the project will be served during drought periods. If conjunctive use of the Santa Maria Groundwater Basin is planned, demonstration that use of the basin will not contribute to long-term groundwater overdraft considering drought periods. The factual determination of overdraft contribution shall be made by the Planning &amp; Development Department and County Water Agency.</i></p> <p><i>Provide a factual demonstration that the water purveyor has available, firm, long-term reliable water supplies which equal or exceed present demand from existing customers, projects approved for new service, and the proposed project under County review. The demonstration should also show that the project use would not contribute to overdraft of the basin. The factual determination of no additional overdraft shall be made by Planning &amp; Development and County Water Agency.</i></p> <p><i>Provide draft contract(s) with water purveyor(s), which demonstrate(s) to the satisfaction of the County that the development will be served by a long-term supplemental water source and will have a continuing right to obtain water equal to that of the water purveyor's other customers.</i></p> <p><i>Provide information on the water purveyor's existing and projected range of potential State Water and/or other supplemental water delivery amounts needed for full buildout under the water purveyor's management plan, status of conservation programs, drought buffers, and groundwater pumpage consistent with applicable state government code requirements on water reporting. Provide information on the most recent annual water deliveries from various sources in the purveyor's service area, as available from existing reports.</i></p> <p><u><i>Facilities</i></u>  <i>Documentation of the facilities necessary to deliver water and demonstration of permanent access to the facilities such that uninterrupted service would be provided. The documentation must include a list and description of facilities, site plans, capacity and capital costs necessary to distribute water to the project.</i></p> <p><i>Demonstration that capital costs associated with providing service to the new development will not impact existing Orcutt development.</i></p>	<p>supplemental water can be provided for the project. Water demand for the proposed project is anticipated to be 11 AFY (44 homes x 0.25 AFY per home).</p> <p>Therefore, future development at the project site will be conditioned to obtain a can and will serve letter and a final agreement with the City of Santa Maria acceptable to County Counsel which ensures additional State water will be purchased from the City and used to serve the proposed development to ensure consistency with these policies.</p>

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<p><i>Demonstration that the water supply project is designed, approved, funded and scheduled for implementation prior to tract map recordation or land use clearance.</i></p> <p><i>Describe approvals and entitlements necessary for the proposed water supply and delivery system.</i></p> <p><b>DevStd WAT-O-2.3:</b> <i>Prior to map recordation or land use clearance, the developer must provide a Can and Will Serve letter and necessary final contract(s) consistent with the conditions of the discretionary permits and terms of the draft contract(s).</i></p>	
<p><b>Policy WAT-O-3:</b> <i>Development in Orcutt shall incorporate water efficient design and technology.</i></p>	<p><b>Potentially Consistent:</b> Future development at the project site would be conditioned to require water efficient design and technology in the form of drought tolerant landscaping and low-water design irrigation system.</p>
<p><b>Policy WAT-O-5:</b> <i>To reduce overall TDS levels in the wastewater in Orcutt, and thereby reduce the level of potential groundwater contamination from disposal of this wastewater, water used to serve new development in Orcutt must have a TDS level of no greater than 425 mg/L. This may either be provided through direct deliveries of 425mg/L or less water to new development or through the delivery of offsetting 425mg/L or less water to the water system serving Orcutt. An exception to this standard is allowed only when the TDS level of State Water delivered to Santa Maria exceeds 425mg/L; in that case, the TDS level of water serving Orcutt may not exceed the TDS level of State Water. However, in "drought years" (as determined by the County Water Agency) water demand may be satisfied by groundwater pumpage in compliance with the adopted groundwater management agreement between the City of Santa Maria and the SMV Water Conservation District.</i></p>	<p><b>Potentially Consistent:</b> Future development at the project site would be served by supplemental State water that has a TDS level that meets the water quality requirements of this policy. Since the water is being delivered to the water system serving Orcutt, the project's wastewater would meet the required TDS levels and be considered consistent with this policy. The future project would be conditioned to provide a Can and Will Serve Letter provided to the satisfaction of the county prior to Zoning Clearance approval.</p>
<b>ORCUTT COMMUNITY PLAN – AIR QUALITY POLICIES</b>	
<p><b>Policy AQ-O-1:</b> <i>The County shall encourage land use planning and development design which reduces air pollution through development of transportation infrastructure supportive of alternative modes of transportation and pedestrian oriented developments.</i></p>	<p><b>Potentially Consistent:</b> Future development at the project site shall contain hiking/walking trails and would be located near existing transit stops in Old Town Orcutt. The trail would provide an alternative form of transportation to commercial areas in OT Orcutt.</p>
<p><b>Policy AQ-O-2:</b> <i>Significant fugitive dust and PM<sub>10</sub> emissions shall be reduced through implementation of appropriate construction restrictions and control measures, consistent with standards adopted by the Board.</i></p>	<p><b>Potentially Consistent:</b> Future development at the project site would be subject to the standard APCD dust control mitigation measures as part of the future project approval.</p>
<b>ORCUTT COMMUNITY PLAN – BIOLOGICAL HABITAT POLICIES</b>	
<p><b>Policy BIO-O-1:</b> <i>Important natural resources in Orcutt, including sandhill chaparral, central dune scrub, wetlands, oak trees and woodland, Bishop pine forest, specimen trees, and central sage scrub shall be protected, consistent with the Open Space Plan and the standards below, unless this would prevent reasonable development of a property.</i></p>	<p><b>Potentially Consistent:</b> As discussed in Section 4.3 Biological Resources, the project site does not contain these natural resources. Therefore, development on the project site would not impact these biologically sensitive habitats and would be considered consistent with this policy.</p>

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<p><b>DevStd BIO-O-1.1:</b> <i>Development shall be sited and designed to avoid disruption and fragmentation of significant natural resources within and adjacent to designated undeveloped natural open space areas, minimize removal of significant native vegetation and trees, preserve wildlife corridors and provide reasonable levels of habitat restoration. Where possible, significant natural resources, such as specimen trees, adjacent to designated, natural undeveloped open space corridors should be preserved.</i></p>	<p><b>Potentially Consistent:</b> As mentioned above, the project site does not contain significant natural biological resources.</p>
<p><b>DevStd BIO-O-1.8:</b> <i>Where new development eliminates important onsite habitat (e.g. coastal sage scrub, grasslands, riparian habitat and wetlands), County shall require development to restore or enhance like kind habitat either onsite or off site. If restoration sites are limited or unavailable, County shall require payment of adequate fees into a mitigation bank program acceptable to County to permanently protect a comparable or greater amount of created or restored habitat elsewhere within the OPA.</i></p>	<p><b>Potentially Consistent:</b> As mentioned above, the project site does not contain these significant natural biological resources.</p>
<p><b>Policy BIO-O-4:</b> <i>Non-native trees (e.g., eucalyptus groves and windrows) that provide known raptor nesting or key roosting sites shall be protected; non-native specimen trees shall be protected to the greatest degree feasible except where it would interfere with reasonable development of a property. Non-native trees of less than 25 inches in diameter at breast height do not qualify as specimens for this Policy.</i></p>	<p><b>Potentially Consistent:</b> Future development at the project site would not impact any non-native trees that provide known nesting or roosting habitat. Mitigation Measure BIO 1-1 would assure that nesting birds, if present during construction, would be protected.</p>
<p><b>Policy BIO-O-5:</b> <i>New facilities in Orcutt, including roads, bikepaths/trails, sewer lines and retention basins, shall to the maximum extent feasible be sited and designed to avoid disruption of significant natural resources within designated natural undeveloped open space areas, minimize removal of significant native vegetation and trees and provide for reasonable levels of habitat restoration for significant habitats disrupted by construction.</i></p> <p><b>DevStd BIO-O-5.3:</b> <i>Multi-use trail construction should avoid removal of riparian vegetation to the maximum extent feasible. The Orcutt Creek multi-use trail shall be set back a minimum of 50 feet from the outside edge of riparian vegetation or the top-of-bank (whichever is further), unless this would make the multi-use trail link infeasible. Trail construction shall include riparian restoration between the edge of existing native vegetation and the bicycle path. Trail lighting should be directed away from the creek.</i></p> <p><b>DevStd BIO-O-5.4:</b> <i>Trails should follow existing dirt road and trail alignments and utilize existing bridges where feasible. Where this is not possible, prior to final trail alignment proposed trail routes should be surveyed and rerouted where necessary to avoid sensitive species,</i></p>	<p><b>Potentially Consistent:</b> Future development at the project site would be required to construct a trail/sidewalk along the project frontage of Rice Ranch Road. The trail would be located between the road and the proposed development. No areas of significant natural vegetation would be impacted.</p> <p><b>Potentially Consistent:</b> Future development at the project site would be required to construct a trail/sidewalk along the project frontage of Rice Ranch Road. The trail would be located between the road and the proposed development. No areas of significant</p>

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<p><i>subject to final approval by P&amp;D and the Park Department. All trails shall be sited and designed to avoid or minimize impacts to sensitive resources, areas of steep slopes and/or highly erosive/sandy soils, where feasible. Developers shall fund sign installation along certain trails (as identified in the Multi Use Trail Guidelines) providing educational and interpretive information and advising dog owners to keep their dogs out of sensitive habitats.</i></p>	<p>natural vegetation would be impacted. Signs are not required for the proposed trail as it is not located in an environmentally sensitive location.</p>
<b>ORCUTT COMMUNITY PLAN – FLOODING AND DRAINAGE POLICIES</b>	
<p><i>Policy FLD-O-1: Flood risks in the Orcutt planning area shall be minimized through appropriate design and land use controls.</i></p> <p><b>DevStd FLD-O-1.2:</b> <i>No structures or other development (except for bridges, culverts and flood control requirements) shall be allowed within creek channels.</i></p> <p><b>DevStd FLD-O-1.3:</b> <i>No development shall be permitted within the floodplain of Orcutt, Pine Canyon or Graciosa Creeks unless such development would either be necessary to:</i></p> <ol style="list-style-type: none"> <li><i>1. Permit reasonable development of the site and would not lead to disturbance or removal of significant riparian/wetland vegetation; or</i></li> <li><i>2. Accomplish a major public policy goal of the Orcutt Community Plan.</i></li> </ol> <p><b>DevStd FLD-O-1.4:</b> <i>Residential units requiring raised finish floor elevations in areas prone to flooding shall be constructed on raised foundations rather than fill material, where practical.</i></p>	<p><b>Potentially Consistent:</b> Future development at the project site would be required to provide a drainage design to be reviewed and approved by the County Flood Control District, subject to several conditions.</p>
<p><b>Policy FLD-O-2:</b> <i>Off-site runoff associated with development should be minimized.</i></p>	<p><b>Potentially Consistent:</b> The drainage system for future development at the project site shall be designed to County Flood Control standards to minimize off-site drainage impacts. Standard Flood Control District conditions of approval also ensure that off-site impacts are minimized.</p>
<p><b>Policy FLD-O-3:</b> <i>Short-term and long-term erosion associated with development shall be minimized.</i></p> <p><b>DevStd FLD-O-3.1:</b> <i>Development projects shall incorporate sedimentation traps to minimize the erosion of soils into natural and manmade flood control drainages, where feasible. All development adjacent to stream channels shall be required to install check dams as deemed appropriate by Flood Control and Planning &amp; Development to minimize channel down-cutting and erosion. To the maximum extent feasible, all such structures shall be designed to avoid impacts to creek vegetation.</i></p>	<p><b>Potentially Consistent:</b> Future development at the project site shall be subject to standard County erosion control measures associated with the project.</p>



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<p><b>DevStd FLD-O-3.2:</b> Silt fencing, straw bales, sand bags, and sediment basins shall be used in conjunction with other methods to prevent erosion on slopes and siltation of the stream channel.</p> <p><b>DevStd FLD-O-3.3:</b> Drainage outlets into natural creek channels shall be constructed in a manner which causes outlet flow to approximate the general direction of natural stream flow. Energy dissipaters beneath outlet points shall be incorporated where appropriate, and designed to minimize damage to creek vegetation.</p>	<p><b>Potentially Consistent:</b> Future development at the project site would be required to accommodate stormwater runoff generated at the site in accordance with OCP policy.</p>
<p><b>Policy FLD-O-4:</b> The County shall construct and maintain a regional retention basin system in Orcutt as depicted in Figure 35 (of the OCP), if feasible. Where feasible, these retention basins should be designed to accommodate recreational uses consistent with reasonable natural resource protection.</p> <p><b>DevStd FLD-O-4.2:</b> Developers shall purchase capacity in and connect to the planned regional retention basins, if feasible. If participation in the Mello Roos district for the regional retention basin system is determined by Flood Control to be infeasible, the developer may construct on-site retention facilities with sufficient capacity to reduce offsite runoff in accordance with Flood Control District standards. All private basins shall be attractively landscaped and where appropriate, shall be designed to accommodate recreational facilities. Prior to development of private basins, all applicants for discretionary projects shall agree to maintain the basins and demonstrate that a Homeowners Association will be established which will generate adequate revenues to provide long term maintenance of the basins including all landscaping and recreational facilities.</p>	<p><b>Potentially Consistent:</b> Future development at the project site would be required to accommodate stormwater runoff generated at the site in accordance with OCP policy.</p>
<b>ORCUTT COMMUNITY PLAN – GEOLOGY/TOPOGRAPHY/SOILS POLICIES</b>	
<p><b>Policy GEO-O-1:</b> Development shall be sited to avoid geologically hazardous areas.</p>	<p><b>Potentially Consistent:</b> As discussed in Section 4.5 Geology and Soils, significant impacts related to geological hazardous are not anticipated.</p>
<p><b>Policy GEO-O-2:</b> In areas of high erosion potential, development shall be sited and designed to minimize increased erosion.</p> <p><b>DevStd GEO-O-2.2:</b> Development shall be prohibited on slopes greater than 30% unless this would prevent reasonable development of a property. In areas of unstable soils, highly erosive soils or on slopes between 20% and 30% development shall not be allowed, unless an evaluation by a qualified professional (e.g., soils engineer, geologist, etc.) establishes that the proposed project will not result in unstable slopes or severe erosion or this would prevent reasonable development of a property.</p>	<p><b>Potentially Consistent:</b> Future development at the project site would be conditioned to prevent and reduce erosion and siltation run-off. However, the project site is not located in a high erosion area.</p> <p><b>Potentially Consistent:</b> All future development would occur on slopes of 20% or less.</p>

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<p><b>DevStd GEO-O-2.4:</b> All surface water runoff shall be culverted and diverted to avoid erosion of exposed slopes and shall be directed to the nearest natural drainage channel. Where such measures are feasible and would not substantially increase erosion, vegetated earthen channels should be substituted for culverts. Cribwalls or other methods should only be used where necessary to retain slopes.</p> <p><b>DevStd GEO-O-2.5:</b> In foothill areas, cut and fill slopes shall be planted with slope-stabilizing plants. Only native species shall be planted within designated natural open space corridors, and shall be irrigated until the plants are established.</p> <p><b>DevStd GEO-O-2.6:</b> All landscape plans shall be reviewed by P&amp;D to ensure revegetation of graded areas in areas of sandy soils. Landscape securities shall be required unless expressly waived by P&amp;D.</p> <p><b>DevStd GEO-O-2.7:</b> The County shall consider allowing lots to be drained to the rear only where it can be demonstrated that such rear-draining will reduce overall grading associated with a project and will provide an equal level of flood control protection as standard front-draining design.</p>	<p><b>Potentially Consistent:</b> Proposed surface water drainage systems would be designed to Flood Control District standards.</p> <p><b>Potentially Consistent:</b> Future development at the project site would be required to incorporate erosion control measures and habitat restoration.</p> <p><b>Potentially Consistent:</b> Future development at the project site would be required to submit landscape plans and a landscape surety are required prior to Zoning Clearance approval.</p> <p><b>Potentially Consistent:</b> Future development at the project site would be required to drain to the street located in front of the project site. No development would be allowed to drain to the rear.</p>
<p><b>Policy GEO-O-3:</b> No grading in excess of 50 cubic yards (combined cut and fill) shall be permitted within areas designated open space in the Orcutt Community Plan without an approved Grading Permit. This requirement applies to all grading activity (including activities otherwise exempted under County Grading Ordinance 3937, Sections 14-6 and 14-8). This requirement shall not apply to the emergency activities of a public agency, including but not limited to wildfire and/or flood control.</p>	<p><b>Potentially Consistent:</b> Future development at the project site would be subject to the County's Grading Ordinance. No grading may occur until the appropriate permits are obtained.</p>
<b>ORCUTT COMMUNITY PLAN – HISTORY AND ARCHAEOLOGY POLICIES</b>	
<p><b>Policy HA-O-1:</b> Archaeological and historic resources in the Orcutt Planning Area shall be protected and preserved to the maximum extent possible.</p>	<p><b>Potentially Consistent:</b> No archaeological sites were identified on the property. However, Future development at the project site would be subject to the standard County conditions, which would protect archaeological resources.</p>
<b>ORCUTT COMMUNITY PLAN – NOISE POLICIES</b>	
<p><b>Policy NSE-O-1:</b> Development of new noise sensitive uses (as defined in the Noise Element) in Orcutt should provide attenuation of ambient noise levels for indoor living areas and, where practical, for outdoor living areas.</p>	<p><b>Potentially Consistent:</b> Future development at the project site would be required to comply with this policy.</p>
<p><b>DevStd NSE-O-1.1:</b> Noise sensitive land uses should be located outside of the 65 dB(A) CNEL contours, unless this would prevent reasonable development of a property.</p> <p><b>DevStd NSE-O-1.2:</b> Noise sensitive uses proposed in areas exceeding 65 dB(A) CNEL shall be designed so that exterior living spaces do not exceed 65 dB(A) CNEL and interior noise levels attributable to exterior sources do not</p>	<p><b>Potentially Consistent:</b> Outdoor noise levels at the site do not exceed 65 dB(A) CNEL. Standard building construction reduces interior noise levels by 20 dB. Therefore, since outdoor noise levels are less than 65 dB(A) CNEL, the indoor noise levels would be less than 45 dB(A) CNEL.</p>

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<p>exceed 45 dB(A) CNEL when doors and windows are closed. Noise insulation construction techniques may include installation of air conditioning for all units and double-paned windows and wall insulation for all window and wall locations with lines of sight to the noise source. Building design and construction specifications shall meet the interior noise standard set forth in California Administrative Code, Title 25, as demonstrated through an acoustical analysis prior to project approval.</p>	
<p><b>Policy NSE-O-2:</b> Construction noise in Orcutt shall be minimized during non-standard work hours.</p> <p><b>DevStd NSE-O-2.1:</b> Standard construction working hours (i.e., 7 a.m. to 4:00 p.m., Monday-Friday) shall be required for development activities. Flexibility to allow extended hours on weekdays and/or occasional working hours on Saturdays should be determined on a case-by-case basis.</p> <p><b>DevStd NSE-O-2.2:</b> Noise attenuation barriers, muffling of grading equipment and additional mitigation where deemed appropriate should be required for development where construction equipment generates noise levels in excess of 95 dB(A).</p>	<p><b>Potentially Consistent:</b> Future development at the project site shall be subject to the standard County construction noise condition which limits the days and hours of construction, and places noise restrictions on the construction equipment.</p>
<b>ORCUTT COMMUNITY PLAN – RISK OF UPSET POLICIES</b>	
<p><b>Policy RISK-O-3:</b> The County shall minimize the risk to public safety associated with hazardous materials.</p>	<p><b>Potentially Consistent:</b> Mitigation Measures HAZ 1-1 through 1-3 would assure that potential hazardous materials impacts at the site would be reduced to a less than significant level.</p>
<b>ORCUTT COMMUNITY PLAN –VISUAL/AESTHETICS POLICIES</b>	
<p><b>Policy VIS-O-1:</b> Significant scenic and visual natural resources in Orcutt shall be protected in order to preserve the semi-rural character of the OPA.</p> <p><b>DevStd VIS-O-1.1:</b> All development including buildings, understories, fences, water tanks and retaining walls adjacent to designated natural open space areas shall be sited and designed to protect the visual character of these areas and blend in with natural landforms through the use of such methods as setbacks, building orientation, materials and colors (earth tones and non-reflective paints), landscape buffers, shielded exterior lighting, screening of parking areas and inclusion of perimeter roads to allow maintenance of open space corridors.</p> <p><b>DevStd VIS-O-2.1:</b> Development shall be sited and designed to minimize disruption of important public view corridors and viewsheds through building orientation, minimization of grading on slopes, landscaping and minimization of sound walls.</p>	<p><b>Potentially Inconsistent:</b> Future development at the project site would be required to provide design elements to reduce the visual impacts of the project. It would also require NBAR final review and approval to ensure consistency with these policies. However, as described in Section 4.1 Aesthetics/Visual Resources, future development at the project site may result in significant unavoidable impacts related to visual character and scenic views.</p>
<p><b>Policy VIS-O-6:</b> Outdoor lighting in Orcutt shall be designed and placed so as to minimize impacts on neighboring properties and the community in general.</p>	<p><b>Potentially Consistent:</b> The future project would be required to have all outdoor lighting hooded and directed downward in order to avoid lights impacting neighboring residences and/or traffic.</p>

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<i>DevStd VIS-O-6.3: Night lighting fixtures adjacent to residential areas shall be of the minimum height and intensity required for security/safety.</i>	
<b>ORCUTT COMMUNITY PLAN – FISCAL POLICIES</b>	
<i>Policy-FSCL-O-1: The County shall ensure that adequate funding is available for the construction of public infrastructure and facilities as identified in the Orcutt Community Plan and the Public Infrastructure Financing Program.</i>	<b>Potentially Consistent:</b> Future development at the project site would be required to pay for its share of public infrastructure costs. The OCP Fee Program is adopted and the project is subject to these new and revised fees.
<i>Policy-FSCL-O-2: The County shall strive to ensure that funding is available for the operation and maintenance of public facilities in the community of Orcutt.</i>	<b>Potentially Consistent:</b> Future development at the project site would be conditioned so that a long-term funding source for maintenance is identified, and the project is included in the identified funding mechanism, prior to Zoning Clearance approval.
<b>LAND USE ELEMENT</b>	
<b>Land Use Element Designation</b> <i>Multiple Residential, 8.0 units per acre</i>	<b>Potentially Consistent:</b> Designated/zoned Residential 8.0/SLP, with provision that County shall re-designate central part of site at density of Residential 20.0/DR-14 if a 100% senior housing project is proposed; located amid existing residential neighborhood and community facilities, is largest undeveloped area in “Old Town Orcutt”; potential development would be compatible, and adopted Development Standards would help ensure site design harmony with surroundings.
<b>Land Use Development Policy 2:</b> <i>The densities specified in the Land Use Plan are maximums and may be reduced if it is determined that such reduction is warranted by conditions specifically applicable to a site, such as topography, geologic or flood hazards, habitat areas, or steep slopes. However, density may be increased under programs of the Housing Element.</i>	<b>Potentially Consistent:</b> The Orcutt Community Plan (OCP) allowed a provision that County shall re-designate central part of site at density of Residential 20.0/DR-14 if a 100% senior housing project is proposed; located amid existing residential neighborhood and community facilities, is largest undeveloped area in “Old Town Orcutt”; potential development would be compatible, and adopted Development Standards would help ensure site design harmony with surroundings.
<b>Land Use Development Policy 3:</b> <i>No urban development shall be permitted beyond boundaries of land designated for urban uses except in neighborhoods in rural areas.</i>	<b>Consistent:</b> The proposed project is located within the urban boundary line of Orcutt.
<b>Land Use Development Policy 4:</b> <i>Prior to issuance of a use permit, the County shall make the finding, based on information provided by environmental documents, staff analysis, and the applicant, that adequate public or private services and resources (i.e. water, sewer, roads, etc.) are available to serve the proposed development. The applicant shall assume full responsibility for costs incurred in service extensions or improvements that are required as a result of the proposed project. Lack of available public or private services or resources shall be grounds for denial of the project or reduction in the density otherwise indicated in the land use plan.</i>	<b>Potentially Consistent:</b> As discussed in Section 4.9 Public Services and Facilities, the proposed project would have less than significant impacts on fire protection and police protection services upon payment of required impact mitigation fees. As discussed in Section 4.11 Transportation and Circulation, buildout of Key Site 17 would not result in impacts to area intersections. However, the project would be required to contribute to the traffic fee mitigation program to offset its contribution to cumulative effects. Adequate water supply is available to serve the project and no significant impacts would result. In addition, adequate wastewater capacity is available and payment of impact mitigation fees would reduce potential impacts to a less than significant level. Adequate landfill capacity is available to serve the project; however, due to County standards, the amount of waste generated would still result in

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	significant impacts. Despite the project-specific significant impact, there is current capacity at the land fill, and no capacity issues are projected for the reasonably foreseeable future. Therefore, the project is potentially consistent with this policy. A Can and Will Serve Letter from Laguna County Sanitation for sewer service is required prior to zoning clearance issuance. Adequate roadways that meet Public Works and Fire Department standards are proposed.
<i>Land Use Development Policy 5: Within designated urban areas, new development other than that for agricultural purposes shall be serviced by the appropriate public sewer and water district or existing mutual water company, if such service is available.</i>	<b>Potentially Consistent:</b> At this time the project is only a General Plan Amendment and Rezone. The project site is within the urban boundary line of Orcutt and future development at the site would be served by the Golden State Water Company and the Laguna County Sanitation District, subject to submittal of a finalized agreement with the City of Santa Maria.
<i>Stream and Creek Policy 1: All permitted construction and grading within stream corridors shall be carried out in such a manner as to minimize impacts from increased runoff, sedimentation, biochemical degradation, or thermal pollution.</i>	<b>Potentially Consistent:</b> Grading and construction for the project would not occur within stream corridors.
<i>Flood Hazard Policy 1: All development, including construction, excavation, and grading, except for flood control projects and non-structural agricultural uses, shall be prohibited in the floodway unless off-setting improvements in accordance with HUD regulations are provided. If the proposed development falls within the floodway fringe, development may be permitted, provided creek setback requirements are met and finish floor elevations are above the projected 100-year flood elevation, as specified in the Flood Plain Management Ordinance.</i>	<b>Potentially Consistent:</b> No development would occur within the 100-year floodway or floodway fringe.
<i>Flood Hazard Policy 2: Permitted development shall not cause or contribute to flood hazards or lead to expenditure of public funds for flood control work, i.e., dams, stream channelizations, etc.</i>	<b>Potentially Consistent:</b> The drainage system included as part of a future development proposal at the project site shall be reviewed and approved by the County Flood Control District, subject to their condition letter. Based on this, the project would not cause or contribute to flooding hazards.
<i>Park/Recreation Policy 4: Opportunities for hiking and equestrian trails should be preserved, improved, and expanded wherever compatible with surrounding uses.</i>	<b>Potentially Consistent:</b> A public, meandering trail will be required along the project frontage of Rice Ranch Road in accordance with the requirements of the Orcutt Community Plan.
<i>Fire Hazard Recommendation 2: All land development (including grading and clearing) in high fire hazard or extreme fire hazard areas should be subject to conditional use permit regulations, and review by the County Fire Prevention Officer, and where appropriate, by responsible federal or state agencies.</i>	<b>Potentially Consistent:</b> The project site is not within a designated High Fire Hazard area. Future development at the project site shall require review and approval by the County Fire Department.
<i>Historical and Archaeological Policy 2: When developments are proposed for parcels where archaeological or other cultural sites are located, project design shall be required which avoids impacts to such cultural sites if possible.</i>	<b>Potentially Consistent:</b> No cultural sites have been identified on the project site. The County's standard discovery condition of approval would be required for a future development project at the project site.

REQUIREMENT	DISCUSSION
<i><b>Ecological Communities:</b> Unique ecological areas should be identified and preserved. Changes in natural or re-established topography, vegetation, biological communities should be minimized in an attempt to avoid the destruction of natural habitats.</i>	<b>Potentially Consistent:</b> As described in Section 4.3 Biological Resources, no unique biological habitat or wildlife exists on the site. The development of the proposed project would not impact unique ecological areas.
<i><b>Visual Resource Policy 1:</b> All commercial, industrial, and planned developments, shall be required to submit a landscaping plan to the County for approval.</i>	<b>Potentially Consistent:</b> Upon future submittal of a development project, the proposed development would be subject to review and approval by NBAR which would also include the submittal of a landscape plan.
<i><b>Visual Resource Policy 3:</b> In areas designated as urban on the land use plan maps and in designated rural neighborhoods, new structures shall be in conformance with the scale and character of the existing community. Clustered development, varied circulation patterns, and diverse housing types shall be encouraged.</i>	<b>Potentially Inconsistent:</b> Future development at the project site would require NBAR final review and approval to ensure consistency with this policy. However, as described in Section 4.1 Aesthetics/Visual Resources, future development at the project site may result in significant unavoidable impacts related to visual character and scenic views.
<i><b>Visual Resource Policy 5:</b> Utilities, including television, shall be placed underground in new developments in accordance with the rules and regulations of the California Public Utilities Commission, except where cost of undergrounding would be so high as to deny service.</i>	<b>Potentially Consistent:</b> The undergrounding of utilities is a standard condition of approval for tract maps.
<i><b>Santa Maria/Orcutt Area Land Use Policy:</b> Leapfrog development should be discouraged.</i>  <i><b>Santa Maria/Orcutt Area Circulation Policy:</b> Public transit should be planned and provided within the urban area</i>	<b>Potentially Consistent:</b> The proposed project site is located adjacent to existing residential neighborhood and within a development area identified in the OCP. Therefore, the project does not constitute leapfrog development. The project has been reviewed by Santa Maria Area Transit and it was determined that the development was within walking distance to existing bus stops and no new transit stop or turnout would be required.

# Impacts Found to be Less Than Significant

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# SECTION 6



## 6.0 IMPACTS FOUND TO BE LESS THAN SIGNIFICANT

The EIR Scoping Document prepared by the County of Santa Barbara Planning and Development Department (see Appendix A) notes that the proposed project would not result in the potential for significant impacts related to land use, agricultural land conversion, schools, police, solid waste, and historical resources. The following provides substantiation for these conclusions.

Land Use and Agricultural Land Conversion. Land use impacts identified in the OCP EIR are primarily related to the projected increase in housing that would occur under the OCP. This housing would exacerbate the existing jobs/housing imbalance, increase fiscal impacts associated with the provision of public services, and result in the potential for agricultural land conversion and loss of open space. The potential for agricultural land conversion and loss of open space impacts are attributed primarily to the development of single-family, low-density housing. One of the mitigation measures identified in the OCP EIR (Mitigation LU-3) states that the County shall review the land use plan to determine if densities could be raised. The proposed project assessed in this EIR would raise the allowable density on the project site, which would be consistent with this measure and would reduce land use impacts associated with low-density residential development. The impact analyses in Chapter 4 of this EIR assess potential land use compatibility issues in the immediate vicinity of the site.

Schools. Development of the project site with a 100 percent senior housing facility is not expected to generate school-aged population and therefore would not increase the demand for school facilities.

Police. The proposed project would increase the Orcutt population by approximately 386 (1.5 people per unit x 257 units). This increase in population would add to the demand for police protection service provided by the Santa Barbara County Sheriff Department (SBCSD). In addition, according to SBCSD, as housing densities increase, demand for police protection service also increases. The OCP provides for increases to police services over the life the plan. SBCSD has indicated that the Orcutt Sub-station could accommodate the additional deputies necessary to provide adequate police protection services. Furthermore, additional outside support is provided through Mutual Aid Agreements with the Santa Maria and Guadalupe Police Departments and the California Highway Patrol. The project would be within the five-minute response time. Therefore, the increase in population associated with build-out of Key Site 17 would not require the construction of new or expanded SBCSD facilities causing the potential for environmental impacts, and impacts to police services would be less than significant.

Solid Waste. As described in the EIR Scoping Document, the proposed project is estimated to generate approximately 366 tons of solid waste per year (1.5 people/unit x 257 units x 0.95 tons/year/person). Required source reduction, recycling and composting could reduce the waste stream by approximately 50 percent, to approximately 183 tons of solid waste per year. This is below the County's 196 tons per year threshold. Given the level of proposed development, the project is not expected to exceed the construction and demolition waste threshold. The project's solid waste generation would also be below the threshold for cumulative impacts. Therefore, the proposed project would not result in significant solid waste impacts.

Historical Resources. No historical resources exist on the site. As such, the proposed project would not result in the potential for impacts on such resources.

Given the above, potential impacts related to these issues were determined to be less than significant and are not further discussed in this EIR.

**Alternatives**

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# SECTION 7

## 7.0 ALTERNATIVES

The following alternatives were selected for analysis in this EIR:

- Alternative 1: No Project Alternative (Development of the Site Under the Existing General Plan Designation and Zoning).
- Alternative 2: Revised Park Location and Reduced Building Height Alternative (Proposed GPA/Rezoning without Modifications to Development Standards).
- Alternative 3: Reduced Density Alternative (GPA/Rezoning to Res 12.3/DR-12.3 without Modifications to Development Standards).

In accordance with CEQA Guidelines Section 15126.6, these were selected to provide a reasonable range of alternatives that could feasibly accomplish most of the project's basic objectives (as listed in Section 2.0 Project Description) and avoid or substantially lessen one or more of the project's significant effects (as identified in Sections 4.1 through 4.12 of this EIR).

It is noted that the alternatives assessed in this section do not include an off-site alternative. The proposed project's objective is to increase the value of the project site property, which is an existing land holding of the OUSD. As such, an off-site alternative is not further considered in this analysis.

Sections 6.1 through 6.3 describe each of the selected alternatives and provide a comparative analysis for each issue. The analysis focuses on the extent to which the alternative would reduce or avoid the project's impacts. Section 6.4 provides a summary table and identifies the environmentally superior alternative.

The OCP EIR assessed No Project, Low Buildout, and High Buildout alternatives pertaining to the entirety of Key Site 17. This analysis focuses on alternatives pertaining to the portion of Key Site 17 that comprises the proposed project site.

### 7.1 ALTERNATIVE 1: NO PROJECT ALTERNATIVE (DEVELOPMENT OF THE SITE UNDER THE EXISTING GENERAL PLAN DESIGNATION AND ZONING)

CEQA Guidelines Section 15126.6(e)(3)(A) state, "When the project is the revision of an existing land use or regulatory plan, policy or ongoing operation, the "no project" alternative will be the continuation of the existing plan, policy or operation into the future. Typically this is a situation where other projects initiated under the existing plan will continue while the new plan is developed. Thus, the projected impacts of the proposed plan or alternative plans would be compared to the impacts that would occur under the existing plan."

Accordingly, the No Project Alternative assumes that the project site is developed in accordance with the site's existing General Plan land use designation, Res 8.0, and its existing SLP zoning. A land use designation of Res 8.0 allows for the development of 8 single-family residential units per acre. As such, under this alternative the maximum number of units that could be built on the site (9.53 acres) is 77.

#### 7.1.1 Aesthetics/Visual Resources

This alternative would result in the same impact as the proposed project with regard to the potential loss of two existing oak trees along the site's northern border. This impact is considered a less than significant impact due to an existing OCP development standard that assures future development would be required

to (1) avoid damage to these trees to the maximum extent feasible, and (2) replace these trees if removal cannot be avoided.

With regard to visual character/compatibility impacts, this alternative would result in impacts similar to those of the proposed project in that it would change the character of the site by replacing open land with residential development, develop facilities that if unmaintained would degrade the visual character of the area, and result in potential incompatibility impacts if the architectural styles of the homes developed at the site are not consistent with the character of Old Town Orcutt. However, this alternative would reduce the degree of these impacts because the types of structures that would be built on the site (single-family homes), as well as their lot sizes, would be similar to the single-family homes and lots sizes that currently exist in the Old Town area to the north of the site. Although impacts would be reduced, they would not be reduced to less than significant levels. As such, significant unmitigable impacts would remain with regard to changing the character of the site and its compatibility with Old Town Orcutt.

Significant unmitigable view impacts would remain under this alternative because the introduction of one- or two-story homes would block views of the Casmalia and Solomon Hills. However, the severity of this impact would be less than that of the proposed project because the building heights would be lower (building heights in the SLP zone are restricted to 25 feet as compared to 35-foot heights allowed in the proposed DR-20 zone) and smaller structures may allow for greater availability of views between buildings.

This alternative would reduce potential night lighting impacts as compared to the proposed project because single-family residences would likely require less nighttime lighting than a senior housing complex. With adherence to OCP development standards, night lighting impacts under this alternative would be less than significant, as with the proposed project.

### **7.1.2 Air Quality**

This alternative would result in the potential for dust and PM-10 impacts during future construction at the site, as is expected under the proposed project. However, to the extent that grading and/or other ground disturbing activities for this alternative may be less under this alternative as compared to the proposed project, dust/PM-10 impacts would be reduced. Under the proposed project and this alternative, these impacts would be less than significant given required implementation of dust control measures. This alternative may similarly reduce the project's less than significant impacts generated by construction equipment emissions.

This alternative would result in the potential for fewer residential units to be developed at the site with the development of single-family housing rather than senior housing units. The trip generation and number of vehicle miles travelled may or may not decrease, depending on the type of senior housing units assumed under the proposed project. The number of trips generated by 77 single-family homes would total about 737 trips per day based on a generation rate of about 10 trips per day. Trip generation rates for senior housing varies depending on the type of senior housing provided, from 2.15 to 3.71 trips per day. The total daily trips generated by 257 units would range from 553 to 953. It is noted that average trip lengths for single-family housing are typically longer than those generated by senior housing since the residents of single-family housing generate commuting home-to-work trips. –This alternative is not expected to result in significant vehicular emissions, however, a definitive conclusion with regard to whether or not vehicle miles travelled and associated operational vehicular air emission would be reduced or increased cannot be made.

Health risks associated with this alternative would be less than significant, as expected under the proposed project, with the exception that fewer residents would occupy the site.

### **7.1.3 Biological Resources**

Development of the project site with single-family residences under this alternative is anticipated to result in the removal of all on-site vegetation, as is expected under the proposed project. It would result in similar less than significant impacts with respect to vegetation removal, the potential removal of two coast live oak trees, the introduction of invasive species, sensitive wildlife and wildlife movement, and similar significant but mitigable impacts on nesting birds during construction and water quality impacts on habitats in Pine Canyon Creek. It would also result in similar less than significant night lighting impacts, however the need for night lighting may be reduced for single-family housing as compared to a senior housing facility, and as such, the degree of associated impacts may be less.

### **7.1.4 Cultural Resources**

Similar to the proposed project, this alternative would result in the potential for impacts to archaeological resources during surface and subsurface grading. This alternative would likely involve less grading and subsurface disturbance than the proposed project and therefore may reduce the associated potential for impacts on archaeological resources. However, as with the proposed project, these impacts would be less than significant given Santa Barbara County's Standard Conditions of Approval that require work stoppage or redirect work immediately in the event archaeological remains are encountered during grading, construction, landscaping, or other construction-related activity.

### **7.1.5 Geology/Soils**

Grading and construction activities would be less extensive under this alternative as compared to the proposed project, and therefore associated erosion impacts would be reduced. However, under either the proposed project or this alternative, implementation of OCP development standards would assure that this impact would be reduced to a less than significant level.

Potential impacts associated with the possible location of a fault near the project site would occur under this alternative, however it would be reduced to the extent that fewer people would be housed in proximity to this fault. As with the project, this impact is considered less than significant given OCP Development Standards GEO-O-1.1 and GEO-O-1.2. These would assure that the location of the Orcutt Frontal relative to the project site is determined through a fault study conducted by a Registered Geologist or Certified Engineering Geologist and that new construction shall be set back a minimum of 50 feet from all known active or potentially active faults.

### **7.1.6 Hazards and Hazardous Materials**

The potential exposure to hazardous materials from on-site dumping/storage, the adjacent OUSD Hazardous Materials Business Plan site, and/or natural radon gas emissions that would occur under the proposed project would also occur under this alternative. This impact may be slightly reduced with fewer occupants at the site, however it would still be significant but mitigable.

### **7.1.7 Flood/Water Quality**

Proposed development of the site under this alternative would result in increased stormwater runoff from the site due to the introduction of impervious surfaces (roofs, roadways, parking facilities, etc.). As with the proposed project, existing OCP development standards would prevent significant surface drainage and flooding impacts. Potential significant water quality impacts would occur during construction and

operation but would be mitigated. This alternative would reduce potential flooding and water quality impacts if it results in a smaller area covered with impermeable surfaces, if fewer vehicles were parked at the site, or less area was landscaped with herbicides and fertilizers. However, such parameters cannot be determined at this point, and therefore a definitive conclusion with regard to whether or not this alternative would reduce or increase these impacts cannot be made.

### 7.1.8 Noise

Construction noise associated with development under this alternative may be reduced given the likely need for less extensive and less intensive construction activity. As with the proposed project, these impacts would be less than significant with implementation of OCP development standards for Key Site 17.

Operational noise impacts associated with project-generated trips would remain less than significant. However, given that the changes in daily trip generation rates cannot be determined (as discussed above under air quality), the change in off-site vehicular noise generation cannot be determined. This alternative would result in a similar potential for significant but mitigable noise nuisance impacts resulting from the juxtaposition of residences on a site adjacent to a bus maintenance and storage yard. This impact may be reduced under this alternative to the extent that fewer residents may be exposed to this nuisance.

### 7.1.9 Public Services

Under this alternative, 77 single-family homes would be developed on the site, generating a population of approximately 220 (2.87 residents per unit x 77 units). The proposed project would generate a population of about 385 (1.5 people per unit x 257 units). This alternative's reduced residential population would reduce the project's less than significant impacts related to fire protection, healthcare, wastewater treatment, and water supply.

### 7.1.10 Recreation

The introduction of additional population at the project site would increase the use of existing recreational facilities and demand for new facilities. As compared to the proposed project, the No Project Alternative would reduce the residential population at the site from 385 to 220. This would reduce the project's less than significant impacts associated with demand for recreational facilities. With regard to the specific need for neighborhood facilities and the OCP identification of a neighborhood park on the project site, this alternative would not involve changes to the OCP development standards that call for a park along Soares Avenue, in the northwest corner of the site. As such, it is assumed that under this alternative a neighborhood park would be provided as planned in the OCP. This would avoid the project's significant unmitigable impact related to its request to modify the on-site park requirement.

### 7.1.11 Transportation/Circulation

Under this alternative, the maximum number of units that could be built under is 77 single-family residential units. **Table 7.1-1** compares No Project trip generation estimates to the trip generation estimates developed for the project. As shown, developing the site with 77 single-family residential units would generate 737 ADT, with 78 trips occurring during the PM peak hour. The daily traffic that would be generated under the No Project scenario (737 ADT) falls within the range of estimates for the various senior housing types that could be developed under the proposed project. The peak hour estimates that would be generated under the No Project Alternative (78 PM trips) would be higher than the range of estimates for the various senior housing types that could be developed under the proposed project. Therefore, this alternative would increase

potential traffic impacts. However, given existing traffic conditions and the magnitude of potential traffic generation, these impacts would still be less than significant.

**Table 7.1-1  
No Project Trip Generation**

Scenario/ITE Land Use Category	Size	ADT		P.M. Peak	
		Rate	Trips	Rate	Trips
<b>No Project</b>					
Single Family Detached Housing	77 Units	9.57	737	1.01	78
<b>Proposed Project</b>					
Continuing Care Retirement Community	257 Units	2.81	722	0.29	75
Assisted Living	257 Units	2.74	704	0.29	75
Congregate Care Facility	257 Units	2.15	553	0.19	44
Senior Adult Housing (Attached)	257 Units	3.48	894	0.16	41
Senior Adult Housing (Detached)	257 Units	3.71	953	0.27	69

### 7.1.12 Greenhouse Gas Emissions/Global Climate Change

This alternative would decrease the number of units that would be developed at the site and would result in the development of single-family units rather than senior housing units. The County's interim guidelines assigns GHG emissions associated with electricity and natural gas consumption for residential uses on a per unit basis regardless of unit type or size. Using this methodology, fewer units may decrease the estimated GHG emissions associated with energy consumption. However, as described above, given the various trip generation rates for different types of senior housing and the uncertainty as to which type of senior housing would be developed as a result of the proposed project, the difference in vehicle miles travelled under this alternative as compared to the proposed project is not known. Therefore, associated changes in vehicular GHG emissions cannot be determined.

## 7.2 ALTERNATIVE 2: PROPOSED GPA/REZONING WITHOUT MODIFICATIONS TO DEVELOPMENT STANDARDS

The proposed project includes a request to modify certain development standards pertaining to the project site (OCP DevStd KS17-1, DevStd KS17-2, and DevStd KS17-3) in addition to the requested amendment to the site's General Plan land use designation and rezoning. Under this alternative, the project site's land use designation would be amended to Res 20 and it would be rezoned to DR 20, consistent with the proposed project. However, the OCP development standards would remain in effect without revision. This would retain: the requirement to locate the on-site public park along the ~~north~~south side of Soares Avenue; the limitation of homes adjacent to the park, along Soares Avenue, and along Rice Ranch Road to one-story; and a maximum of two stories at other buildings on the site.



### **7.2.1 Aesthetics/Visual Resources**

This alternative would result in the same impact as the proposed project with regard to the potential loss of two existing oak trees along the site's northern border. This impact is considered a less than significant impact due to an existing OCP development standard that assures future development would be required to (1) avoid damage to these trees to the maximum extent feasible, and (2) replace these trees if removal cannot be avoided.

With regard to visual character/compatibility impacts, this alternative would result in impacts similar to those of the proposed project in that it would change the character of the site by replacing open land with a senior housing development, develop facilities that if unmaintained would degrade the visual character of the area, and result in potential incompatibility impacts if the architectural style of the development is not consistent with the character Old Town Orcutt. However, this alternative would reduce the degree of these impacts because the maximum number of stories would be reduced to two (as compared to three stories allowed under the proposed project) and structures along Rice Ranch Road and along a park to be located along Soares Avenue would be restricted to one story. Although impacts would be reduced, they would not be reduced to less than significant levels. As such, significant unmitigable impacts would remain with regard to changing the character of the site and its compatibility with Old Town Orcutt.

Significant unmitigable view impacts would remain under this alternative because the introduction of one- or two-story structures would block views of the Casmalia and Solomon Hills. However, the severity of this impact would be less than that of the proposed project because the buildings would be restricted to two stories.

This alternative may slightly reduce potential night lighting impacts as compared to the proposed project because buildings (and associated lighting) would not be as high, particularly along Soares Avenue. However, this alternative may increase lighting along Soares Avenue associated with the park. Overall, as with the proposed project, adherence to OCP development standards would assure that night lighting impacts under this alternative would be less than significant.

### **7.2.2 Air Quality**

Development of the site under this alternative would be similar to development anticipated under the proposed project. Therefore, its construction-period dust/PM-10 impacts and equipment emissions impacts would be similar to the impacts expected with the proposed project and less than significant.

This alternative would result in the development of the same number of senior housing units as the proposed project, and therefore would result in the same trip generation, vehicle miles travelled, and associated vehicular emissions. Operational air emissions and potential health risks would be less than significant for the proposed project and this alternative.

### **7.2.3 Biological Resources**

This alternative is anticipated to result in the removal of all on-site vegetation, as is expected under the proposed project. It would result in similar less than significant impacts with respect to vegetation removal, the potential removal of two coast live oak trees, the introduction of invasive species, sensitive wildlife and wildlife movement, and similar significant but mitigable impacts on nesting birds during construction and water quality impacts on habitats in Pine Canyon Creek. It would also result in similar less than significant night lighting impacts, however the limitation of buildings to two stories may slightly decrease the heights of night lighting sources at the site.

### **7.2.4 Cultural Resources**

This alternative would involve a similar amount of grading and extent of subsurface disturbance as the proposed project and therefore would result in similar potential for impacts on archaeological resources. As with the proposed project, these impacts would be less than significant given Santa Barbara County's Standard Conditions of Approval that require work stoppage or redirect work immediately in the event archaeological remains are encountered during grading, construction, landscaping, or other construction-related activity.

### **7.2.5 Geology/Soils**

This alternative would involve a similar amount of grading and surface disturbance as the proposed project, and therefore would result in similar (less than significant) erosion impacts. It would also result in the same less than significant impact associated with the possible location of a fault near the site as was identified for the proposed project.

### **7.2.6 Hazards and Hazardous Materials**

Hazardous materials impacts under this alternative would be the same as expected with the proposed project. Both would result in a potentially significant but mitigable impact associated with exposure to hazardous materials from on-site dumping/storage, the adjacent OUSD Hazardous Materials Business Plan site, and/or natural radon gas emissions.

### **7.2.7 Flood/Water Quality**

This alternative would result in a similar amount of impermeable surfaces and introduce a similar level of urban activity at the site as the proposed project. As such, potential flooding and water quality impacts associated with this alternative would be the same as expected for the proposed project (less than significant surface drainage/flooding impacts and significant but mitigable water quality impacts).

### **7.2.8 Noise**

This alternative would result in the same construction activities and therefore the same construction-period noise impacts as the proposed project. These impacts would be less than significant given OCP development standards.

This alternative would not affect the anticipated trip generation at the site and therefore operational noise impacts would be the same as those expected to occur with the proposed project (less than significant). As with the proposed project, this alternative would result in the potential for significant but mitigable noise nuisance impacts resulting from the juxtaposition of residences on a site adjacent to a bus maintenance and storage yard.

### **7.2.9 Public Services**

This alternative would result in the same population generation as the proposed project. Therefore, its impacts related to fire protection, healthcare, wastewater treatment, and water supply would be the same as those resulting from the proposed project (less than significant).

### **7.2.10 Recreation**

The on-site population generated by this alternative would be the same as the proposed project's population because the number and type of residential units would be the same. Therefore, impacts

associated with increased use of existing recreational facilities and demand for new recreational facilities would be the same (less than significant). However, with regard to the specific need for neighborhood facilities and the OCP identification of a neighborhood park on the project site, this alternative would not involve changes to the OCP development standards that call for a park along Soares Avenue, in the northwest corner of the site. As such, under this alternative a neighborhood park would be provided as planned in the OCP. This alternative would avoid the project's significant unmitigable impact related to its request to revise the on-site park requirement.

### **7.2.11 Transportation/Circulation**

This alternative would result in the same transportation/circulation impacts as the proposed project because it would not change the number or type of residential units that would be developed at the site.

### **7.2.12 Greenhouse Gas Emissions/Global Climate Change**

This alternative would result in the development of the same number and type of residential units as the proposed project. Therefore, it would generate the same quantity of GHG emissions, which is considered a less than significant impact under the County's interim thresholds of the significance.

## **7.3 ALTERNATIVE 3: REDUCED DENSITY ALTERNATIVE (GPA/REZONING TO RES 12.3/DR-12.3 WITHOUT MODIFICATIONS TO DEVELOPMENT STANDARDS)**

Under this alternative, the site's General Plan land use designation would be changed to Res 12.3 and its zoning would be changed to DR-12.3. The site would be developed with a 100 percent senior housing project. With this General Plan designation/zoning and a 35 percent density bonus, up to 158 residential units could be built at the site (9.53 acres x 12.3 units per acre x 1.35). In addition, the OCP development standards would remain in effect without revision, as described above for Alternative 2.

### **7.3.1 Aesthetics/Visual Resources**

This alternative would result in the same impact as the proposed project with regard to the potential loss of two existing oak trees along the site's northern border. This impact is considered a less than significant impact due to an existing OCP development standard that assures future development would be required to (1) avoid damage to these trees to the maximum extent feasible, and (2) replace these trees if removal cannot be avoided.

With regard to visual character/compatibility impacts, this alternative would result in impacts similar to those of the proposed project in that it would change the character of the site by replacing open land with a senior housing development, develop facilities that if unmaintained would degrade the visual character of the area, and result in potential incompatibility impacts if the architectural style of the development is not consistent with the character of Old Town Orcutt. However, this alternative would reduce the degree of these impacts because the maximum number of stories would be reduced to two (as compared to three stories allowed under the proposed project) and structures along Rice Ranch Road and along a park to be located along Soares Avenue would be restricted to one story. In addition, the development of fewer units is expected to reduce the size of on-site buildings. Although impacts would be reduced, they would not be reduced to less than significant levels. As such, significant unmitigable impacts would remain with regard to changing the character of the site and its compatibility with Old Town Orcutt.

Significant unmitigable view impacts would remain under this alternative because the introduction of one- or two-story structures would block views of the Casmalia and Solomon Hills. However, the

severity of this impact would be less than that of the proposed project because the buildings would be restricted to two stories and would likely be smaller.

This alternative may slightly reduce potential night lighting impacts as compared to the proposed project because buildings (and associated lighting) would be smaller and less tall, particularly along Soares Avenue. However, this alternative may increase lighting along Soares Avenue associated with the park. Overall, as with the proposed project, adherence to OCP development standards, would assure that night lighting impacts under this alternative would be less than significant.

### **7.3.2 Air Quality**

Although this alternative may result in the development of smaller buildings, the need to grade the entire site is still expected. Therefore construction-period dust/PM-10 impacts resulting from this alternative are expected to be similar to those resulting from the proposed project. Daily construction equipment emissions impacts would be similar to those expected with the proposed project, but would likely extend for a shorter duration. Overall, this alternative may slightly reduce the project's less than significant construction-period air quality impacts.

This alternative would result in the development of fewer senior housing units than the proposed project, and therefore would reduce trip generation, vehicle miles travelled, and associated vehicular emissions. This would reduce the project's less than significant operational air emissions.

Health risks associated with this alternative would be less than significant, as expected under the proposed project.

### **7.3.3 Biological Resources**

This alternative is anticipated to result in the removal of all on-site vegetation, as is expected under the proposed project. It would result in similar less than significant impacts with respect to vegetation removal, the potential removal of two coast live oak trees, the introduction of invasive species, sensitive wildlife and wildlife movement, and similar significant but mitigable impacts on nesting birds during construction and water quality impacts on habitats in Pine Canyon Creek. It would also result in similar less than significant night lighting impacts, however the limitation of buildings to two stories may slightly decrease the heights of night lighting sources at the site.

### **7.3.4 Cultural Resources**

This alternative would involve a similar amount of grading and extent of subsurface disturbance as the proposed project and therefore would result in similar potential for impacts on archaeological resources. As with the proposed project, these impacts would be less than significant given Santa Barbara County's Standard Conditions of Approval that require work stoppage or redirect work immediately in the event archaeological remains are encountered during grading, construction, landscaping, or other construction-related activity.

### **7.3.5 Geology/Soils**

This alternative would involve a similar amount of grading and surface disturbance as the proposed project, and therefore would result in similar (less than significant) erosion impacts. It would also result in a less than significant impact associated with the possible location of a fault near the project site, as was identified for the proposed project. However, this impact would be reduced to the extent that fewer people would be housed in proximity to this fault.

### **7.3.6 Hazards and Hazardous Materials**

The potential exposure to hazardous materials from on-site dumping/storage, the adjacent OUSD Hazardous Materials Business Plan site, and/or natural radon gas emissions that would occur under the proposed project would also occur under this alternative. This impact may be slightly reduced with fewer occupants at the site, however it would still be significant but mitigable.

### **7.3.7 Flood/Water Quality**

Flood and water quality impacts under this alternative are expected to be similar to the proposed project's impacts because development at the site would be similar. However, to the extent that this alternative results in a smaller area of impermeable surfaces and/or introduces a lower level of urban activity at the site than the proposed project, it may reduce flooding and/or water quality impacts. Regardless, surface drainage/flooding impacts would remain less than significant and water quality impacts would remain significant but mitigable under this alternative.

### **7.3.8 Noise**

Construction noise associated with development under this alternative may be reduced given the likely need for less extensive and intensive construction activity. As with the proposed project, these impacts would be less than significant with implementation of OCP development standards.

This alternative would reduce trip generation at the site as compared to the proposed project, and therefore the project's less than significant operational noise impacts would be reduced accordingly. As with the proposed project, this alternative would result in the potential for significant but mitigable noise nuisance impacts resulting from the juxtaposition of residences on a site adjacent to a bus maintenance and storage yard. This impact may be reduced under this alternative to the extent that fewer residents may be exposed to this nuisance.

### **7.3.9 Public Services**

Under this alternative, 158 senior housing units could be built at the site, generating a population of approximately 237 people (1.5 residents per unit x 158 units). The proposed project would generate a population of about 385 (1.5 people per unit x 257 units). This alternative's reduced residential population would reduce the project's less than significant impacts related to fire protection, healthcare, wastewater treatment, and water supply.

### **7.3.10 Recreation**

The on-site population generated by this alternative would be lower than the proposed project's population because fewer senior housing units would be permitted. Therefore, the project's less than significant impacts associated with increased use of existing recreational facilities and demand for new recreational facilities would be reduced. In addition, with regard to the specific need for neighborhood facilities and the OCP identification of a neighborhood park on the project site, this alternative would not involve changes to the OCP development standards that call for a park along Soares Avenue, in the northwest corner of the site. As such, under this alternative a neighborhood park would be provided as planned in the OCP. This alternative would avoid the project's significant unmitigable impact related to its request to revise the on-site park requirement.

### 7.3.11 Transportation/Circulation

This alternative would reduce the project's less than significant transportation/circulation impacts because it would reduce the number of residential units that would be developed at the site, which would reduce the number of vehicle trips generated.

### 7.3.12 Greenhouse Gas Emissions/Global Climate Change

This alternative would result in the development of fewer residential units than the proposed project. Therefore, it would reduce the project's less than significant GHG impacts.

## 7.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

**Table 7.4-1** summarizes the conclusions of the above alternatives analysis. Based on this analysis, Alternative 1 (the No Project Alternative) is the environmentally superior alternative. Under this alternative, up to 77 single-family homes could be built on the site and future development of the site would be subject to the existing development standards as set forth in the Orcutt Community Plan. This alternative would reduce the density of development at the site, be more in keeping with the character of the residential neighborhood north of the site, and would reduce population at the site as compared to the proposed project. This alternative would result in reduced impacts as compared to the proposed project in the areas of aesthetics, air quality, biological resources (night lighting), cultural resources, geology/soils, hazards and hazardous materials, construction-period noise, public services, and recreation. The No Project Alternative would reduce the project's significant impacts, but not to less than significant levels, with the exception of recreation. Keeping the requirement for a park along Soares Avenue adjacent to the Stonegate park would avoid the project's significant unmitigable impact related to neighborhood park provision. This alternative would increase traffic impacts because it would generate a greater number of trips during peak traffic periods. However, traffic impacts would remain less than significant. In addition, this alternative would not fulfill the County's policy to meet the growing demand for senior housing.

In accordance with CEQA Guidelines Section 15126 (e)(2), if the environmentally superior alternative is the No Project Alternative, then an environmentally superior alternative among the other alternatives must be identified. The environmentally superior alternative among the other alternatives is Alternative 3 (Reduced Density Alternative). This alternative would reduce the number of senior housing units that could be constructed at the site and would keep the existing development standards with regard to the on-site park location and building heights. It would result in reduced impacts as compared to the proposed project in the areas of aesthetics, air quality (fewer vehicle emissions), geology/soils, hazards and hazardous materials, surface drainage/flooding, noise, public services, recreation, traffic (fewer vehicle trips), and greenhouse gas emissions. This alternative would reduce the project's significant impacts, but not to less than significant levels, with the exception of recreation. Keeping the requirement for a park along Soares Avenue adjacent to the Stonegate park would avoid the project's significant unmitigable impact related to neighborhood park provision. However, the provision of fewer senior housing units under this alternative would not fulfill the County's policy to meet the growing demand for senior housing to the same extent as the proposed project.

Although Alternative 2 would not reduce impacts associated with the site's population, it would result in impact reductions similar to those expected under Alternative 3 with regard to maintaining the existing development standards (including avoidance of the project's significant unmitigable impact related to neighborhood park provision) and it would fulfill the County's policy with regard to the provision of senior housing to the same extent as the proposed project.

**Table 7.4-1**  
**Alternatives Analysis Summary**

Impact Issue	Proposed Project	Alternative 1 No Project	Alternative 2 No Development Standard Modifications	Alternative 3 Reduced Density
<b>Aesthetics/Visual Resources</b>				
Visual Resources	III	III (=)	III (=)	III (=)
Character/Compatibility	I	I (-)	I (-)	I (-)
Scenic Views	I	I (-)	I (-)	I (-)
Light and Glare	III	III (-)	III (-)	III (-)
<b>Air Quality</b>				
Construction-Period Dust	III	III (-)	III (=)	III (=)
Construction-Period Exhaust Emissions	III	III (-)	III (=)	III (-)
Operational Vehicular Emissions	III	III (U)	III (=)	III (-)
Operational Health Risk	III	III (-)	III (=)	III (-)
Air Quality Planning Consistency	III	--	III (=)	III (-)
<b>Biological Resources</b>				
Protected Trees	III	III (=)	III (=)	III (=)
Exterior Night Lighting	III	III (-)	III (-)	III (-)
Nesting Birds	II	II (=)	II (=)	II (=)
Invasive Plant Species	III	III (=)	III (=)	III (=)
Water Quality	II	II (=)	II (=)	II (=)
<b>Cultural Resources</b>				
	III	III (-)	III (=)	III (=)
<b>Geology/Soils</b>				
Erosion	III	III (-)	III (=)	III (=)
Fault Rupture	III	III (-)	III (=)	III (-)
<b>Hazards and Hazardous Materials</b>				
	II	II (-)	II (=)	II (-)
<b>Flood/Water Quality</b>				
Surface Drainage/Flooding	III	III (U)	III (=)	III (-)
Water Quality	II	II (U)	II (=)	II (-)
<b>Noise</b>				
Construction Noise	III	III (-)	III (=)	III (-)
Operational Noise Generation	III	III (U)	III (=)	III (-)
Operational Noise Nuisance	II	II (=)	II (=)	II (=)
<b>Public Services</b>				
Fire Protection	III	III (-)	III (=)	III (-)
Health Care	III	III (-)	III (=)	III (-)
Wastewater Treatment	III	III (-)	III (=)	III (-)
Water Supply	III	III (-)	III (=)	III (-)
<b>Recreation</b>				
Increased Use of and Demand for Recreational Facilities	III	III (-)	III (=)	III (-)
Increased Need for Neighborhood Parks	I	III	III	III
<b>Transportation/Circulation</b>				
	III	III (+)	III (=)	III (-)
<b>Greenhouse Gas Emissions/Global Climate Change</b>				
	III	III (U)	III (=)	III (-)
-- - No impact. (+) - The impact is greater than the proposed project. (-) - The impact is less than the proposed project. (=) - The impact is similar to the proposed project. (U) - A determination cannot be made.				



# Growth Inducing Impacts

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# SECTION 8

## 8.0 GROWTH INDUCING IMPACTS

Section 15126.2(d) of the CEQA Guidelines requires that an EIR discuss the “ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a waste water treatment plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively.” Section 15126.2(d) also states, “It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.”

The proposed General Plan Amendment (GPA) and Rezone would increase the site’s development potential (from 77 single-family homes to 257 senior housing units). To the extent that this GPA/Rezone makes the site’s development a more attractive investment to real estate developers, it may induce growth at the site. This EIR assesses the impacts of potential future development at the site under the GPA/Rezone. The potential for growth inducement in areas surrounding the site is described below.

The project site is currently undeveloped but within an area planned for development of residential uses and surrounded for the most part by residential and institutional uses. As such, the project would not induce growth by extending development outside of urban boundaries. Similarly, the project site is located in an area served by existing infrastructure; development of the site would not remove an obstacle to growth or otherwise allow for additional development in surrounding areas.

However, the project’s residential population (and potentially employees, depending on the type of senior housing provided) would contribute to economic growth of the area by increasing demand for residential-oriented commercial uses (e.g., retail services). If future development of the project site includes employees, the project could also increase the demand for housing within a short commuting distance of the site. Population growth at the site under the proposed project is estimated at 385 new residents (based on 1.5 people per unit). The population of the Orcutt community and surrounding unincorporated Santa Maria Valley area is estimated at 35,000 persons.<sup>1</sup> The project’s population represents a marginal increase (1.1 %) above the existing population of the area and as such is not expected to result in substantial growth inducement.

The project’s population would also tax existing community facilities and incrementally contribute to the need for additional facilities to serve the population within the Orcutt area, as discussed in Sections 4.9 and 4.10 of this EIR. The impacts associated with the project’s increased demand for community facilities is expected to be less than significant, with the exception of the project’s impacts related to the provision of a neighborhood park.

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<sup>1</sup> Santa Barbara County Regional Growth Forecast 2005-2040, Santa Barbara County Association of Governments, August 2007.

The OCP EIR (Section 7.0) identifies the OCP as a growth-inducing plan. The proposed project would contribute to this, and to the extent that the project allows for a greater population at the site as compared to the existing OCP, it would increase the growth inducement potential. The project would generate 180 additional units (257 units as compared to 77 units without the GPA/Rezone). The increase in residential units anticipated under the OCP is more than 6,300 by full buildout. Therefore, the proposed project would increase the number of units that could be built under the OCP by about 2.9 percent.

Based on the above, the proposed project is not expected to result in significant growth inducement impacts.

# Significant Irreversible Environmental Changes

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# SECTION 9

## 9.0 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

Section 15126.2(c) of the CEQA Guidelines requires a discussion of any significant irreversible environmental changes that would be caused by the proposed project. Specifically, Section 15126.2(c) states: “Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible, since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.”

Generally, a project would result in significant irreversible environmental changes if:

- The primary and secondary impacts would generally commit future generations to similar uses;
- The project would involve a large commitment of nonrenewable resources;
- The project involves uses in which irreversible damage could result from any potential environmental accidents associated with the project; or
- The proposed consumption of resources is not justified (e.g., the project involves the wasteful use of energy).

The OCP EIR (Section 8.0) acknowledges that future residential and commercial growth in Orcutt under the OCP would constitute an irreversible commitment of non-renewable resources during both the construction and operation phases. Irreversible changes to the environment during the construction and operation phases include air quality degradation, and consumption of non-renewable natural resources such as petroleum products for fuel, lumber, water, and aggregate materials. In addition, as individual developments occur, there would be the irreversible loss of open space and wildlife/native plant habitat, agriculturally viable soils, further degradation of the ambient air quality, and increased degradation in ambient noise levels. Although these resource commitments and environmental changes will occur gradually, their combined loss can be considered significant and irreversible.

Future development at the project site under the proposed GPA/Rezone would commit the project site to residential development. Although such development could be reversed, it would likely commit future generations to such use and therefore would be considered an irreversible change. The project would also result in the irreversible changes identified in the OCP EIR, with the exception of the loss of agriculturally viable soils. The proposed project would not result in irreversible changes beyond those identified in the OCP EIR.

# Response to Comments

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# SECTION 10

## 10.0 RESPONSE TO COMMENTS RECEIVED ON THE MAY 2011 DEIR

This section provides written responses to all comments received on the Draft EIR during its public review period from May 19, 2011 through July 5, 2011. Comments were received in the form of letters and testimony at the public hearing on the Draft EIR (held on June 29, 2011). The letters are numbered chronologically according to their date.

1. Lillian Smith, 05/26/11
2. Lillian Smith, 05/30/11
3. Santa Barbara County Air Pollution Control District, Carly Wilburton, June 22, 2011
4. Lillian Smith, June 28, 2011
5. California Department of Transportation, Chris Shaeffer, Development Review, June 30, 2011
6. Oasis Associates, C.M. Florence, AICP Agent, Orcutt Union School District, July 5, 2011

Each of these letters with numbered comments corresponding to the responses below is provided at the end of this section.

Opportunity for public to comment on the draft Subsequent EIR was provided at the Public Hearing held on June 29, 2011. Verbal comments were received from the hearing audience, including Lillian Smith, a member of the public, and C.M. Florence, AICP, agent for the applicant. Each of these individuals provided written comment letters, Letters 1 and 2, respectively (as itemized above). The verbal hearing comments were reiterations of the comments provided in writing in each case. As such, the responses to written comments provided below are inclusive of the responses to verbal testimony.

### 10.1 INDIVIDUAL RESPONSES TO COMMENTS RECEIVED ON THE MAY 2011 DEIR

This section provides a response to each comment received on the May 2011 Subsequent DEIR. Each comment letter is reproduced with comment numbering added, followed by corresponding itemized responses to each comment.

#### 10.1.1 Lillian Smith, May 26, 2011

- 1-1 As described in this Subsequent DEIR, the project's proposal to provide on-site park acreage does not specify where those acres would be located within the project site; and therefore, could potentially be located in an area that is not contiguous with the existing park site within the adjacent Stonegate development. Since the project requests to eliminate the "contiguous" requirement, there are no mitigation measures available to reduce the impact to recreation, as described in Section 4.10 *Recreation* and included in the Executive Summary table as noted by the commenter. The Subsequent DEIR correctly characterizes this impact as Significant and Unavoidable, for which a Statement of Overriding Considerations (See CEQA 2011 Statute & Guidelines Sec. 15093) must be made as part of this Final Subsequent EIR that will be considered by the County Planning Commission.

The commenter references [California] Government Code Section 66474(g) *Findings: grounds for denial*. This portion of the Code provides:

*A legislative body of a city or county shall deny approval of a tentative map, or a parcel map for which a tentative map was not required, if it makes any of the following findings:*

*(g) That the design of the subdivision or the type of improvements will conflict with easements, acquired by the public at large, for access through or use of, property within the proposed subdivision. In this connection, the governing body may approve a map if it finds that alternate easements, for access or for use, will be provided, and that these will be substantially equivalent to ones previously acquired by the public. This subsection shall apply only to easements of record or to easements established by judgment of a court of competent jurisdiction and no authority is hereby granted to a legislative body to determine that the public at large has acquired easements for access through or use of property within the proposed subdivision*

The requirement to provide a soccer field on Assessor's Parcel No. 105-134-004 was based on a former Condition of Approval (Condition 23) of the Stonegate Ranch development. The project, requesting a General Plan Amendment and Rezone, does not include a request for a Tentative Map; therefore, this Code Section would not apply. Any such reference to the Code should have been considered at the time of approval of the Tentative Map for the Stonegate development. Furthermore, there is no easement recorded on the Parcel on behalf of the general public for a public soccer field, and absent such an easement, the elimination of Condition 23 would not have required "denial" of the Tentative Map as provided in Code Section 66474. In addition, the soccer field was to occur on the Orcutt Union School District owned parcel subject to an Agreement with the District. Any changes to the soccer field requirement would be processed separately as a modification to the recorded Tract Map and is not a part of this project.

- 1-2 Condition 23 of the Conditions of Approval for the adjacent Stonegate Ranch development requires the developer of the Stonegate project to construct and maintain a soccer field on Assessor's Parcel No. 105-134-004. Per this Condition, the soccer field was subject to agreement with the Orcutt Union School District. At that time it was anticipated that Orcutt Union School District would ultimately maintain the field for the long-term upon construction of the remainder parcels for its own District-related uses. The Orcutt Community Plan calls for a contiguous public park of 0.75 acre, and does not specify the development of a 96,000 square foot soccer field as referenced by the commenter. Any changes to the soccer field requirement would be processed separately as a modification to the recorded Tract Map and is not a part of this project.
- 1-3 The underlined text reference by the commenter is not specific revision language to Development Standard DevStd KS17-3. The underlining of this text was removed from Section 4.10.3.
- 1-4 The requirement for the development to provide a 0.75-acre sized public park is consistent with the 0.75-acre size specified in Development Standard DevStd KS17-3, and is not proposed for revision by the project. For response to the remainder of the comment, please refer to Responses 1-1 and 1-2, above.
- 1-5 The anticipated lease of the project site is provided in Section 2.8 *Project Objectives*, but is not an action itself that is included as a component of the "project" requiring environmental impact analysis according to CEQA. Although owned by the Orcutt Union School District, the project site does not currently contain a school site and is not currently zoned to allow a school site. It is zoned for single-family residential units. Furthermore, the Orcutt Union School District has determined that a school facility at this location is no longer feasible due an overall declining trend in enrollment within the District. Therefore, the project site does not meet the premise of Section 17486 of the California Education Code that requires a "schoolsite" be offered for sale or lease to public agencies for recreational purposes according to those priorities contained within the Code.



- 1-6 The purpose of this Subsequent EIR is to determine whether impacts of the project would exacerbate or add new previously unidentified impacts, and to add new or enhanced feasible mitigation that would further reduce impacts beyond the existing OCP policies, development standards, or mitigation measures. As the project site contains a limited number of trees on the perimeter, there is a potential that construction could impact nesting birds within the trees. Mitigation Measure BIO 1-1 specifies that surveys for nesting birds are to be conducted prior to initiating construction activities. The Subsequent EIR includes a Mitigation Monitoring and Reporting Plan (MMRP) that specifies the required timing within which the mitigation would be required to be implemented. In this case, the General Plan Amendment would be required prior to issuance of a Land Use Permit from the County Planning and Development Department. Upon approval of this project, the General Plan Amendment and related Mitigation Measure BIO 1-1 would be in effect and future development would be subject to this Mitigation.
- 1-7 As part of the Subsequent EIR Scoping process, it was determined that a “Land Use” Section of the EIR was not necessary, and as the commenter noted, the County does not include specific Land Use thresholds in its Thresholds Manual. However, the Subsequent EIR Section 5.0 includes a consistency analysis of the project impacts relative to all of the policies and development standards within the Orcutt Community Plan. This Section is essentially a “Land Use” policy consistency analysis that would be provided in “Land Use” section. Therefore, the policies and development standards considered in relation to the project goes well beyond those that apply only to Keysite 17, as stated by the commenter. The commenter’s opinion as to the “significant number of text revisions and addition[s]” to those items that apply specifically to Keysite 17, is not sufficient criteria from which to make a significance determination of an impact. The commenter should refer to the consistency analysis within Section 5.0 *Policy Consistency*, which considers the merits of the requested text revisions and additions relative to their consistency with the policies of the Orcutt Community Plan.
- 1-8 The commenter references Figure 4.1-9 “Height and Bulk Diagrams” and suggests Development Standard DevStd KS17-7 would not adequately mitigate for visual impacts. Figure 4.1-9 represents pre and post-project conditions as viewed from Rice Ranch Road looking north. The massing study conducted represents a worst-case scenario (i.e. without specific development proposal and County Board of Architectural Review (BAR) review) that could conceivably be developed based on zoning standards. Although, the study and the figure referenced show a worst case scenario, the northerly view from Rice Ranch Road and the view blocking effects of this study demonstrate there would be a less than significant impact (Class III), as there is not a significant scenic view to the north from this location and it is not recognized as a scenic view in the OCP. The “Height and Bulk Diagrams” for potential southerly views from Soares Avenue are shown in Figures 4.1-7 and 4.1-8. DEIR correctly characterizes this impact as Significant and Unavoidable (Pg. 1-8), for which a Statement of Overriding Considerations (See CEQA 2011 Statute & Guidelines Sec. 15093) must be made as part of this Final EIR document. At the time of a specific development proposal, the BAR will have an opportunity to review elevations and determine the adequacy in meeting DevStdKS17-7 and relative reduction in view impacts.

### 10.1.2 Lillian Smith, May 30, 2011

- 2-1 Section 1.5 *Areas of Public Controversy and Issues to be Resolved* of the Subsequent EIR was revised to include the issues raised in the commenter’s letter dated December 30, 2009 submitted at the Scoping Meeting. As requested issues added to this discussion include: recreation, the public transit system, air quality, land use, biological resources, and aesthetics. The recreation concern is inclusive of the reference to Condition 23 of the Stonegate Ranch development.

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- 2-2 Sections 1.0 *Executive Summary* and 7.0 *Alternatives* were revised to reflect that the public park would occur along the south side of Soares Avenue.

This commenter incorporated by reference, and included as an attachment, the aforementioned December 30, 2009 comment letter regarding the project's EIR Scoping Document. Responses to those comments regarding the Scoping Document are provided immediately below and in sequence with the above May 30, 2011 letter.

- 2-3 As described in Section 4.10 *Recreation*, based on a maximum development level of a 257-unit senior care facility with an average occupancy of 1.5 persons per unit, an estimated 385 persons would reside at the site.
- 2-4 Please see response to Comment 1-2 regarding the Stonegate Development's obligations to provide recreation facilities. At the time of the Scoping Document (essentially the Notice of Preparation), there was no easement on Parcel 105-134-004 and no such easement has since been recorded. Condition No. 23 of the Stonegate Ranch development had been deleted and the performance bonds exonerated at the time of the scoping process. Therefore, the Subsequent EIR correctly did not include the soccer field as part of the existing environmental conditions; and therefore, not an impact of the project.
- 2-5 All appropriate stakeholders to the park and recreation aspects of the project were provided opportunity to comment on the Subsequent EIR.
- 2-6 The Traffic and Circulation Study, included as Appendix F to the Subsequent EIR, identified street segments and intersections along Clark Avenue that warranted analysis based on anticipated traffic patterns of the project. The trip distribution modeling did not indicate that the project would generate traffic at the intersection of Clarke Avenue and Blosser Road. As such, the existing Level of Service and impact analysis of this intersection was not included in the Subsequent EIR.
- 2-7 Per Section 4.11 *Traffic and Circulation*, the intersection of Broadway and Clark Avenue operates at a LOS A under existing conditions and with project added traffic. Therefore, the impact was determined to be less than significant and no mitigation of the project is required.
- 2-8 As provided in Section 4.11 *Traffic and Circulation*, the Subsequent EIR determined that the project would increase demand for public transit; however, impacts would be less than significant. The stated requirements of KS 17-4 indicate that project development will coordinate with SMAT, and provision of a turn-out or bus stop would be at SMAT request. The Subsequent EIR also recognizes that retirement and assisted living communities routinely provide private bus transit services for their residents, which could reduce the impacts of the project.
- 2-9 Section 4.2 *Air Quality* addresses cumulative air quality impacts including ozone precursors, dust, and particulate matter, as required and found that all of these potential impacts would be less than significant.
- 2-10 As provided in Section 4.2 *Air Quality* evaluates impacts regarding Toxic Air Contaminant (TAC), which is the subject to Health and Safety Code Section 44360, and determined that exposure to toxic air contaminants would be less than significant.

2-11 Thresholds of significance from the County of Santa Barbara’s Environmental Thresholds and Guidelines Manual were used as the basis to determine the project level and cumulative air quality impacts of the project. The analysis determined that impacts would be less than significant for both project level and cumulative impacts. Should a future senior housing project contribute the maximum amount of traffic, depending on the level of care facility, it’s increase relative the existing single-family residential designation would be marginal, and would not require mitigation beyond the provisions of the County’s Clean Air Plan. As provided in Section 4.2.3, a screen analysis was conducted in accordance with the California Office of Environmental Health Hazard Assessment’s Air Toxic Hot Spots Program Risk Assessment Guidelines and found impacts to be less than significant under worst-case assumptions.

2-12 Pursuant to CEQA, a presumption based upon County thresholds that a project's impact is insignificant is rebutted if there is substantial evidence in light of the whole record before the lead agency that the project may have a significant impact on the environment. The commenter is encouraged to refer to Section 4.1 *Aesthetics/Visual Resources* for a discussion as to the impact as a result of the loss of open space, as the project would replace open space with development, which was found to be significant and unavoidable impact (Class I). No other significant impacts were identified in the Subsequent EIR process that would warrant a revision to the scope of the Subsequent EIR beyond the environmental issues addressed.

The commenter’s reference to the *Change in Environmental Circumstances* Section of the County’s Environmental Thresholds and Guidelines Manual is not applicable to this case. The referenced section of the Manual is designed to address criteria for an amendment to the County’s thresholds themselves. The commenter has not provided evidence to suggest that the County must amend its Manual as a result of the project.

2-13 The analysis of biological resources in this DEIR included an updated field investigation and biological survey of the project site by Envicom Corporation biologists in the spring 2010. No Central dune scrub was observed. As provide in Section 4.3 *Biological Resources*, compliance with the Federal Migratory Bird Treaty Act was discussed and potential impacts relative to nesting birds and compensatory mitigation is provided.

2-14 The Subsequent DEIR evaluates the project’s visual character/compatibility impacts based on a maximum development of 257 units, the equivalent of 37 units per acre. The maximum height that would be allowed by the Zoning standards was also evaluated. The commenter is encouraged to refer to Section 4.1 *Aesthetics/Visual Resources* for a detailed description of project impacts relative to neighborhood compatibility.

2-15 As provided in Section 4.1 *Aesthetics/Visual Resources*, the Subsequent EIR identified southerly view impacts of the Casmalia and Solomon Hills from Soares Avenue to be significant and unavoidable (Class I). Section 5.0 *Policy Consistency* provides a consistency analysis of the project with the applicable Policies of the OCP and determined that the project would be “potentially inconsistent” with Policy VIS-O-1.

The commenter referred to California Government Code Section 65915, which requires local governments to provide a density bonus for certain types of housing. Allowing the density bonus as required by state law, does not preclude an application for a project that could be potentially inconsistent with an OCP policy (e.g. VIS-O-1). If, in the future, a specific development proposal is made, the County decision makers will have an opportunity to review the project in greater detail to determine consistency with the Policies as designed. The Subsequent EIR assumes a

worst case scenario in accordance with what could be constructed per the existing Zoning Standards, and proposed changes to the Development standards, and Action Items, as they pertain to Keysite 17.

- 2-16 The Subsequent EIR estimates project water demand for the project based on water usage rates provided in the County of Santa Barbara Environmental Thresholds and Guidelines Manual 2008 (Table 8a, page 106 of the Manual).
- 2-17 Comment Noted. Any future sale or lease of the property would be subject to all applicable laws, including the Education Code, if applicable. Please also refer to Response to Comment No. 1-5, above.

### **10.1.3 SANTA BARBARA COUNTY AIR POLLUTION CONTROL DISTRICT, CARLY WILBURTON, JUNE 22, 2011**

- 3-1 The project is a general plan amendment and rezone of four parcels to allow the future development of senior housing. No specific project development proposal (which could vary depending on the level of care) is under consideration at this time. Back-up power facilities are required for hospitals, nursing homes, assisted living facilities or hospices. It is not known if any such facilities would be included in a future development proposal for Key Site 17. If such equipment is made part of an application, then any back-up power will require an APCD permit to operate, which may entail completion of a health risk assessment, and requirements of Best Available Control Technology (BACT) to limit emissions. In the absence of any knowledge as to whether such facilities would be necessary, their location(s), and the amount of power output, fuel type, etc., any attempt at analysis for this project would be overly speculative.
- 3-2 Section 4.12 *Greenhouse Gas Emissions/Climate Change* has been revised to reflect a population ration of 1.5 persons per unit, as opposed to the previously used 2.0 persons per unit. The analysis was also supplemented further with assumptions for senior housing use of electricity and natural gas.
- 3-3 The compatibility issues of the project resulting in placement of residential units adjacent to the Orcutt Union School District bus storage and maintenance yard is addressed in Section 4.6 *Hazards and Hazardous Materials*. The yard emissions and hazardous materials use and storage is regulated under a County Hazardous Materials Business Plan (HMBP). However, the potential exposure to emissions associated with the yard operations was determined to be a potentially significant impact and Mitigation Measure HAZ 1-2 requires that a future development site plan consider a buffer between residential units and the yard.
- 3-4 The commenter is correct. The text was revised to reflect 0.09 in a million cancer risk as opposed to 0.90 in a million. The SCREEN3 model output was reprinted and there is a minute change in the annual concentration calculated as follows:

Peak 1-hour PM-2.5 from 11 buses idling 5 minutes each (see attached) =  $0.1354 \text{ ug/m}^3$

1-hour to annual conversion =  $0.08 \text{m (CAPCOA)} = 0.0056417 \text{ ug/m}^3$

1-hour vs. 24 hour =  $1/24 = 0.00045 \text{ ug/m}^{**3}$

250 days/year vs. 365 days =  $0.000309 \text{ ug/m}^{**3}$

Individual cancer risk is  $0.000309 \times 300$  in a million = 0.09 in a million

- 3-5 The latest version of the SCREEN3 model run application was used to model the toxic air exposure the analysis and the results align with the values presented in the Subsequent EIR. The results of this model run are included in Appendix B *Air Quality* of this Subsequent FEIR.
- 3-6 County Planning and Development Department applies APCD requested conditions of approval to a land use permit (such as a Conditional Use Permit), Development Plan Approval (DVP), Zoning Clearance, or Grading Permit as they may pertain to a specific development application. The project under consideration does not include application for a land use permit. The conditions provided by APCD are not mitigation measures for purposes of CEQA compliance needed for this project; and therefore, not included in this Subsequent FEIR. Should a development project application be made in the future under the provisions of the project's amendments to OCP, the APCD will have the opportunity to review the specific project and provide an update to its request for conditions to be placed on the land use permit at that time.

#### **10.1.4 Lillian Smith, JUNE 28, 2011**

- 4-1 The source cited in the Tetra Tech Phase I ESA for the 11 radon sites tested is from Environmental Data Resources, Inc. (EDR) Inquiry Number 590134.4 4s dated January 31, 2001, page A10. No specific locations for the tests are provided. The relevant pages from the EDR report were added to Appendix D *Hazardous Materials* for reference. Also added to Appendix D is the Radon Zone Map for Santa Barbara County. Orcutt is not in a High Radon risk area of Santa Barbara County. Section 4.6 *Hazards and Hazardous Materials* correctly characterizes the radon gas screening levels. Mitigation Measure HAZ 1-3 requires radon gas testing for the site the implementation of construction techniques (if required, although highly unlikely) to reduce levels to an acceptable level. The specific locations of the 11 reference tests would not result in any changes to the Subsequent EIR analysis.

#### **10.1.5 CALIFORNIA DEPARTMENT OF TRANSPORTATION, CHRIS SHAEFFER, DEVELOPMENT REVIEW, JUNE 30, 2011**

- 5-1 The Subsequent EIR correctly references the 1995 OCP EIR Key Site 17 analysis as not finding project-specific traffic impacts. Mitigation Measure KS17-CIRC-1 provided in the 1995 OCP EIR is described as "project-specific" mitigation, because it is designed to address the project-specific contribution that development of Key Site 17 would make to the cumulative congestion impact due to build-out of the overall Community Plan. This cumulative impact is described as *Impact CIRC-1: Significant overall increase in traffic volumes/delays* in the 1995 OCP EIR and the threshold is based on CEQA Guidelines Appendix G then in effect. The latest CEQA Guidelines (2011) do not include a similar threshold. Mitigation Measure KS17-CIRC-1 of the 1995 OCP EIR requires that the County address problems with increased traffic volumes and delays through collection of impact mitigation fees and list the types of improvements for the County to implement. The County has such a program in place, and a future development for Keysite 17 would be required to contribute a standard fee to the program. However, this requirement is not the result of a new environmental impact.
- 5-2 Based on the County's Level of Service (LOS) standards, the Subsequent EIR, on Page 4.11-15, correctly states that "Mitigation measures are not required" in the analysis of project specific impacts. Please refer to the response to comment No. 4-1 above. On Page 4.11-15, the Subsequent EIR recognizes the cumulative contribution that development of Key Site 17 would generate toward regional traffic volumes and specifies that a proposed development would be required to contribute to the County's traffic mitigation fee program as a fair-share contribution. The requirement to contribute to the mitigation fee program is a County standard at this time, and

would be required irrespective of the significance determination in the Subsequent FEIR. This fee is consistent with the contribution that was anticipated originally in 1995 OCP EIR Mitigation KS17-CIRC-1, as referenced by the commenter. Since the project would not necessitate “new mitigation” beyond County standards in effect now, and identified previously as future “mitigation,” the Subsequent EIR is adequate for the project land use designations and standards, in that it is not necessary to rewrite specific portions of the language of the 1995 OCP EIR, particularly where that language may have since become obsolete.

5-3 In Section 2.7 *Development Previously Evaluated in the OCP EIR*, the Subsequent EIR refers to the 1995 OCP EIR (Volume II) to provide background historical information as to the intensity of development that could occur on Key Site 17. By “evaluated” the Subsequent EIR means that 1995 OCP EIR provided a qualitative impact comparison of intensity of uses for four alternative land use designations (ranging from “No Project” to “High Buildout” as they are defined in the 1995 OCP EIR). The 1995 OCP EIR has long been certified by the County in accordance with CEQA, and the adequacy of that document’s content for the OCP at that time is not a subject of this Subsequent EIR now under consideration for the project. In accordance with CEQA Guidelines Section 15126.6(e)(3)(A), the Subsequent EIR provides an analysis of a reasonable range of alternatives that could reduce impacts of the project being proposed while meeting the basic objectives of the project. Any reference to the 1995 OCP EIR evaluation of alternatives is for historical reference and should not be interpreted as an incorporation of that analysis to meet the alternatives analysis requirements of CEQA Guidelines for this project.

5-4 According to the 8<sup>th</sup> Edition of the Institute of Transportation Engineers (2008), Trip Generation report, the standard Average Daily Trips for the P.M. Peak rate for Senior Adult Housing – Detached (Land Use Code 251) is accurately stated as 0.27 trips per unit. However, the rate cited for Assisted Living (Land Use Code 254) was overstated, and has been revised from 0.29 to 0.22 in accordance with the ITE report. The estimated P.M. Trip generation was revised accordingly from 75 to 57 trips. The applicable pages from the ITE report providing the trip generation rates are for reference in Appendix F. The highest traffic volume that could be generated at the site under the types of senior living facilities analyzed is below the volumes previously analyzed under the existing single-family designation. Therefore, with this correction downward of the traffic volume, the comparison of impacts with the OCP EIR provided in the Subsequent EIR still correctly characterizes the impacts of the project relative to the 1995 OCP EIR as less and as a less than significant impact.

The trip generation rate of 0.29 for the Continuing Care Retirement Community (CCRC) (Land Use Code 255), as provided in the EIR, is correctly cited from the 2008 ITE Trip Generation report, 8<sup>th</sup> Edition. The applicable page from the ITE report is included in Appendix F for reference.

5-5 Comment noted. The Subsequent EIR utilizes the County standard intersection capacity utilization (ICU) methodology for analyzing the level of service for signalized intersections. Based on this analysis, the Clark Avenue/Orcutt Road intersection currently operates at a Level of Service (LOS) B with no change to the capacity utilization ratio or LOS as a result of the project trip generation. Similarly, the Clark Avenue/State Route 135 North Bound Ramp intersection currently operates at LOS B with a 0.01 increase in the capacity utilization ratio and no change to the LOS as a result of the project. The traffic engineering methodology is appropriate for this project and the impacts are correctly identified as less than significant. The Highway Capacity Methodology and an analysis that would consider these two intersections to be one unit are not

necessary or appropriate according to County standards; therefore, that methodology was not used.

### **10.1.6 OASIS ASSOCIATES, C.M. FLORENCE, AICP AGENT, ORCUTT UNION SCHOOL DISTRICT, JULY 5, 2011**

6-1 Section 1.2.4 *Proposed GPA/Rezone* is intended to clearly state the facts that define the project from which environmental impacts are assessed. However, Sections 1.2.6 *Project Objectives* and 2.8 *Project Objectives* were revised to include language that would meet the commenter's request to provide the distinction of how an objective of the project was to coincide with the existing language of DevStdKS17-6, as these Sections provide a more appropriate context.

6-2 The full extent of the applicant submitted DevStd KS17-7, as outlined in their Development Standards Comparison Table in Appendix A, was intentionally not included for several reasons.

The requested parking standards were not deemed applicable to the project description for the Subsequent EIR, and are not appropriate for a Community Plan in general. The description provided by the applicant is too vague to define actual parking requirements when a specific development proposal is not under consideration. Furthermore, the language provided suggested thresholds for which a modification to the parking criteria would be allowed, and it would require the County assess consistency with the existing zoning standards for parking. CEQA does not speak to parking standards beyond circulation issues that could create access and safety concerns. As such, there are no applicable CEQA or County environmental thresholds for parking. Parking adequacy is better addressed at the time a specific development project is proposed for review and can be reviewed in accordance with zoning standards and specific project requirements.

The portion of the applicant's Development Standards Comparison Table providing height limitations as 35 feet is effectively addressed in the Zoning Standards, which are summarized in Table 2-1 *Comparison of Existing and Proposed Zone Standards*. The height allowed by the zoning is 35 feet.

The portion of the applicant's Development Standards Comparison Table providing a maximum lot coverage of 60 percent was inconsistent with the zoning standard of 30 percent for the DR20 zone, and the applicant agreed that they would be able to achieve the desired number of units under existing zoning standards for lot coverage, along with the density bonus and relaxing of development standards allowed under California Government Code Section 65915.

Section 2.0 *Project Description*, as written, from which Section 1.0 *Executive Summary* was derived, was provided to the commenter for review and comment prior to initiating the environmental analysis. The commenter provided their concurrence with this project description, as written, to the County at the time the Administrative Draft was under preparation.

6-3 To clarify, the basis for the Class I, significant unavoidable adverse impact, was determined not simply based on the lack of a specific development proposal; rather, it is based upon an assumed worst-case scenario based on the maximum development envelop, scale and massing, and minimum setbacks as would be allowed by the existing and proposed zoning standards. A future development application could propose a design that is, in fact, what was analyzed, or it may be a reduction in scale and different orientation of structures. The Subsequent EIR does not speculate as to the level of impact for an unknown development proposal that may seek to limit the visual impacts. The public and decision-makers would have the ability to assess a future project to determine the level of impact relative to the analysis provided in this Subsequent EIR. The

decision-makers at that time would have the latitude to determine whether a specific design proposal would result in less than significant or significant and unavoidable impacts.

- 6-4 The 1995 OCP FEIR was not relied upon to determine the impacts of the project under consideration within this Subsequent EIR. The 1995 OCP FEIR was referenced to the extent that impacts of future development of the site were previously identified. Environmental impacts of the proposed project were analyzed independently based upon the merits of the project it-self. In other words, the 1995 OCP FEIR was reviewed to ascertain whether the document considered, and the degree to which it considered, impacts of future development of the project site that would also encompass the impacts of proposed project, but did not form the basis for impact analysis of the project under consideration. To that end, a determination was made as to whether the proposed project would reduce or exacerbate previously identified impacts, or introduce new (or previously unidentified) impacts. The Class I significant unavoidable impact of the project is an independent conclusion, and it was determined that the impacts of the proposed project would exacerbate those previously identified in the 1995 OCP FEIR, which is also based upon the zoning standards and not a specific development proposal. The Subsequent EIR finds that there is a significant unavoidable Class I impact regardless of the conclusions of the 1995 OCP FEIR.

To the extent that the commenter would like to gain further information as to the impacts of the project considered in 1995 OCP FEIR, the following discussion is provided. While the 1995 OCP FEIR uses the phrase “potentially significant” as regards Impact VIS-11 and Impact VIS-12, Section 5.15.5 *Residual Impacts* (page 5.15-16) and *Residual Impacts* (page 17-30) of Volumes I and II, respectively, state that the visual resources specifically identified in Impact VIS-11 and Impact VIS-12 would remain “Class I, significant and unavoidable” and “Significant and Unavoidable (Class I)”. The Subsequent FEIR considers the project, which could allow for a future development that may exacerbate visual resource impacts, as the project’s zoning standards would allow for a greater amount of development than the standards that currently apply to the site. The Subsequent FEIR correctly uses a consistent pattern of terms internally to defined impacts as defined in Section 4.0 *Environmental Setting and Impact Analysis* (page 4.0-1), which includes the phrase “significant and avoidable (Class I) in the *Residual Impacts* sections where appropriate.”

- 6-5 Volumes I and II of the 1995 OCP FEIR recognize “potentially significant” Impact VIS-11 and VIS-12. Volume two also defines a “significant” impact from future development of the Keysite 17 from build-out in accordance with the land use designation and development standards then under consideration, which allowed for development of single-family residential units over the project site (the four parcels of the project site making up a portion of Keysite 17. Mitigation VIS-8 is provided in Volumes I and II of the 1995 OCP FEIR to mitigate for Impacts VIS-1 and VIS-12, requiring an Old Town Orcutt overlay and Board of Architectural Review (BAR) for specific future development proposals as noted by the commenter. However, contrary to the commenter’s statement, the 1995 OCP EIR found that impacts related to the loss of open space and scenic backdrop would remain significant and unavoidable (which is noted as a Class I impact under the County’s current terminology for labeling of impacts).

The proposed general plan amendment, rezone, and modifications to the OCP were determined to cause a significant unavoidable visual resources impact, as the project would increase the development potential of the site, exacerbating previously recognized Impacts VIS-11, VIS-12, and KS17-VIS-1 within the 1995 OCP FEIR. Since the project would exacerbate these previously identified significant unavoidable impacts it is prudent to similarly consider impacts of the project to be significant and unavoidable Class I impacts. CEQA does not preclude the



finding of a significant unavoidable impact based on there not being a specific development proposed as part of a project. CEQA applies to Plan amendments, where in the absence of a specific development plan, it is prudent and common practice to consider the greatest development potential or maximum build-out of a “Plan” when analyzing impacts. The Subsequent EIR is consistent with requirements of CEQA in identifying the worst-case potential, and is consistent with the methodology used in the 1995 OCP FEIR for which there was also not a specific development project under consideration, and is consistent with standard County of Santa Barbara practice.

- 6-6 There is not a contradiction between DevStd KS17-1 and DevStd KS17-2. DevStd17-1 requires landscaping along the perimeter of the site to partially screen views of development. This measure is intended to “soften” the massing appearance and architectural facade of future development to reduce visual compatibility and character impacts on the area as a result of increased urbanization over open space. DevStd KS17-2 limits the heights of the structures on the site along Soares Avenue to one-story in order to ensure compatibility of future development with the existing adjacent residences along the north side of Soares Avenue, which are one-story. Otherwise, the zoning provisions would allow up to three story, which would be a greater impact than that anticipated with adherence to DevStd KS17-2 for the height restriction.

Although Section 4.1.1 *Existing Conditions* identified the view-blocking effect of some existing mature landscaping from within Old Town Orcutt, unobstructed southerly views of the Casmalia and Solomon Hills through the vacant project site currently exists as identified in Impact AES-2. Landscaping would be required in accordance with zoning and development standards as part of a future development proposal, and could contribute to view-blocking impacts upon development. On Page 4.1-8, the Subsequent EIR recognizes the contribution landscaping could cause to view-blocking impacts.

Compliance with one of the referenced development standards is not exclusive of compliance with the other. Requirements for one-story structures, along with landscaping to soften appearance, is designed to create a balance between ensuring compatibility and preserving long-range views to the extent feasible. In addition, DevStd VIS-O-2.1 provides that development, including associated landscaping plans, should be designed to minimize disruption of views. Through BAR, the strategic placement and orientation of a future project development and landscaping (including types and heights of trees or plants) would be considered in relation to reducing both viewshed and compatibility impacts. Nevertheless, it is prudent to determine that future development and landscaping (as required) could result in significant and unavoidable (Class I) impacts to the long-range views that currently exist through the site.

- 6-7: The project description (Section 2.0 of the Subsequent EIR) was reviewed and agreed to by the commenter, as the applicant’s representative prior to completion of the Draft EIR. The project description incorporates development standard KS-17-7 as it pertains to a neighborhood compatibility, low-profile building elevation, screening vegetation, and the Old Town Orcutt Design Guidelines. The initial applicant written KS17-7 is provided in Appendix A *EIR Scoping Document*. Parking requirements would be considered based upon a specific development proposal at the time of application and in accordance with zoning standards. The height specification of 35 feet and the limitation of this height to within the center of the site are established within the existing zoning and development standards (Table 2-1).
- 6-8: The discussion of the BAR review was elaborated further as shown in the Subsequent FEIR, Section 4.1.4 *Southerly Views of the Casmalia and Solomon Hills from Soares Avenue*. However,

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it is outside the scope of this Subsequent FEIR to speculate on the effectiveness of the BAR review process for a future Development Plan application without a specific project to consider. The Subsequent FEIR relies on a worst-case development to determine the impacts are significant and unavoidable, as there may be constraints to a future design in terms of feasibility to provide an economically and operationally viable project while still maintaining southerly views. It is possible that a Development Plan could ultimately be approved where visual impacts remain significant and unavoidable despite the BAR's best efforts to ensure visual resources are protected. The Subsequent EIR includes Mitigation Measure AES 1-1 requiring a development standard that outlines specific parameters that the BAR should address once a specific development proposal is application is submitted.

- 6-9: The conditions of approval requested by the Santa Barbara County Air Pollution Control District (SBAPCD) would be considered at the time of review of a specific development application and issuance of a land use permit. In addition, the SBAPCD would be provided additional review at that time to ensure the most up to date conditions of approval are applied to the specific development.
- 6-10: The term "significant" in the *Vegetation and Sensitive Plant Communities* discussion in Section 4.3.1 is referring to a noteworthy patch of coast live oak seedlings, as they are readily observed by the biological surveyors due to the numbers of seedlings and differentiation from the more predominant non-native grasslands and forbs on site. The statement that the seedlings are not "established" refers to the criteria specified in Policy BIO-O-3 in the Orcutt Community Plan, which defines native tree as "established" if they are six feet in height. If the oak seedlings were six feet in height, the Policy would require that they be incorporated into the site's landscaping plan if feasible. Therefore, the terms "significant" and "established" are independent and should not be confused. "Significant" was changed accordingly to "noteworthy" to ensure this term is not confused with the significance of impact to native trees analysis.
- 6-11: A reference to Section 4.7 *Flooding and Water Quality* was added to the *Pine Canyon and Downstream Waterbodies* discussion in Section 4.3 *Biological Resources*, as requested. However, specific reference to mitigation measures would not be appropriate at this location as this Section is designated to the description of the existing conditions only. References to mitigation in this section would be inconsistent with the document format and could lead to confusion. The Subsequent EIR appropriately refers to the mitigation measures of Section 4.7 *Flooding and Water Quality* under the discussion regarding Impact BIO 2.
- 6-12: Section 4.10.2 *Thresholds of Significance*, of the Subsequent EIR lists several thresholds, one of which is the existing development standard DevStd KS17-3 requiring development of a one to two acre park along Soares Avenue, as the basis for determining the project's impacts to the community's recreational resources.

Any "inherent differences" between the allowed use (single-family residential) per the existing general plan designation, zoning, and development standards and the proposed changes to the zoning and development standards allowing for a 100 percent senior housing project, do not eliminate the requirement for a public park at the site. As provided in the Subsequent EIR in Section 4.10 *Recreation*, the 1995 OCP EIR recognizes a lack of parks within Old Town Orcutt, and the OCP requires development of a park at that location to serve, not only the needs of future development at the site, but also the recreation needs of the community. Therefore, any change in location as means of gaining "flexibility in the location, at minimum, of any park feature to better accommodate seniors," could result in the potential to reduce the ability of the park to meets the

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needs of the community at large, as anticipated by the OCP. Furthermore, the project site would still be required to provide common open space, which could be strategically placed on site to meet open space needs of seniors, while not compromising the intent of the existing park location requirement along the site's north boundary, the development feasibility of senior housing, or the senior needs for recreation or open space.

DevStdKS17-3 as currently provided, was intended to reduce the impact that build-out of the OCP would have on recreational resources, particularly as regards Old Town Orcutt, not simply the project site; although, the 1995 OCP EIR determined that the impact to recreation resources remained a significant unavoidable impact ("Class I"). Therefore, the current project that proposes language that allows flexibility in its location reduces the potential mitigating effects of the existing location, and as such, potentially results in a significant and unavoidable Class I impact beyond that assumed in the 1995 OCP EIR.

- 6-13: As stated above in Response 6-12, accommodating housing needs and provisions for adequate open space and recreational facilities can be achieved within the open space as required under the zoning standards, and are not mutually exclusive. The project does not propose to eliminate the park provision requirement. The commenter references the Santa Barbara County Housing Element and the forecasted increase in the overall percentage of elderly in the community and the need to provide housing accommodations. While the County recognizes the importance of housing for seniors and the project's provisions for up to 257 senior housing units, as proposed, instead of the 77 single-family housing units under current zoning, the community's need for the public parks remains necessary. Parks are also recognized as a fundamental component of a healthy community. In addition, while the percentage of seniors as a part of the overall population may be forecast to increase, the total population is also forecast to increase, so there would be more residents to serve within many age groups, not just seniors. Also, the County's threshold ratio is based on having 4.7 acres of parkland per 1,000 residents. This threshold does not discriminate among the age groups for which various amounts or types of acreages would be required to serve a particular age range. Again, it is not a part of this project to eliminate the public park requirement; rather the application to add flexibility for its on-site location.
- 6-14: The County has not verified the commenter's claim that the existing 0.5 acre park at the adjacent Stonegate development is in fact situated at a two-foot grade differential from the OCP conceptual contiguous park shown to be located on the project site, as it is not necessary. As provided above, the park anticipated was required to meet the needs of the general public, and would not be considered a "senior" park as a result of the approval of a 100 percent senior housing development on the site. The commenter infers that a contiguous park is not physically feasible (or would be "difficult to achieve") based on the reported grade differential and the existing perimeter fence; and therefore, the allowance of the relocation should not be deemed a significant impact. However, the Subsequent EIR correctly assumes that a contiguous park at this location would in fact be feasible. At time of a specific future development proposal, a grading plan would be prepared that would align grading elevations of the project site with those of the existing adjacent park such that no unsafe, or un-useable, slopes would be constructed and ensure continuity. Grading of this magnitude is considered minor and common. The fence would simply be removed.
- 6-15: Based on site investigations, it could not be verified that the existing trees and retaining wall create a "perceived" separation that would render a contiguous park infeasible for open play fields or group picnics. A future development proposal could be required to provide grading that

would allow for a contiguous gradient that does not include perceived physical barriers to open play or picnics.

- 6-16: The underlined portion was added to Section 4.10.1 *Existing Conditions*.
- 6-17: Section 4.10.1 *Existing Conditions* was revised to clarify of the applicability of the County's Quimby Fee and Park Development Mitigation Fee.
- 6-18: Please refer to Responses 6-12 and 6-13.
- 6-19: Development Standard DevStd KS17-3 was not revised as suggested as the language provided by the commenter would allow for the required park area to be divided into smaller, less functional, parks.
- 6-20: Section 4.11.3 has been revised to include a statement that the project would be required to comply with Development Standard DevStd KS17-4 requiring Coordination with the Santa Maria Area Transit (SMAT) and construction of a bus turn-out pocket or bus stop, if required by SMAT. The commenter's statement that the project would be required to create a "Transportation Demand Management Plan (TDMP)" cannot be verified, as this type of Plan, or title, has not been used in recent years. As provided in the Subsequent FEIR, there were not significant Traffic and Circulation, Air Quality, or Greenhouse Gas impacts that warrant mitigation relating to managing transportation demands for this project. Should a development proposal be submitted in the future, County Public Works Division would review the project and require conditions of approval that may be required related to the term "TDMP;" however, such a requirement is not known at this time, nor required to be identified for this Subsequent FEIR.
- 6-21: Comment Noted. Reference to DevStd KS17-4 was added to the last paragraph of Section 4.11.4.
- 6-22: County Planning and Development Department would apply APCD requested conditions approval to a land use permit as they may pertain to a specific development application. Should a development project application be made in the future, the APCD would again have the opportunity to review the project and provide updated requests for project-specific conditions at that time.
- 6-23: The intent of the OCP in providing Action KS17-6, as currently written, is to ensure neighborhood visual compatibility with limitations on heights of structures along Soares Avenue and the future park, which is also to be located along Soares Avenue according the current OCP. Further, the intent of KS17-6 to require no higher density than single-family home on lots of 6,000 sq. ft. or greater is to ensure compatibility with the single-family homes of similar scale and on lots of similar size along the north boundary of Soares Avenue opposite the project site.

The project would amend DevStd KS17-2 and Action KS17-6 to eliminate the one-story structure restriction adjacent to the neighborhood park and the overall perimeter of the site, while leaving it in place for the northern perimeter adjacent to Soares Avenue only. The project would allow the development of higher density senior living (multi-family style housing) along Soares Avenue, which is considered less compatible with the existing single-family neighborhood than the similar single-family homes that would be anticipated under the existing language of Action KS17-6. Also, the project would also amend KS17-3 to allow the neighborhood park to be constructed anywhere on-site; therefore, the intent of preserving compatibility with a relatively smaller scale structure adjacent to the public park is removed as a result of the project. The Subsequent EIR

correctly finds that the project would be *potentially inconsistent* with the intent of the OCP in requiring Action KS17-6, as currently written.

5/26/2011

Re: Draft Subsequent Environmental Impact Report, May, 2011, Orcutt Union School District, Key Site 17 Project, O9GPA-00000-00004, 09RZN-00000-00012

Dear Ms Trotter-Cadena:

The following is respectfully submitted in response to the Draft Subsequent Environmental Impact Report (DSEIR), 5/2011, for the Orcutt Union School District Key Site 17 proposed project

Recreation

“Based on the County standard of 4.7 acres of parkland per 1,000 residents, this would generate a need for approximately 1.82 acres of parkland.” (please see KS17 Scoping Document, p. 22, 12/15/09, DSEIR, Appendix C). The Orcutt Community Plan (OCP) DevStd KS17-3 requires the construction of a park on the project site of between 1-2 acres (OCP p. KS17.3 ) on APN 105-134-004 of the project site and contiguous with APN 105-330-004 of the Stonegate project. Please see the text of Govt. Code 66474 (g) outlined below under “Significant and Unmitigable Impact.” Please see DSEIR Recreation, p. 1-19, where no mitigation is provided.

1-1

DSEIR Section 2.5 “Proposed GPA/Rezone

The text amendment to DevStd KS17-3, DSEIR p. 2-3, suggests “A park at least 3/4 of an acre in size shall be provided within APN’s 105-134-004, 105-134-005, 105-330-005 or 105-330-006.” This park acreage falls short of the 2+-acre park equating with Stonegate Condition of Approval #23, text provided by Santa Barbara County Planning and Development (Attach. #1), and with the Stonegate developer’s bond (a promise of surety), Performance Bond No. 726714S, (Attach. #2).

1-2

The proposed revisions to OCP Development Standard KS17-3 are also found on p.4.10-8 of the DSEIR, 5/2011, and appear to clarify the revision text on p. 2-3 as to contiguity: “The proposed project would change DevStd KS17-3 to eliminate the provisions for a contiguous park along Soares Avenue. Under the proposed project, there would be greater flexibility in where the required 0.75-acre park could be provided within the project site, i.e., the park would not be limited to Parcel No. 105-134-004 or along the Soares Avenue frontage. The proposed project would allow the smaller parks (0.5 acre on the adjacent Stonegate property and 0.75-acre within the project site) as opposed to one contiguous park.” Since the text appears as underlined text, is the text also a part of the revision text for DevStd KS17-3 found on p. 2-3 of the DSEIR and should appear on p. 2-3 of the DSEIR for DevStd K17-3?

1-3

Significant Unmitigable Impact . See Govt. Code 66474 (g)

While the above acreage, 0.75-acre, in the revision text for the project-site park falls short of the 1-2 acres along Soares Avenue provided for in the OCP (OCP Fig. KS17-1 (p. KS17.3) and the text of Stonegate Conditions of Approval #23 conceptually figures the park acreage as contiguous, the 0.75-acre park falls short of the 2.0 acre park for which Stonegate developer bonded. The DSEIR text (p. 4.10-9, Pars.1-3) finds that the proposed revisions to DevStd KS17-3 would result in a significant unmitigable impact.

The concern is that the text of Condition of Approval for the Stonegate Ranch project reads that the Stonegate developer shall be responsible for an approximately 96,000 sq. ft. (2+-acre) soccer field constructed on APN105-134-004 and for which the developer bonded (please see Attachs. 1 and 2). *This was an easement for access and use as described in Govt. Code 66474 (g) acquired by the public at large and to be provided before any project approval that might come forth to conflict with the easement for access or use acquired by the public. Govt. Code 66474 (g) addresses the conflict with access or use determining that onsite designation or designating a substantially equivalent alternate easement elsewhere must occur.* Please see CEQA 15121 (a) as the guideline for addressing the state guidance in the SDEIR for the proposed project.

1-4

It is therefore concluded that Govt. Code 66474 (g) counters the statement: “No mitigation measures are available.” (please see DSEIR, p. 4.10-9, “Mitigation Measures.”)

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JUN 03 2011  
COUNTY CLERK  
SANTA BARBARA COUNTY

State Guidelines for School Properties to be Leased or Purchased

Among the State Education Codes dealing with school district properties intending to be leased or purchased commencing with Education Code 17485 is Education Code Sec.17486 (a) which is a directive that prior to selling or leasing any schoolsite containing land described in Sec. 17486 (a) where uses listed are: School playground, playing field, or other outdoor recreational purposes, or open-space land particularly suited for recreational purposes. "Open-space land particularly suited for recreational purposes" is an *assessment and not a physical use*. The first offer to sell or lease shall be provided to any park or recreation district within which the land may be situated and then to any county within which the land may be situated with others listed. As it is seen, the school district still receives the lease monies and the community benefits from playing fields or other open-space uses. The DSEIR finds that the project as proposed creates a significant unmitigable impact for recreation in regard to the park on the KS17 project site, but does not assess the impact of the loss of open space as outlined in the above Education Code (i.e., "Open-space land" *suited for recreational use*).

1-5

DSEIR, p. 1-10 "Nesting Birds"

The proposed mitigation measure for impacts to nesting birds during construction is a *proposed* amendment to the OCP (BIO 1.1) (please see ES, p. 1-10). The OCP Policies Compendium already carries a text for DevStd BIO-O-1.1 (please see Policies Compendium, p. 35), but it does not specifically address nesting birds. It is respectfully submitted that until any amendment of the OCP of the suggested DSEIR text on ES, p. 1-10 occurs, that no mitigation is provided that would reduce the impact to "Less than significant (Class 11)." The suggested revision text is appreciated as are the reference sections included, but it is not likely that such an amendment to the OCP would occur in a timely fashion. As example, the 2009 OCP Amendments are now the 2011 OCP Amendments and the circulated Draft Supplemental EIR will be recirculated due to new significant information (pers. comm., Long Range Planning, 5/18/2011).

1-6

DSEIR, p.2-3, Sec. 2.5 "Proposed GPA/Rezone"

"The OCP includes a policy statement, five development standards, and an action item to guide future development on Key Site 17." (p. 2-3, Sec. 2-5)

While school districts are allowed "modifications" to development standards (DevStds) to reach the goals of their proposed projects, DevStd KS17-7 is an addition to the OCP DevStds while the texts of DevStds KS17-5 and KS17-4 remain unchanged. DevStd KS17-1, DevStd KS 17-2 and DevStd KS17-3 contain revision text as does Policy KS17-1 and Action KS17-6. The unchanged texts deal with discussion with Santa Maria Area Transit and coordination of an access road with KS13.

1-7

An added DevStd, revision text for three of the five OCP DevStds, one Policy and one Action item for the proposed KS17 project reflect a significant change in the OCP guidance for KS17. While the County Thresholds Manual does not include thresholds for Land Use, the significant number of OCP text revisions and addition suggest that the project proposal itself is a significant impact.

It is not clear as to the boundaries of the designated Old Town Orcutt "Commercial Center" might be, however, view impacts (View Impacts, p.1-8) from Soares Avenue are Significant (Class 1) and it is respectfully suggested that (DevStd KS17-7) would not retain visual resources with low-profile buildings screened with vegetation given View B, Figure 4.1-9, Height and Bulk Diagrams, as "Potential Future Conditions."

1-8

Sincerely,  
 5/26/2011  
Lillian Smith

Attachment #1: Condition of Approval #23 for Stonegate project offsite on OCP KS17  
Attachment #2: Request for Bond rescinding by Stonegate developer, 3/31/08



Lillian see below,

23. Prior to occupancy clearance of the first house located within the Stonegate Ranch development a soccer field shall be constructed on APN 105-134-004 in accordance with the approved soccer field plan. The field shall be approximately 96,000 square feet in size as shown on Exhibit 3. The field installation shall include grading, installation of turf, irrigation, soccer goal posts and any approved plant material along Soares Avenue for screening or aesthetic purposes. The owner shall enter into an agreement with the School District subject to County Counsel approval which states that the owner of the Stonegate Ranch property shall be financially responsible for the installation, maintenance and upkeep of the field until such time as the School District develops the property for its own use. At that time the School District will take over maintenance responsibilities.

----- Headers -----



# Stonegate Orcutt Venture, LLC

*Amelise*

**Real Estate Development**

124 W. Main Street #G  
Santa Maria, CA 93458  
PH: (805) 922-9129  
FAX: (805) 922-9130

March 31, 2008

## **Addendum to Record Map Modification**

County of Santa Barbara  
Planning & Development

THIS IS A FORMAL REQUEST TO DELETE CONDITION #23  
REQUIRING CONSTRUCTION OF OFF SITE SOCCER FIELD AND THE  
CORRESPONDING RELEASE OF PERFORMANCE BOND NO. 726714S  
AND MAINTENANCE BOND NO. 726713S

as

THE LAND ON WHICH THE SOCCER FIELD WAS TO HAVE BEEN  
LOCATED IS NO LONGER AVAILABLE. THE ORCUTT UNION  
SCHOOL DISTRICT RECINDED THEIR APPROVAL TO ALLOW  
DEVELOPMENT OF SAID SOCCER FIELD ON LAND THAT THE  
DISTRCT HAS LABELED SURPLUS PROPERTY.

Respectfully submitted,

Stonegate Orcutt Venture, LLC

  
Anthony E. Wells

**RECEIVED**

JUL 24 2008

**S.B. COUNTY (NORTH)  
PLANNING & DEVELOPMENT**

May 30, 2011

Ms Florence Trotter-Cadena  
624 West Foster Road, Suite C  
Santa Maria, CA 93455

Re: Orcutt Union School District Key Site 17 Project Draft Subsequent Environmental Impact Report (DSEIR), May 2011, Notice of Preparation Meeting Letter dated 12/30/09

Dear Ms Trotter-Cadena:

In addition to my letter of May 26, 2011, concerning the Orcutt Union School District Key Site 17 proposal to designate the parcels listed on p. 1-3 of the DSEIR under Proposed GPA/Resone (see Policy KS17-1) where the listed parcels are proposed to be designated Res 20 and zoned DR 20, the following comments are respectfully submitted to address Sec. 1-5 "Areas of Controversy and Issues to be Resolved" (please see DSEIR p. 1-23).

DSEIR Sec. 1.5, p. 1-23 notes: "The areas of public concern regarding the project as expressed at the EIR scoping meeting are traffic and compatibility with the character of Old Town Orcutt. Issues that need to be resolved include selection among the various alternatives."

Enclosed is a copy of the three-page letter dated 12/30/2009 with three attachments which was provided to the planner at the Scoping meeting referred to in the above Sec. 1.5, p. 1-23. The letter included concerns about Recreation, Land Use/Loss of Open Space, Impact on Public Transit System, Air Quality, Aesthetics/Visual Resources and referenced Condition of Approval #23 for the Stonegate project. To address DSEIR Sec. 1-5, p. 1-23 the letter is included herein as an Attachment.

Please note DSEIR p. 1-22, Alternative 2 text places the "public park along the north side of Soares Avenue." The text should read along the "south side of Soares Avenue."

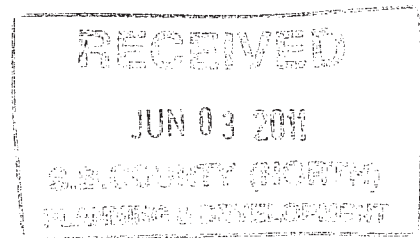
Sincerely,

*Lillian Smith*  
Lillian Smith

Attachment: Letter of Response to Scoping Document 12/15/09

2-1

2-2



December 30, 2009

Mr. John Zorovich, Senior Planner  
624 West Foster Road, Suite C  
Santa Maria, CA 93455

Re: Key site 17, Schoolsite Open-space Land EIR Scoping Document, 12/15/09, request for OCP Amendment and Rezone, Revisions of DevStds KS17-1, -2, -3, -6 and added Policy/ DevStd 17-7, noting that the text of *DevStd* KS17-6 is countered by *Action* KS17-6 (p. 29)

Dear Mr. Zorovich:

The following is respectfully submitted in reference to the Orcutt Union School District request for a General Plan Amendment and Rezone for KS17 of the Orcutt Community Plan and the determined need for an Environmental Impact Report. The portion of KS17 of the OCP which is owned by the Orcutt Union School District was purchased for playing fields (*Please see Staff Report, 1/28/09, p. 7*). The OCP allows for a rezone for senior housing and Gov. Code 65915 (e) (1) allows an applicant to submit a proposal for the waiver or reduction of development standards (defined in Sec. 65915 (o) (1) that will have the effect of physically precluding the construction of a development meeting the criteria of subdivision (b) at the densities or with the concessions or incentives permitted under the section. (*See "Definition", Attach. 1*)

The first pages of this letter are comments on the EIR Scoping Document, 12/15/09. A short discussion follows, for the record, not necessarily pertinent to the scoping process, and is the guidance provided by the California Education Code for sale or lease of school properties.

**EIR Scoping Document, p. 22, Recreation**

"Based on the County standard of 4.7 acres of parkland per 1,000 residents, this would generate a need for approximately 1.82 acres of parkland. OCP Key Site 17 Development Standard KS17-3 requires the construction of at least 3/4 of an acre of a public park on this portion of Key Site 17." Suggesting that an increased density of 35% is a likelihood and given that the proposed project is senior residences, it is not clear what occupancy number was used in determining the 1.82 acres.

2-3

Attach. A, Revised DevStd KS17-3, p. 28 reads that two parcels shall each contribute 3/4 acre to the park. One of the APN numbers 105-134-004 in the Revised DevStd will receive a 2+ acre park unless another location elsewhere is provided pursuant to Govt. Code 66474 (g).

As mentioned, the school district request to modify DevStd KS17-3 could result in two smaller isolated parks of questionable value. The concern is that the text of Condition of Approval for the Stonegate Ranch project reads that the Stonegate Ranch developer shall be responsible for an approximately 96,000 sq. ft. (2+acre) soccer field constructed on APN 105-134-004 and for which the developer bonded (*please see Attachments 2 and 3*). This was an easement for access or use as described in Govt. Code 66474 (g) acquired by the public at large and before approval of any project proposal that might come forth the conflict with easement for access or use acquired by the public must be resolved by onsite designation or designating a substantially equivalent alternate easement elsewhere. It would be expected that the 2+ acre bonded park would be in addition to the park requirements in Revised DevStd KS17-3, p. 28 and it is reasoned that it should be addressed in the work of the currently proposed EIR. (*Please see CEQA 15121 (a)*).

2-4

The formation of an Orcutt Citizens Parks/Open Space Committee as outlined in OCP Policy OS-O-7 and Action OS-O-7.1, Policies Compendium, pp.18 and 19, respectively, and Action OS-O-7.1, OCP Amended 10/2004, p. 116, would involve all the stakeholders in an issue which is associated with the deficit in community parks and playing fields.

2-5

**EIR Scoping Document, p. 25, Cumulative Level of Service**

Presently Long Range Planning is proposing an Amendment to OCP Policy CIRC-O-3 (OCP, amended 10/2004, p. 165) which reduces Level of Service (LOS) to LOS D at intersections along Clark Avenue from Blosser to Foxenwood Lane. The county action creates a significant impact pursuant to the Significance Threshold determined in the County Thresholds Manual (revised 10/2002, pp. 170-72). Table 6 (Scoping document, p. 25) indicates that under either the 2-lane or 4-lane Clark Avenue scenarios that Average PM Peak Hour Delay results in LOS B at Clark Avenue and Blosser. Presently the Clark Ave/Blosser intersection is operating at LOS C (pers. comm. Public Works, Transportation Division, 9/29/09). The \$450,000 earmarked for the stoplight at Clark Ave. and South Broadway has been proposed to be removed from the OTIP fund and made a "site specific requirement" (KS22) in order to reduce development transportation mitigation fees by 19.5% (2009-10 OCP Amendments, Amendment #3, Long Range Planning Informational Document distributed 9/9/09).

2-6  
2-7

**Impact on Public Transit System**

To provide public transit service on Rice Ranch Road, east and west from Orcutt Road to South Broadway, while maintaining the existing public transit service on Clark Avenue is thought to be a potentially significant impact to SMAT services. While Attach. A, Revised DevStd KS17-4, see also Dev Std KS17-4, requires the developer to provide a bus turn-out pocket or a site-located bus stop (e.g., Rice Ranch Rd.), additional buses for the east-west run on Rice Ranch Road is a cost to be assumed by SMAT and costly due to purchase of at least two hybrid buses. (Pers. comm., Director of SMAT as to cost of two hybrid buses)

2-8

**EIR Scoping Document, p. 8, Air Quality (AQ)**

"Additionally, the "project" would add to the cumulative impacts from the build-out of the Orcutt Community Plan. These impacts include: "Significant ozone precursors" and Dust and PM10 generation." Inconsistency with the Clean Air Plan growth rate is noted. Health and Safety Code 44360 addresses health risk assessments. Please see Thresholds Manual, revised 10/2002, p. 30, Table 2: Retirement Community, 250 units, a potentially significant long-term Air Quality Impact.

2-9  
2-10  
2-11

**EIR Scoping Document, p. 5, Environmental Review, Land Use**

"The sections which follow do not include discussions of impacts to the following areas: Land Use... ." No significant impacts to these resources were identified during the initial evaluation of the proposed "project" and/or would not be relevant to a 100 percent senior housing facility." The loss of the existing 9.53 acres (project description, p. 3) of open space would be considered significant given the cumulative loss of open space (the first major concern of the Orcutt residents published in the OCP, 1997) that has occurred with development within the Orcutt Planning Area over the past 13 years. (Please see County Thresholds Manual, revised 10/2002, p.6 C. "Change in Environmental Circumstances" (see also E.) and Footnote, p. 38, the rebut to insignificance pursuant to Public Resources Code 21082.2.)

2-12

**EIR Scoping Document, p.10, Biological Resources**

"Overall the site contributes incrementally to the overall loss of biological habitats, but the site itself contains no significant habitats or resources." Fourteen-year-old survey data (i.e., Rindlaub, 1995) and nine-year-old survey data (i.e., Levine and Fricke), the latter conducted during a prolonged drought period, are generally not considered adequate by the State Trustee Agency for an accurate analysis of potential impacts to biological resources resulting from a proposed project (See CEQA 15162). Potential loss of Dune Scrub habitat for a number of rare plants and animals including Blochmann's groundsel, curly-leafed monardella, CA spineflower, coast horned lizard, silvery legless lizard, burrowing owl, horned lark, and loggerhead shrike and potentially for a species USFWS-listed endangered warrants an updated biological resources survey. It is mentioned herein that KS30 is a mitigation site for 85% of the Central Dune Scrub habitat within the Orcutt Planning Area (see Executive Summary, 95-EIR-01), indicating a County assessment of the value of Central Dune Scrub as habitat. (Please see County Thresholds Manual, revised 10/2002, p 35 and p. 38 footnote, op. cit.) In the Biological Mitigation Hierarchy there is no "override."

2-13



3. On December 30, 2009, it was observed that some grading and possibly tree felling in the Southeast corner of the site with standing water along the Soares Ave. area of the site was taking place. Climate and soil suitability still remain for Central Dune Scrub. In following the Orcutt Community Plan, a perceived contract with the people of Orcutt, seldom is seen a reference to the Federal Migratory Bird Treaty Act (50 C.F.R Section 10.13, migratory nongame native bird species protection.)

2-13

It is speculated a 35% increase in density over the requested 20-units per acre rezone would likely be sought by the developer pursuant to Govt. Codes 65915-65918. It is understood that the 257 (EIR Scoping Document, 12/15/09, p. 3) residential units for seniors includes "the worst case scenario" of the density of 37 units per acre (pers. comm., planner, 12/21/09). This prompts the inquiry as to whether the EIR will address the impact of 37 units per acre on the compatibility with Old Town Orcutt with 3-story buildings while the definition of a development standard that may be reduced or waived includes "height limitation." (See "Height", Attach. A, Revised Policy/DevStd 17-7, p.31 which has no counterpart in the Orcutt Community Plan for Key Site 17.)

2-14

It is not clear how the loss of such **Aesthetics/Visual Resources** (Document, p. 6) designated as potentially significant impacts could be mitigated to less than significant levels by any measures (EIR Scoping Document, p. 6, Par. 3) (Attach. A, Revised DevStd KS17-2) given that the undeveloped site has a remarkable view of the Solomon and Casmalia Hills and even one-story houses will obstruct a view. Visual and Aesthetic Resources Policy VIS-O-1 (OCP amended 10/2004, p. 240), not a development standard to be waived or reduced as defined in Sec. 65915 (o) (1), reads: "Significant scenic and visual natural resources in Orcutt shall be protected in order to preserve the semi-rural character of the OPA."

2-15

If the text of Sec. 65915 (o) (1) is exclusive to development standards waiver or reduction as defined, how is it seen that existing development standards can be rewritten so as to adversely address such policies as Policy VIS-O-1 and include items that do not physically preclude the construction of a development? (Please see "Definition", Attach. 1)

It is not clear why San Luis Obispo County "Water Use Factors" are included in a Santa Barbara County Scoping document.

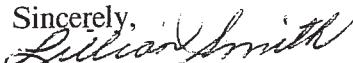
2-16

It is respectfully included herein and not pertinent to the scoping process, but worth mentioning, that the legislature devotes in the Education Code a special section that expresses concern that school playground, playing fields, and recreational real property and open space particularly suited to playing fields will be lost for the expressed uses by the surrounding community and enacts the Article 5. Education Code 17486. The legislature enacted Sec.17489 of the Education Code to allow school districts to recover their investment in surplus property while making it possible for other agencies of government to acquire the property and keep it available for playground, playing field or other outdoor recreational and open-space uses, directing that the governing body shall first offer to sell or lease that portion of the schoolsite consisting of land described in Education Code 17486 to specified agencies.

2-17

With kindest regards,

Sincerely,

  
Lillian Smith

Attachments :

- 1) Definitions of "Development Standards" as provided in Gov. Code 65915 (o) (1)
- 2) Condition 23, Condition of Approval for Stonegate Ranch project on KS17, 2003
- 3) Bond rescinding letter from developer of Stonegate Ranch, KS17

## **Attachment 1**

### **Government Code 65915 (O) (1)**

“Development standard” includes a site or construction condition including, but not limited to, a height limitation, a setback requirement, a floor area ratio, an on-site open-space requirement, or a parking ratio that applies to a residential development pursuant to any ordinance, general plan element, specific plan, charter, or other local condition, law, policy, resolution, or regulation.”

Note: Government Code 66474 (g) refers to an easement for access or use acquired by the public at large (i.e., 2+acre soccer field on APN 105-134-004 and for which the developer of Stonegate Ranch bonded and before the project can be approved onsite designation or designation of a substantially equivalent alternate easement elsewhere must be made.

Lillian see below,

23. Prior to occupancy clearance of the first house located within the Stonegate Ranch development a soccer field shall be constructed on APN 105-134-004 in accordance with the approved soccer field plan. The field shall be approximately 96,000 square feet in size as shown on Exhibit 3. The field installation shall include grading, installation of turf, irrigation, soccer goal posts and any approved plant material along Soares Avenue for screening or aesthetic purposes. The owner shall enter into an agreement with the School District subject to County Counsel approval which states that the owner of the Stonegate Ranch property shall be financially responsible for the installation, maintenance and upkeep of the field until such time as the School District develops the property for its own use. At that time the School District will take over maintenance responsibilities.

# Stonegate Orcutt Venture, LLC

*Amended*

**Real Estate Development**

124 W. Main Street #G  
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PH: (805)922-9129  
FAX: (805)922-9130

March 31, 2008

## **Addendum to Record Map Modification**

County of Santa Barbara  
Planning & Development

THIS IS A FORMAL REQUEST TO DELETE CONDITION #23  
REQUIRING CONSTRUCTION OF OFF SITE SOCCER FIELD AND THE  
CORRESPONDING RELEASE OF PERFORMANCE BOND NO. 726714S  
AND MAINTENANCE BOND NO. 726713S

as

THE LAND ON WHICH THE SOCCER FIELD WAS TO HAVE BEEN  
LOCATED IS NO LONGER AVAILABLE. THE ORCUTT UNION  
SCHOOL DISTRICT RECINDED THEIR APPROVAL TO ALLOW  
DEVELOPMENT OF SAID SOCCER FIELD ON LAND THAT THE  
DISTRCT HAS LABELED SURPLUS PROPERTY.

Respectfully submitted,

Stonegate Orcutt Venture, LLC

  
Anthony E. Wells

**RECEIVED**

JUL 24 2008

**S.B. COUNTY (NORTH)  
PLANNING & DEVELOPMENT**



June 22, 2011

Florence Trotter-Cadena  
Santa Barbara County  
Planning and Development  
624 W. Foster Road  
Santa Maria, CA 93455

**Re: APCD Comments on Draft Subsequent Environmental Impact Report for Orcutt Union School District Key Site 17 Project, 11EIR-00000-00003, 09GPA-00000-00004, 09RZN-00000-00012**

Dear Ms. Trotter-Cadena:

The Air Pollution Control District (APCD) has reviewed the Draft Environmental Impact Report (EIR) for the Orcutt Union School District Key Site 17 Project, which consists of a future development of a 100% senior housing project with an allowed 257 residential units. The proposed project would require, and therefore proposes, a change to the Comprehensive Land Use Designation from Residential 8.0 units/acre to Residential 20.0 units/acre and a Rezone from SLP (Small Lot Plan) to DR-20.0 Design Residential and a Rezone from SLP to DR-20. The proposed project would also require modification to the Orcutt Community Plan (OCP) Development Standards KS17-1, KS17-2, KS17-3, KS17-4, and KS17-5 and the OCP Policy KS17-1. Currently, there is no specific development plan for the site. A range of levels of care for senior housing facilities are being considered resulting in a final project that could include: continuing care retirement community, assisted living, congregate care facility, senior adult housing (attached), or senior adult housing (detached). The site is currently undeveloped. The subject property, a 9.53-acre parcel currently zoned SLP and identified in the Assessor Parcel Map Book as APN 105-134-002, -004, -005, 105-330-005, and -006, is located at what is commonly known as OCP Key Site 17 at the intersection of Soares Avenue and Rice Ranch Road in the community of Orcutt.

The proposed project's development plan may include an emergency generator, firewater pump, or water heaters, which may be subject to APCD permit requirements and prohibitory rules. Therefore, APCD may be a responsible agency under the California Environmental Quality Act (CEQA), and will rely on the EIR when evaluating any APCD permits for proposed equipment. In the case of a diesel-fired emergency generator, an equipment-specific Health Risk Assessment may be required. Please contact APCD Engineering and Compliance Division at (805) 961-8800 for more information on HRA screening.

3-1

Air Pollution Control District staff offers the following comments on the Draft EIR:

1. **Section 4.2 Air Quality, Page 4.2-14 and Section 4.12 Greenhouse Gas Emissions/Climate Change, Page 4.12-8:** The Air Quality Planning Consistency discussion on page 4.2-14 states that *"The proposed project would generate a population of about 385 (assuming 1.5 people per unit)."* The Greenhouse Gas Emissions/Climate Change section on page 4.12-8 states that the service population to compare to the applicable threshold of 4.6 MT CO<sub>2</sub>e per resident per year was calculated *"conservatively assuming two residents per dwelling unit"* resulting in annual

3-2

Terence E. Dressler • Air Pollution Control Officer

operational emissions of 3.53 MT CO<sub>2</sub>e per resident per year. These statements present an inconsistent resident per dwelling unit being applied to the project to analyze project impacts. Please revise the document to present a consistent resident per dwelling unit throughout the document.

3-2

2. **Section 4.2 Air Quality, 4.2.3 Project Impacts and Mitigation Measures, Page 4.2-12 and 13:** The development of the site will introduce residential units in the vicinity of a school bus maintenance and storage yard, which generates diesel emissions. The applicant is advised to consider incorporating a buffer between the storage yard and residential units when designing the final project.

3-3

3. **Section 4.2 Air Quality, 4.2.3 Project Impacts and Mitigation Measures, Page 4.2-13:** The value for cancer risk appears in the document as *0.9 in a million*. However, performing the calculation provided ( $0.00312 \mu\text{g}/\text{m}^3 \times 300 \text{ in a million per } \mu\text{g}/\text{m}^3$ ) results in a 0.0936 in a million cancer risk. Please revise the value as necessary.

3-4

4. **Appendix B, SCREEN3 Output:** The worst-case one-hour exposure DPM concentration on the SCREEN3 output should agree with value presented on page 4.2-13 of  $0.000312 \mu\text{g}/\text{m}^3$ . The SCREEN3 model run appears to be an older version of the model run, as the results of the model run do not match the information provided in the text of the document. Please include the most recent SCREEN3 model run and confirm that the results align with the values presented on page 4.2-13.

3-5

Air Pollution Control District staff offers the following suggested conditions be placed on the development that is eventually proposed for this site:

1. APCD Rule 345, *Control of Fugitive Dust from Construction and Demolition Activities*, became effective on July 21, 2010 and establishes new limits on the generation of visible fugitive dust emissions at demolition and construction sites. The rule includes measures for minimizing fugitive dust from on-site activities and from trucks moving on- and off-site. The text of the rule can be viewed on the APCD website at [www.sbcapcd.org/rules/download/rule345.pdf](http://www.sbcapcd.org/rules/download/rule345.pdf).
2. Prior to occupancy, APCD permits must be obtained for all equipment that requires an APCD permit. APCD Authority to Construct permits are required for diesel engines rated at 50 bhp and greater (e.g., firewater pumps and emergency standby generators) and boilers/large water heaters whose combined heat input rating exceeds 2.0 million BTUs per hour.
3. All portable diesel-fired construction engines rated at 50 brake-horsepower or greater must have either statewide Portable Equipment Registration Program (PERP) certificates or APCD permits prior to operation. Construction engines with PERP certificates are exempt from APCD permit, provided they will be on-site for less than 12 months.
4. Small boilers and water heating units (rated between 75,000 and 2.0 million Btu/hr) must comply with the emission limits and certification requirements of APCD Rule 360. Combinations of units totaling 2.0 million Btu/hr or greater are required to obtain a District permit prior to installation. Please see [www.sbcapcd.org/eng/boiler/rule360/rule\\_360.htm](http://www.sbcapcd.org/eng/boiler/rule360/rule_360.htm) for more information and a list of certified boilers (note: any units fired on fuel(s) other than natural gas

3-6

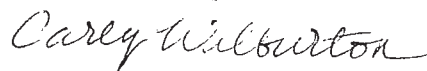
must be certified by the SBCAPCD on a case-by-case basis, even if the unit is certified when fired on natural gas).

5. If contaminated soils are found at the project site, the APCD must be contacted to determine if Authority to Construct and/or Permit to Operate permits will be required.
6. At a minimum, prior to occupancy any feasible greenhouse gas reduction measures from the following sector-based list should be applied to the project:
  - Energy use (energy efficiency, low carbon fuels, renewable energy)
  - Transportation (reduce vehicle miles traveled, compact and transit-oriented development, pedestrian- and bicycle-friendly communities)
  - Water conservation (improved practices and equipment, landscaping)
  - Waste reduction (material re-use/recycling, composting, waste diversion, waste minimization)
  - Architectural features (green building practices, cool roofs)
7. Asphalt paving activities shall comply with APCD Rule 329, *Cutback and Emulsified Asphalt Paving Materials*.

3-6

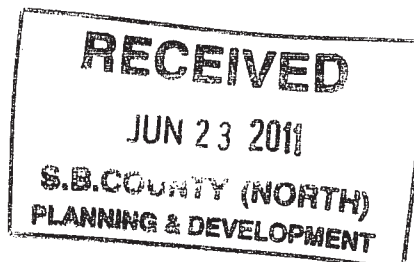
If you or the project applicant have any questions regarding these comments, please feel free to contact me at 805-961-8890 or via email at [cvw@sbcapcd.org](mailto:cvw@sbcapcd.org).

Sincerely,



Carly Wilburton,  
Air Quality Specialist  
Technology and Environmental Assessment Division

cc: Oasis Associates, Inc.  
Marysia Ochej, Orcutt Union School District  
Project File  
TEA Chron File



6/28/2011.

For: Florence Trotter-Cadena and John Zorovich, Santa Barbara County Planners  
from Lillian Smith

Re: Tetra Tech, Inc..Santa Barbara, Findings Regarding Radon Activity on KS 17  
and Suggested Mitigations and 10 other sites in Orcutt which were evaluated  
for Radon Activity (See Appendix in the DSEIR (5/2010) for the Orcutt School  
District, Key Site 17, nine acres)

- 1) Tetra Tech., Inc. person **contacted 6/28/2011: Mr. Randy Westhaus**  
Cell: 805-455-0603, Office 805-681-3100, Ext.130  
E-mail Randy.Westhaus@Tetrattech.com
- 2) See Draft Subsequent EIR (May, 2011) for Preliminary Endangerment  
Section for Radon activity on eleven Orcutt sites and suggested mitigations.
- 3) See p. 15-1, Sec. 15.0, for the following Tetra Tech, Inc., personnel (2001)  
names: James R. Steele, Principal Geologist, and Randy W. Griffith, P.E.  
Project Manager  
(Steve Nailor and Paul Bailey of the Santa Barbar County Protection Services  
Division were contacted by Tetra Tech, Inc., for a review of their files

Question: What sites were included in the eleven sites tested for Radon  
activity, beside the Key Site 17, School District Site?  
Were Key Sites 3 and 30 among them?

**DEPARTMENT OF TRANSPORTATION**

50 HIGUERA STREET  
 SAN LUIS OBISPO, CA 93401-5415  
 PHONE (805) 549-3101  
 FAX (805) 549-3329  
 TDD (805) 549-3259  
<http://www.dot.ca.gov/dist05/>



*Flex your power!  
 Be energy efficient!*

June 30, 2011

John Zorovich  
 Santa Barbara County Planning  
 624 W. Foster Road, Suite C  
 Santa Maria, CA 93455

SB-135-R10.41  
 SCH 2009121042

SUBJECT: Orcutt Union School District – Key Site 17 Draft Environmental Impact Report

Dear Mr. Zorovich:

Thank you for the opportunity to provide comment on the Key Site 17 Draft Environmental Impact Report (DEIR). The project anticipates up to 257 senior-serving housing units. It is not known, however, what the precise configuration of housing type will be constructed. Caltrans offers the following comments:

1. Page 4.11-11, Comparison with OCP EIR. This paragraph states that the 1995 OCP EIR KS17 analysis concluded that proposed development of KS17 would not result in significant project-specific traffic impacts. This should be reconciled with the text in the 1995 OCP EIR (vol II) on page 17-15 which states that “The following site-specific mitigation measures would also be required:” and references Mitigation KS17-CIRC-1. According to the Residual Impacts discussion, it is this mitigation measure, in conjunction with other measures, which would reduce impacts to less than significant. 5-1
2. Page 4.11-11, Mitigation Measures. “Mitigation measures are not required.” Please reconcile with site-specific mitigation measure in the 1995 OCP EIR referenced in paragraph 1 above. 5-2
3. Page 2-6, paragraph 2.7: Development Previously Evaluated in the OCP EIR. This paragraph sets forth that the 1995 OCP EIR evaluated several alternatives from No Project to High Buildout. The current KS17 EIR should define what is meant by “evaluated”. Four alternatives are presented on page 17-30 of the 1995 OCP EIR. If these are the evaluations referred to with the current DEIR, the narrative should explain whether or not these evaluations would meet the burden of CEQA analysis on their own. The low-buildout and high-buildout discussions include a generalized caveat that these alternatives’ impacts would increase significantly; yet nowhere are those impacts further treated within the 1995 DEIR. 5-3
4. Page 4.11-7, Table 4.11-2, Project Trip Generation. Generation Rates are obtained from the ITE standard reference 8<sup>th</sup> edition. All ADT generation rates and the p.m. peak rates for Senior Adult Housing – Attached (252) and Congregate Care Facility (253) use the average trip rate values. The KS17 DEIR should explain why the p.m. peak rates for Senior Adult Housing – Detached (251) and Assisted Living (254) much lower than the p.m. peak average rate stated in the ITE reference. If the p.m. peak average rate for land uses 251 and 254 5-4

John Zorovich

June 30, 2011

Page 2

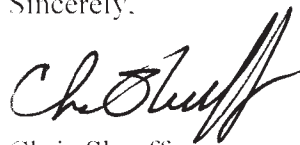
reflect the average rate in the ITE manual, the discussion on page 4.11-11, Comparison with OCP EIR, may not be entirely accurate.

The KS17 DEIR should explain how the p.m. peak average rate for CCRC (255) was obtained. The table for this time period for this land use does not appear to be included the ITE manual.

5. Regarding use of methodology, Caltrans has historically requested the use of the Highway Capacity Methodology for State owned facilities, in particular, signalized intersections. This method provides the analyst with a superior suite of tools to analyze the myriad components of complex intersections. This particular project will affect the two closely spaced intersections of Clark / Orcutt and the Clark / 135 NB ramp node. Because they are very close together, they should be analyzed as a single unit, which is a complex undertaking. This DEIR does not provide adequate treatment of this facility.

Thank you for accepting these comments upon this project. I can be reached at 805.549.3632 if you have any questions.

Sincerely,



Chris Shaeffer  
Caltrans District 5  
Development Review

C: L. Newland, CT  
F. Boyle, CT  
M. Streder, CT

5-4

5-5





05 July 2011

Ms. Florence Trotter  
PLANNING & BUILDING DEPARTMENT  
COUNTY OF SANTA BARBARA  
624 West Foster Road  
Santa Maria, CA 93455-3623

RE: APPLICANT'S RESPONSE TO THE DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT ("DSEIR") FOR THE ORCUTT UNION SCHOOL DISTRICT KEY SITE 17 PROJECT 09GPA-00000-00004, 09RZN-00000-000012

Dear Florence,

As agent for the applicant, Orcutt Union School District ("OUSD"), we are pleased to provide you with the following comments to the DSEIR. Thank you in advance for your time and consideration of our collective comments.

Our objective in providing these comments is to ensure accuracy of the DSEIR consultant's peer review of the technical and environmental aspects of the project, address the environmental determination, and the proposed mitigation measures. For ease of reference, our comments are presented pursuant to the organization of the sections in the DSEIR.

**1.0 Executive Summary**

**Section 1.2.4 Proposed GPA/Rezone, Page 1-3:**

In the introductory paragraph, please clearly state that the OUSD relied on the original DevStd KS17-6 of the Orcutt Community Plan ("...the County should consider redesignating and rezoning the affected parcels" if a 100% senior housing project is proposed). This is an important distinction that provided guidance to the OUSD and formed the basis for the decision to seek the requested entitlements and modifications to the Orcutt Community Plan.

6-1

**Section 1.2.4 Proposed GPA/Rezone, Page 1-4:**

The applicant's requested modifications to the development standards (See Appendix A – Scoping Document, Attachment A: Key Site 17 Policy and Development Standards Comparison Table) were not in their entirety carried forward into this section. Specifically, proposed DevStd KS 17-7 not only included guidance regarding architectural style and character of future development on Key Site 17, but addressed standards for parking, building height and lot coverage. While this may have been an unintentional oversight, please modify this section to include the entire proposed DevStd KS17-7.<sup>1</sup>

6-2

<sup>1</sup> **Parking:** Parking standards for senior housing shall be determined based upon the type of senior housing (i.e., independent living, assisted living, and skilled nursing). Parking for group housing (skilled nursing/assisted living) projects shall be calculated based upon number of persons. Parking for projects with units that include a kitchen (independent living/assisted living) shall be calculated based on the number of beds or per guest room.

1. Should the parking standards require modification based upon a specific project requirements, the requested modification shall be evaluated based upon the following:
2. The modification is minor in nature and will result in a better architectural or site design, as approved by the Board of Architectural Review, and/or will result in greater resource protection than the project without the modification.

**4.1 Aesthetics/Visual Resources – General Comments**

Based upon the recent EIR administrative hearing, the consultant clarified that the Class I visual resource impacts were due to the lack of a specific development proposal to review (i.e., lodging of a formal application including a site plan, building elevations and floor plans). It was further clarified by County staff, assuming that the requested entitlements are granted, that when a senior housing development application is submitted, the applicant will have the ability to bring forward a project that could eliminate these Class I impacts. We believe that this constitutes a significant distinction that should be brought forward to the public and the decision-makers.

6-3

In addition to the above-mentioned, the consultant referenced the visual resource section of the Final Environmental Impact Report (“FEIR”) for the Orcutt Community Plan (95-EIR-01, SCH No. 95031055), and specifically VIS-11: Alteration of visual character of Old Town Orcutt and VIS-12: Incompatible development in Old Town Orcutt. While the consultant commented that this information also informed the project’s Class I visual impact, the FEIR clearly states that the impacts related to VIS-11 and VIS-12 “...could lead to *potentially significant* impacts to the visual character of Old Town through elimination of approximately 150 acres of open space and substantial changes to views from Clark Avenue and Rice Ranch Road” and “could create *potentially significant* visual impacts through construction of buildings whose size and architectural style, etc. are incompatible with the existing character of Old Town.”, respectively. *Potentially significant* is not synonymous with a Class I impact defined as a significant, unavoidable adverse impact.

6-4

It is noteworthy that the FEIR also offered mitigation for VIS-11 and VIS-12 that included creation of an Old Town Orcutt overlay [currently the *Old Town Orcutt Design Guidelines*, July 25, 2006, BOS Resolution 06-236] and review by the Board of Architectural Review (“BAR”). While no development project is being reviewed at this time, it is inappropriate to consider a Class I impact to visual resources for a general plan amendment, rezone and modifications to the OCP. Even the OCP’s FEIR recognized that project specific visual impacts could be rendered less than significant with mitigation.

6-5

**Section 4.1.1 Existing Conditions, Page 4.1-2, Southerly Views of the Casmalia and Solomon Hills:**

This section states that “modestly-scaled, single-story residences and associated mature landscaping...are of sufficient heights to block ground level views of the Casmalia and Solomon Hills...” DevStd KS17-1 requires the proposed development to be partially screened with trees and shrubs along the surrounding streets including Soares Avenue. Please clarify the contradiction between DevStd KS17-1 that requires a landscape screen and DevStd KS17-2 that requires the preservation of long-range southerly views. Perhaps, a Class I visual resource impact is not warranted.

6-6

- 
3. The project will be compatible with the neighborhood, and will not create an adverse impact to aesthetics, community character, or public views.  
Any modification of parking or loading zone requirements will not adversely affect the demand for on-street parking in the immediate area.  
**Height:** The maximum height for a 100% senior housing project shall be 35 feet. The 35-foot maximum may allow the project to reach three stories on the interior (refer to DevStd KS17-2) of the site as long as the long range southerly hillside view from Old Town Orcutt are preserved.  
**Coverage:** A 100% senior housing project shall have a maximum site coverage of 60%.



**Section 4.1.1 Existing Conditions, Page 4.1-3, Existing Development Standards:**

See comment above.

**Section 4.1.4 Project Impacts and Mitigation Measures, Page 4.1-7, Visual Character / Compatibility:**

For clarification, please incorporate the applicant’s project description that included proposed development standard (KS17-7) requiring any future development to be compatible with the surrounding neighborhood and maintain visual resources. Proposed DevStd KS17-7 also requires future development to comply with the Old Town Orcutt Design Guidelines.

6-7

**Section 4.1.4 Project Impacts and Mitigation Measures, Page 4.1-8, View Impacts:**

Figures 4.1-7 and figure 4.1-8 illustrate the worst case development scenario. While this scenario does block some views of the Solomon and Casmalia Hills, it does not completely obscure them. Since views cannot be completely preserved, add a discussion regarding the Board of Architectural Review’s (“BAR”) role in the process and their ability to analyze the design of any future development. In their review of the project, the BAR can ensure that portions of the long-range views are preserved through, for example, the use of view corridors.

6-8

**4.2 Air Quality**

We have reviewed the comments from the Santa Barbara Air Pollution Control District (“SBAPCD”, June 22, 2011). Please confirm that the suggested SBAPCD language will become part of a future development’s Conditions of Approval.

6-9

**4.3 Biological Resources**

**Section 4.3.1 Existing Conditions, Page 4.3-3, Existing Biological Resources, para. 2:**

The patch of coast live oak seedlings, located in the south central portion of the property, are referred to as “significant”. On page 4.3-7, it states that none of the coast live oak seedlings can be considered “established”. Please clarify the significance of these seedlings.

6-10

**Section 4.3.1 Existing Conditions, Page 4.3-5, Existing Biological Resources:**

To provide additional clarification, add a reference to Section 4.7 Flooding and Water Quality that discusses mitigation measures for the potential impacts to the Pine Canyon Creek and Downstream Waterbodies.

6-11

**4.4 Cultural Resources**

No comments.

**4.5 Geology and Soils**

No comments.

**4.6 Hazards and Hazardous Materials**

No comments.

**4.7 Flooding and Water Quality**

No comments.

**4.8 Noise**

No comments.

**4.9 Public Services**

No comments.

**4.10 Recreation – General Comments (also applicable to Section 4.10.2 Thresholds of Significance)**

The EIR confuses the reader by using the existing development standard (DevStd KS 17-3) as the established threshold level to compare the applicant’s requested modifications to the OCP. (See page 4.10-6 last paragraph regarding “conflict” with an existing land use standard). This is a circular argument and invalidates the Class I impact. The purpose of the applicant’s request (to amend the general plan, rezone the property and modify the existing development standards) is to recognize the inherent difference between the originally envisioned development and related development standards for a portion of Key Site 17 and the proposed and modified development standards to better accommodate a senior housing development. Therefore, the applicant purposefully requested flexibility in the location, at a minimum, of any park feature to better accommodate seniors.

6-12

In the OCP, approved in 1997, Key Site 17 was envisioned for low-density, detached, single family residential development (Res 8/SLP), similar to the adjacent Stonegate development. Based upon the allowed use and the property ownership at the time, the requirement for each potential development to contribute land and build a contiguous neighborhood park of between 1 – 2 acres was a reasonable standard. Since 1997, the subject properties were purchased by the OUSD, and subsequently a number of other variables now influence its development (e.g., declining school enrollment, OUSD revenue shortfalls, demographic of the community trending toward a higher population of seniors<sup>2</sup>).

6-13

A future proposal for a 100% senior housing project may, as noted, be comprised of a variety of housing “types”. Based upon these distinctions, a “park” may not meet the needs of the future residents (e.g., an Alzheimers facility does not allow for the free movement of its residents whether in a public or private park setting) or the public at large.

From a physical perspective, the “Stonegate” developer designed, obtained County approval, and constructed the approximate 0.5 acre park independent of a consideration for a “contiguous” park pursuant to the OCP standard. The fenced park is located vertically two (2) feet below the elevation at the District’s property line. If a “senior” park was constructed adjacent to the “Stonegate” park, these existing features would create a barrier/separation between the two parks and any notion of contiguity would be difficult to achieve.

6-14

<sup>2</sup> County of SB Housing Element 2009-2014 (Adopted November 2010) Chapter 2 - Housing Needs, Special Needs Populations – Elderly, Page 47: Access to housing that suits varying needs during each stage of life is a fundamental component of a healthy community. By planning for assisted living facilities, senior housing developments, and retrofit programs to help populations age in place, the County can retain its long-time residents and keep families intact. This is a particularly important consideration for Santa Barbara County, as Table 2.26 demonstrates the elderly population in the region is projected to increase as a proportion of the total population, from 12 percent in 2000 to 16 percent in 2020.

**Section 4.10.1 Existing Conditions, Page 4.10-6, OCP Proposed Park and Trails, and Applicable Development Standards, para 1:**

It should be noted that the “Stonegate” park has been developed independently with a location and related features that render a “complementary recreational use” difficult to achieve. The perceived separation caused by the trees and retaining wall may not allow for a contiguous park, “open play fields”, or “group picnic facilities”.

6-15

**Section 4.10.1 Existing Conditions, Page 4.10-6, OCP Proposed Park and Trails, an Applicable Development Standards, para. 2:**

To provide clarity, please add the underlined language to existing sentence as follows: *The remaining park requirement (0.75 acre) is to be provided on Parcel 105-134-004, which is owned by the Orcutt Union School District and within the proposed project site.*

6-16

**County Parks Department Fee Structure, page 4.10-6**

While the EIR correctly states that the County of Santa Barbara assesses both a Quimby Fee and a Parks Development Mitigation Fee, it should be clarified that the Quimby fee is not applied to a senior housing development (by definition, dwelling other than single family). Only the Parks Development Mitigation Fee would be applied based upon a per unit fee.<sup>3</sup>

6-17

**Section 4.10.3 Project Impacts and Mitigation Measures – Demand for Recreational Facilities:**

With the advent of senior housing developments, and the potential changes to accommodate the large Baby Boomer cohort, the strict application of the County standard to determine the demand for recreational facilities may not accurately represent future needs. Again, based upon the type of senior housing, recreational demand may not necessarily increase, and in fact, may decrease. The EIR acknowledges that while there may be an increase in residents, “senior housing may result in the need different type of recreational facilities (e.g., a less intensive need for active recreational facilities).

6-18

Clearly, the OCP envisioned the recreational needs based upon build out of Key Site 17 as a low-density, single family detached development, and while senior housing was noted as an alternative development scenario in the OCP, its associated recreational needs were not contemplated.

**Section 4.10.3 Project Impacts and Mitigation Measures, Page 4.10-8, Proposed Revisions to Development Standards:**

We would offer that an appropriate mitigation measure could be crafted that would satisfy the needs of the residents of a future senior housing development, while maintaining the County’s ability to require the creation of a complementary and contiguous park should the property not be owned by the OUSD. We offer the following language to replace **DevStd KS17-3:**

6-19

*Any discretionary development proposed on APNs 105-134-004, 105-134-005, 105-330-005, or 105-330-006 shall provide for the construction of an approximate 0.75 acre park. If at a future date the property is sold by the Orcutt Unified School District to a private entity or the property is not developed as a senior housing facility, the proposed park*

<sup>3</sup> Source: County of Santa Barbara Development Impact Mitigation Fee Summary Sheet – Orcutt Planning Area, rev. FY 2011-2012.

*shall be constructed adjacent to the existing "Stonegate" park along Soares Avenue and dedicated to the County as a public neighborhood park.*

**4.11 Traffic and Circulation**

**Section 4.11.3 Project Impacts and Mitigation Measures, Page 4.11-14, Transit:**

It is important to note that DevStd KS17-4 currently requires that any future development be coordinated with Santa Maria Area Transit ("SMAT") in order to provide a bus turnout along a public road or within the project site. The project will also be required to create a Transportation Demand Management Plan ("TDMP").

**Section 4.11.4 Cumulative Impacts, Page 4.11-19, Transit:**

Noting that DevStd KS17-4 currently requires coordination with SMAT and the inclusion of a bus turnout may provide clarification regarding the mitigation measures discussed in the last paragraph.

**4.12 Greenhouse Gas Emissions/Climate Change**

We have reviewed the comments from the Santa Barbara Air Pollution Control District ("SBAPCD", June 22, 2011). Please confirm that the suggested SBAPCD language will become part of a future development's Conditions of Approval.

**5.0 Policy Consistency**

**Section 5.1 Santa Barbara County Comprehensive General Plan, Page 5-2, Action KS17-6:**

Please provide clarification in the discussion section. The request is that the property be rezoned to accommodate a 100% senior housing development. Therefore, no "single-family homes" would be included in the proposed development. Even though the proposed amendment to the OCP would eliminate single family homes along Soares Avenue, DevStd KS17-2 requires that all development in this location be restricted to one story, thus accomplishing the original goal of Action KS17-6 and avoiding any potentially significant impacts.

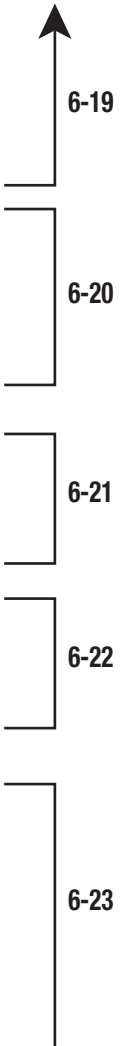
On behalf of the applicant, we appreciate the opportunity to provide comments to the Draft Subsequent Environmental Impact Report. Thank you in advance for your time and consideration. Should any of our individual comments require further explanation and/or clarification, please contact us at your earliest convenience. We would also be amenable to sending you and/or the consultant a digital copy of this document in a Microsoft Word format.

Respectfully submitted,  
OASIS ASSOCIATES, INC.



C.M. Florence, AICP Agent  
ORCUTT UNION SCHOOL DISTRICT

c: M. Ochej, Asst. Superintendent Business Services, OUSD  
J. Karamitsos, County of SB  
07-0039



# Mitigation Monitoring and Reporting Program

---

# SECTION 11

**11.0 MITIGATION MONITORING AND REPORTING PROGRAM**

Mitigation	Monitoring Phase	Party Responsible for Implementation	Party Responsible for Verification/ Monitoring	Sign Off (Initial)	Date
<p><b>AES 1-1:</b> The County shall amend the OCP to add a Key Site 17 development standard stating that:</p> <ul style="list-style-type: none"> <li>• BAR review of the project shall ensure that buildings are appropriately sized and incorporate design elements to promote visual compatibility with the surrounding neighborhood, particularly along Soares Avenue. Potential design elements may include articulation of outer building facades and roof-lines, stepping back upper stories of buildings, and use of building materials common to single-family homes rather than commercial building materials.</li> <li>• Mechanical equipment (such as air conditioner units) and trash storage areas shall be screened from public view. Screening may include a combination of landscaping and/or masonry or lattice walls).</li> <li>• Low maintenance trees, shrubs, and groundcover shall be used in landscape plans for development of the site, particularly within the outer perimeter of the site.</li> </ul>	<p>Planning and Development (P&amp;D) shall be in receipt of appropriate plans prior to BAR review.</p>	<p>Applicant</p>	<p>Santa Barbara County P&amp;D compliance monitoring staff.</p>	<p>Planning and Development (P&amp;D) shall be in receipt of appropriate plans prior to BAR review.</p>	<p>Applicant</p>
	<p>P&amp;D shall review and approve the project plans prior to approval of a zoning clearance.</p>	<p>Applicant</p>	<p>Santa Barbara County P&amp;D compliance monitoring staff.</p>	<p>P&amp;D shall review and approve the project plans prior to approval of a zoning clearance.</p>	<p>Applicant</p>

Mitigation	Monitoring Phase	Party Responsible for Implementation	Party Responsible for Verification/Monitoring	Sign Off (Initial)	Date
<ul style="list-style-type: none"> <li>The on-site stormwater basin shall be designed to be visually pleasing from on-site as well as in views from Rice Ranch Road. Steep-sided, concrete-lined basins shall be avoided to the maximum extent feasible. The use of natural-appearing contoured basins is preferred. The use of perimeter fencing, in particular chain-link fencing, shall be avoided. Where required, perimeter fencing shall be of a decorative nature.</li> </ul> <p>The applicant shall improve existing visual resources in the project vicinity to offset the project's impacts on the area's visual character. Options for improving aesthetic/visual resources include, but are not limited to, increased landscaping of undeveloped areas on OUSD-owned property adjacent to public roads.</p>	<p>Planning and Development (P&amp;D) shall be in receipt of appropriate plans prior to BAR review.</p> <p>P&amp;D shall review and approve the project plans prior to approval of a zoning clearance.</p>	<p>Applicant</p> <p>Applicant</p>	<p>Santa Barbara County P&amp;D compliance monitoring staff.</p> <p>Santa Barbara County P&amp;D compliance monitoring staff.</p>		

Mitigation	Monitoring Phase	Party Responsible for Implementation	Party Responsible for Verification/ Monitoring	Sign Off (Initial)	Date
<p><b>BIO 1-1:</b> The County shall amend the OCP to add a Key Site 17 development standard requiring that nesting bird surveys be conducted by a qualified biologist prior to site preparation activities to determine if any active nests of special status bird species are present in the construction disturbance zone. The construction disturbance zone includes areas within 200 ft. of the site (for songbirds) and areas within 500 ft. of the site (for raptors). If active nests of raptors or other special status species are found within the disturbance zone, construction activities shall be limited, and an appropriate setback shall be established in consultation with the County and CDFG.</p>	<p>P&amp;D shall review the biological surveys prior to construction.</p>	<p>Applicant</p>	<p>Santa Barbara County P&amp;D compliance monitoring staff.</p>		
<p><b>HAZ 1-1:</b> The County shall amend the OCP to add a Key Site 17 development standard stating that: Prior to approval of a senior housing development at the project site, the applicant shall update the Phase I Environmental Site Assessment to ensure that more recent activities on the property have not resulted in deposition of hazardous materials that could result in impacts to future residents at the site. If such materials are found to exist, affected areas will be remediated. Review and approval by County Environmental Health Services Department (EHS) and Santa Barbara County Fire are required.</p>	<p>Prior to approval and issuance of zoning clearance, P&amp;D staff shall verify review and approval of the Phase I Environmental Site Assessment by the County Fire Department.</p>	<p>Applicant</p>	<p>P&amp;D shall verify with the County Fire Department that appropriate sampling and if required, remediation has been completed. Following verification of regulatory compliance, P&amp;D shall complete a permit compliance inspection of the site</p>		



Mitigation	Monitoring Phase	Party Responsible for Implementation	Party Responsible for Verification/ Monitoring	Sign Off (Initial)	Date
<p><b>HAZ 1-2:</b> The County shall amend the OCP to add a Key Site 17 development standard stating that: Development on the site shall be designed to minimize potential conflicts with the adjacent bus yard operations.</p>	<p>P&amp;D shall review and approve the project plans prior to approval of a zoning clearance.</p>	<p>Applicant</p>	<p>Santa Barbara County P&amp;D compliance monitoring staff</p>		
<p><b>HAZ 1-3:</b> The County shall amend the OCP to add a Key Site 17 development standard stating that: A radon gas survey shall be performed prior to development on this site. Radon-resistant construction techniques shall be implemented where necessary to prevent radon gas accumulation within enclosed areas.</p>	<p>Building &amp; Safety shall review the radon surveys prior to occupancy clearance.</p>	<p>Applicant</p>	<p>Santa Barbara County Building &amp; Safety shall site inspect.</p>		
<p><b>FLD/WQ 1-1:</b> The County shall amend the OCP to add a Key Site 17 development standard stating that: The Applicant shall submit proof of exemption or a copy of the Notice of Intent to obtain coverage under the Construction General Permit of the National Pollutant Discharge Elimination System issued by the California Regional Water Quality Control Board.</p>	<p>Applicant shall demonstrate compliance with the California Regional Water Quality Control Board requirements prior to issuance of a zoning clearance.</p>	<p>Applicant</p>	<p>Santa Barbara County P&amp;D compliance monitoring staff</p>		

Mitigation	Monitoring Phase	Party Responsible for Implementation	Party Responsible for Verification/ Monitoring	Sign Off (Initial)	Date
<p><b>FLD/WQ 2-1:</b> The County shall amend the OCP to add a Key Site 17 development standard stating that: The development shall incorporate and maintain the following operational erosion control measures:</p> <ol style="list-style-type: none"> <li>1. Erosion control measures, such as plantings or hard surfaces, shall be incorporated into the drainage plan for all project drainages as required by the Flood Control District and P&amp;D.</li> <li>2. Development in areas of high erosion potential shall be sited and designed to minimize increased erosion and may be required to have a site-specific evaluation of erosion-control measures. Project approval shall be conditioned to ensure that erosion will be reduced to acceptable levels.</li> <li>3. Landscaped areas adjacent to structures shall be graded so that drainage is away from structures.</li> <li>4. Irrigation shall be controlled so that overwatering does not occur. An irrigation schedule shall be reviewed and approved by P&amp;D prior to land use clearance for grading.</li> </ol>	<p>P&amp;D shall review grading plans for adequate erosion control measure and shall site inspect during grading.</p>	<p>Applicant</p>	<p>Santa Barbara County P&amp;D compliance monitoring staff</p>		

Mitigation	Monitoring Phase	Party Responsible for Implementation	Party Responsible for Verification/ Monitoring	Sign Off (Initial)	Date
<p><b>FLD/WQ 2-2:</b> The County shall amend the OCP to add a Key Site 17 development standard stating that: The applicant shall submit and implement a Storm Water Quality Management Plan (SWQMP) designed to prevent the entry of pollutants from the project site into the storm drain system after development. The SWQMP shall identify:</p> <ol style="list-style-type: none"> <li>1. A combination of structural and non-structural Best Management Practices (BMPs) from the California Storm Water BMP Handbook for New Development and Redevelopment (California Storm Water Quality Association), or other approved methods;</li> <li>2. Potential pollutant sources that may affect the quality of the storm water discharges;</li> <li>3. Design and placement of structural and non-structural BMPs to address identified pollutants;</li> <li>4. Inspection and maintenance program; and</li> <li>5. Method for ensuring maintenance of all BMPs over the life of the project.</li> </ol>	<p>P&amp;D shall review project plans prior to issuance of zoning clearance and building permits.</p>	<p>Applicant</p>	<p>Santa Barbara County P&amp;D compliance monitoring staff</p>		

Mitigation	Monitoring Phase	Party Responsible for Implementation	Party Responsible for Verification/ Monitoring	Sign Off (Initial)	Date
<p><b>FLD/WQ 2-3:</b> The County shall amend the OCP to add a Key Site 17 development standard stating that: LID is an alternative site design strategy that uses natural and engineered infiltration and storage techniques to control stormwater runoff where it is generated to reduce downstream impacts. The Environmental Protection Agency has determined that the following LID measures are highly beneficial. In order to further reduce water quality impacts, the SWQMP and project design shall include the following LID measures:</p> <p><u>Design Measures</u></p> <ul style="list-style-type: none"> <li>• Vegetated swales, buffers and strips throughout the project site;</li> <li>• Use of permeable pavement to the extent feasible;</li> <li>• Two-foot permeable pavement strips located at the base of driveways, spanning the width of the driveway; Impervious surface reduction and disconnection.</li> </ul>	<p>P&amp;D shall review project plans prior to issuance of zoning clearance and building permits.</p>	<p>Applicant</p>	<p>Santa Barbara County P&amp;D compliance monitoring staff</p>		

Mitigation	Monitoring Phase	Party Responsible for Implementation	Party Responsible for Verification/ Monitoring	Sign Off (Initial)	Date
<p><u>Structural Measures</u></p> <ul style="list-style-type: none"> <li>• Tree boxes filters to capture and infiltrate street runoff upstream of detention basins;</li> <li>• Roof leader flows directed to planter boxes and other vegetated areas and/or vegetated swales and buffers;</li> <li>• Soil amendments to increase infiltration rates; and</li> <li>• Rain gardens, rain barrels, and cisterns.</li> </ul>					
<p><b>NSE 1-1:</b> The County shall amend the OCP to add a Key Site 17 development standard stating that: The noise study required by OCP DevStd NSE-0-1.3 shall address potential noise nuisance issues associated with the adjacent bus maintenance and storage yard. The study shall include measurements of noise levels generated at the bus yard and identify measures to minimize potential noise nuisance impacts to the extent feasible. Such measures may include requiring a site plan design that places less sensitive uses in locations closest to the bus maintenance and storage yard and places buildings housing sensitive uses in locations that would be removed from and/or shielded from the yard by intervening buildings; structural designs to achieve enhanced noise attenuation; and, if necessary, construction of a sound wall.</p>	<p>P&amp;D shall review acoustical repost prior to issuance of a zoning clearance.</p>	<p>Applicant</p>	<p>Santa Barbara County P&amp;D compliance monitoring staff</p>		

Mitigation	Monitoring Phase	Party Responsible for Implementation	Party Responsible for Verification/ Monitoring	Sign Off (Initial)	Date
<p><b>WAT-1:</b> The County shall amend the OCP to add a Key Site 17 development standard stating that: The maximum feasible water conservation measures shall be included in development of the site. Landscaping shall consist of drought-tolerant native and/or Mediterranean type species.</p>	<p>P&amp;D shall review project plans prior to issuance of zoning clearance and building permits.</p>	<p>Applicant</p>	<p>Santa Barbara County P&amp;D compliance monitoring staff.</p>		
<p><b>GHG-1 (Recommended):</b> Future development plans for the site shall incorporate the following to the extent practicable:</p> <ul style="list-style-type: none"> <li>• Construct the new residential buildings to exceed minimum California Title 24 energy efficiency requirements.</li> <li>• Utilize green buildings and roofs.</li> <li>• Use water conserving landscaping in residential and common areas</li> <li>• Promote solid waste recycling and minimization.</li> <li>• Create a pedestrian and bicycle-friendly community.</li> </ul>	<p>P&amp;D shall review project plans prior to issuance of zoning clearance and building permits.</p>	<p>Applicant</p>	<p>Santa Barbara County Building &amp; Safety shall site inspect.</p>		

# Preparers of the EIR, Contacts, and References

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# SECTION 12

## **12.0 PREPARERS OF THE EIR, CONTACTS, AND REFERENCES**

### **12.1 PREPARERS OF THE EIR**

This document was prepared under the direction and approval of the County of Santa Barbara. A team of private consultants, lead by Envicom Corporation prepared the document for the County, and the County by its approval accepts the document as its own.

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### **12.2 CONTACTS**

Martin Wilder, District Manager, Laguna County Sanitation District, 6/25/10, 7/2/10.  
Glenn Fidler, Captain SBCFD, July 15, 2010.

### **12.3 REFERENCES**

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# Appendices

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# APPENDICES

# **APPENDIX A**

## **EIR Scoping Document**



COUNTY OF SANTA BARBARA

Planning and Development

www.sbcountyplanning.org

# Attachment B EIR Scoping Document Key Site 17

09GPA-00000-00004/09RZN-00000-00012

**December 15, 2009**



**Owner/Applicant**

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## 1.0 INTRODUCTION

Pursuant to State CEQA Guidelines Sections 15063 and 15168 as well as Article V, Section E, 4 of the County of Santa Barbara Guidelines for the Implementation of the California Environmental Quality Act of 1970, as Amended (Last Revised 11/22/05) (“County CEQA Guidelines”), the County of Santa Barbara Planning & Development Department [i.e. the “Lead Agency”] has determined that the proposed request to and the land use designation on a portion of Key Site 17 from Residential 8 to Residential 20 which may allow the construction of up to 257 senior residential units will require the preparation of a Subsequent Project Environmental Impact Report (Subsequent Project EIR).

## 2.0 PROJECT DESCRIPTION/REQUEST

Orcutt Community Plan includes a policy statement, five (5) development standards and an action item to guide future development on Key Site 17. Action KS17-6 states:

*If an application is filed for a 100% senior housing project, as defined by California Civil Code § 51 et. seq, on Assessors Parcels 105-134-04, -05; 105-330-05, -06, or -08, the County should consider redesignating and rezoning affected parcels to Res. 20 and DR 14. However, to ensure neighborhood compatibility, the homes fronting Soares Ave. and the homes adjacent to the park should be single family on lots at least 6,000 s.f. in size. In addition, building on APNs 105-330-05, -06, or -08 may be two stories in height but should be of low profile and screened to the greatest degree feasible.*

In accordance with Orcutt Community Plan Action KS 17-6 cited above, the applicant is requesting a Comprehensive Plan Amendment and Rezone to change the current land use designation (09GPA-00000-00004) from Residential 8.0 units /acre to Residential 20.0 unit/ acre and to change the zoning (09RZN-00000-00012) from Small Lot Planned (SLP) to Design Residential 20 units per acre (DR-20). The site is identified as APNs 105-134-004, 005 and 105-330-005, 006 and is 9.53 acres in size. The site is also within the Orcutt Community Plan (OCP) and located on the eastern portion of Key Site-17.

Currently, the site has an OCP Land Use Designation of Residential 8.0, and is zoned Small Lot Planned (SLP). The application also includes a request to amend OCP Policy KS 17-1 and Development Standards DevStd. KS 17-2; KS 17-3; and, KS 17-6 to allow greater flexibility in site design. In addition, the applicant is requesting to add a new development standard (Dev Std KS 17-7) to provide guidance in the architectural style and character of future development on Key Site 17. Lastly, the applicant is proposing new parking, building height and coverage requirements to the Key Site 17 standards. A comparison of the existing and proposed policy and development standard text amendments are included in Attachment A.

According to an Orcutt Union School District representative, changing the land use designation to Residential 20.0 units/acre will allow for the potential future development of a 100% senior housing facility. Senior housing facilities, or Continuing Care Retirement Communities “CCRC,” are typically defined as a residential development developed, substantially rehabilitated, or substantially renovated for, senior citizens that has at least thirty-five (35)

dwelling units (California Civil Code §51.3). Developers of CCRCs have the option to offer one, or a combination of multiple ranges or levels of care required by its residents. These levels of care include the following:

<u>TYPE OF FACILITY</u>	<u>DESCRIPTION</u>
<b>Independent Living</b> –	For healthy seniors who are self-sufficient.
<b>Assisted Living</b> –	For people who do not have severe medical problems, but who require assistance with personal care.
<b>Skilled Nursing</b> –	Facilities with 24-hour medical care for people with chronic ailments.
<b>Special Alzheimer’s Care</b> –	Specialized housing and care tailored to people with the disease.
<b>Continuing Care Community</b> –	Complex of residences that contain all of the above, so that seniors can stay in one area as they age.

### 3.0 PROJECT LOCATION

The Orcutt Union School District (“School District”) owns portions of property known in the Orcutt Community Plan as Key Site 17, located on Rice Ranch Road, Dyer Street and Soares Avenue. The current District Office is located on the corner of Dyer Street and Soares Avenue. The School District’s holdings include two (2) partially developed parcels (APNs 105-134-002 and 105-330-007, totaling 3.73 acres) and four (4) vacant parcels (APNs 105-330-005, 006 and 105-134-004, 005, totaling 9.53 acres). The four vacant parcels comprise the project site. See Figure 1 below.



Figure 1: Aerial view of Key Site 17. Potential future development of senior housing would take place on 9.53± acres comprised of APN 105-134-004, 005 and 105-330-005, 006 (outlined in red).

<b>Table 1 Site Information</b>	
Comprehensive Plan Designation	Residential 8.0; 8 units per acre
Zoning District, Ordinance	SLP, Small Lot Planned
Site Size	9.53 acres
Present Use & Development	Vacant
Surrounding Uses/Zoning	North: Residential, 7-R-1 South: Residential DR-0.5 East: School Facilities, PI West: Residential , SLP
Access	Access off of Soares Avenue to the north and Rice Ranch Road to the south.
Public Services	Water Supply: Supplemental Water purchased from City of Santa Maria Sewage: Laguna County Sanitation District Fire: Santa Barbara County Fire Department

#### 4.0 ENVIRONMENTAL SETTING

Key Site 17 includes 19.7± acres consisting of seven (7) parcels and three (3) different ownerships. One (1) single family residence exists on the southeast corner of the site (APN 105-330-008), while forty-four (44) single family residences are currently being developed on the most westerly parcel (APN 105-330-004, Hartnell/Wells [Stonegate Subdivision]). One (1) parcel located along Dyer Street (APN 105-330-016) is partially developed by the Orcutt Union School District, while their other four (4) central parcels within the Key Site 17 boundary (APN 105-134-004, 005 and 105-330-005, 006) comprise the 9.53± acre project site for the potential future development of a senior housing facility. It should be noted that two (2) adjacent parcels (APN 105-134-002 and 105-330-007) are also owned by the Orcutt Union School District (i.e., District headquarters), but are not within the Key Site 17 boundary. See Table 2.

Access to the site is available from Soares Avenue to the north and Rice Ranch Road to the south. A 22-foot wide strip of land fronting Rice Ranch Road is exposed to high noise levels in excess of 60 dB from traffic along Rice Ranch Road.

The project site is relatively level and vegetated primarily with non-native grassland and scattered central dune scrub and curly dock. Soils which underlie the 9.53± acre area consist of Garey sandy loam, which is considered to be a moderate to high erosion hazard. An easement to Pacific Coast Oil Co. and Pinal Dome Co. for pipelines was recorded in 1905 for the central parcels. A Phase I Archaeological Survey was also conducted on the site by ISERA Group in March of 1995; no archaeological resources were discovered.

<b>Table 2: Existing Development on Key Site 17 Parcels</b>		
APN	Description	Proposed for Senior Housing
105-134-004	Not developed.	Yes
105-134-005	Not developed.	Yes
105-330-005	Not developed	Yes
105-330-006	Not developed.	Yes
105-330-004	44 single family residences will be constructed at build-out. Currently, 12 production and 3 model single family units have been built.	No



105-330-015	Partially developed. One (1) Single Family Residence.	No
105-330-016	Partially developed. Orcutt Union School District bus yard.	No

#### 4.1 PREVIOUS ENVIRONMENTAL REVIEW

##### **Orcutt Community Plan EIR (95-EIR-01).**

The project site was evaluated in the Program Environmental Impact Report 95-EIR-01, the EIR prepared for the Orcutt Community Plan (OCP). As part of the OCP process a “mini-EIR” was performed on the project site along with other selected Key Sites in the OCP planning area. The purpose of the mini-EIR was to examine the impacts associated with potential development scenarios on these sites and to have the review incorporated into the environmental document for the community plan.

The OCP EIR considered a project of 112 residential units for Key Site 17 with alternatives ranging from No Project (existing zoning) with 1 unit, Low Buildout with 64 units, up to High Buildout with up to 133 units. The expanded level of review in the OCP EIR identified and evaluated sixteen (16) site-specific impacts that could occur should the site be developed. The OCP EIR also discussed both general and site specific mitigation measures for each environmental issue identified.

Insofar as the site specific applications now being reviewed could result in new or substantially greater significant environmental impacts than those identified and adequately analyzed in the OCP EIR, a Subsequent Project EIR must be prepared to analyze such new or substantially greater impacts in accordance with Section 15168 of the California Environmental Quality Act (CEQA) Guidelines, as well as Article V, Section E, 4 of the County of Santa Barbara Guidelines for the Implementation of the California Environmental Quality Act of 1970, as Amended (Last Revised 11/22/05). To the extent that the OCP EIR adequately analyzed environmental impacts from the development of Key Site 17 the Subsequent Project EIR may rely on that analysis and/or incorporate it by reference, thus focusing on effects not analyzed adequately in the OCP EIR for Key Site 17.

The impacts identified in the OCP EIR, Notice of Preparation (NOP) process and Environmental Document Scoping meeting will be utilized as a baseline in determining potential impacts of the proposed project that must be analyzed in the Subsequent Project EIR.

#### 5.0 ENVIRONMENTAL REVIEW

The sections which follow do not include discussions of impacts to the following areas: Land Use, Agricultural Land Conversion, Schools, and Historical Resources. No significant impacts to these resources were identified during the initial evaluation of the proposed “project” and/or would not be relevant to a 100 percent senior housing facility. Potentially significant impacts are anticipated for several other issue areas and are described in detail below.

The prospective EIR consultants must propose a Scope of Work for a Project EIR that, at a minimum, includes these impact areas:

## **AESTHETICS/VISUAL RESOURCES**

The Orcutt School District “project site” is located on a portion of Key Site 17, specifically, 9.53 acres of the total 19.70<sub>±</sub> acres. The property is visible from Soares Avenue and Rice Ranch Road.

The property currently has no street lighting or nighttime activity that is lighted, and no structures that would produce glare. Land uses in the immediate vicinity that may be sensitive to increased levels of night lighting over existing lighting within these neighborhoods or new sources of daytime glare include single family residential development on the north, south, east, and across the open space to the west.

The undeveloped project site is located at the southern edge of the existing community of Old Town Orcutt and is in close proximity to some of the recently developed Key Sites, such as Rice Ranch (Key Site 12). Views from Old Town across the site consist of the Solomon and Casmalia Hills, which create a scenic backdrop for the community. Thus, the potential future build-out of 257 senior housing units could impact existing views and aesthetic qualities on the site. Proposed measures will be able to mitigate these impacts to less than significant levels.

Additionally, the “project” would add to the *potentially significant* cumulative impacts from the build-out of the entire Orcutt Community Plan. These impacts include:

- Increased night lighting. Increased development and associated night lighting from several thousand new units and acres of commercial development at and outside of the existing fringes of urban development, would result in *potentially significant* disruption of the night sky through the installation of street lights and increases in other outdoor lighting.
- Alteration of visual character of Old Town Orcutt. Development of open lands adjacent to Old Town Orcutt could lead to potentially significant impacts to the visual character of Old Town through elimination of open space and substantial changes to views from Clark Avenue and Rice Ranch Road.
- Incompatible development in Old Town Orcutt. New development / redevelopment within the Old Town area could create potentially significant visual impacts though construction of buildings whose size and architectural style, etc. are incompatible with the existing character of Old Town.

### **Potential Mitigation:**

Mitigation could include design requirements (including building height), vegetative screening, building footprint locations, minimization of lighting, or other similar measures in order to preserve the visual character of the area. Additional mitigation would likely include standard conditions related to hooded and shielded exterior lights, directing light downward and preventing spillover onto adjacent properties. All relevant Revised Key Site 17 Development Standards have been incorporated into these mitigation measures shown in *italics*. See Attachment A for a comparison between the existing Key Site 17 Policy and Development Standards and the proposed revisions.

- All project plans shall be reviewed by the Santa Barbara County Board of Architecture Review (“BAR”).
- The project site shall be planted with native trees every 25 feet on center (approximately 80 trees) along the frontage with Rice Ranch Road.
- A landscape buffer shall be installed along the northern property line, and incorporated into a small (approximately 1.7 acre) neighborhood park.
- *Homes located on Soares Avenue should be one-story so as to minimize the interruption of views across the site and southerly views from existing Old Town Orcutt.*
- Night lighting for safety and security will be shielded and of low-intensity pursuant to guidelines noted in the *Model Lighting Ordinance (“MLO”)*, developed by the International Dark-Sky Associates (“IDA”) and the Illuminating Engineering Society (“IES”).
- *The project shall comply with the Old Town Orcutt Design Guidelines to guide the architectural style and character of the proposed structures and other building elements.*
- *Any discretionary development shall include a landscape buffer consisting of drought tolerant trees and shrubs of sufficient density to partially screen the proposed development from Rice Ranch Road, Soares Avenue, and Dyer Street. The buffer along Soares Avenue shall be integrated with the planned park ‘A’ meandering trail along Rice Ranch Road.*
- *To ensure neighborhood compatibility, development located on Soares Avenue shall be one-story. Any development on the interior of the site shall be visually compatible with and shall not significantly block long-range southerly hillside views from Old Town Orcutt.*
- *To ensure neighborhood compatibility and maintain visual resources (i.e., long-range southerly hillside views from Old Town Orcutt), buildings should be of low profile and screened and/or softened with vegetation to the greatest degree.*

### **Scope of EIR:**

- Identify the existing visual resources of Key Site 17 and its surroundings, including the site’s physical attributes, its relative visibility from area roads, trails, and residences, and assess potential impacts to these resources from development of the proposed project including future residences and accessory structures.
- Identify the existing character of public views across, into, and out of the site and assess potential impacts to these views from residential development on the proposed lots.
- Prepare visual simulations from public viewing places, as necessary, to aid in the analysis of visual impacts of the proposed project, including potential future residential development.
- Identify the night time setting and character of the site and surrounding area and assess the potential impacts to this nighttime character from proposed development.
- Identify any impacts to the existing character of the project site and the integrity of the site’s visual character from proposed development.
- Assess the proposed project’s contribution to cumulative impacts.
- Identify mitigation measures as necessary and residual impacts.

## **AIR QUALITY**

### **Impact Discussion:**

Development of the senior housing facility would potentially result in construction related air quality impacts, including short term emissions from dust generation due to grading, greenhouse gas emissions, and air pollution emissions from construction equipment and construction vehicles. Depending on grading requirements for site development, these impacts are considered *potentially significant*.

Additionally, the “project” would add to the cumulative impacts from the build-out of the Orcutt Community Plan. These impacts include:

*Significant ozone precursors.* Potentially significant air quality impacts resulting from significant emissions of ozone precursors (ROG and NO<sub>x</sub>) to a non-attainment air basin for ozone.

*Dust and PM<sub>10</sub> generation.* Potentially significant air quality impacts associated with the generation of fugitive dust and PM<sub>10</sub> emissions during construction related activities.

*Inconsistent with Clean Air Plan growth rate.* Potentially significant air quality impacts could occur by allowing residential development at a rate which is inconsistent with the air quality attainment objectives contained in the 2007 Santa Barbara Clean Air Plan (“CAP”).

### **Potential Mitigation:**

- Project construction shall be consistent with Santa Barbara County Air Pollution Control District (“APCD”) air pollution control measures to reduce stationary and mobile source ROG and nitrogen oxides (NO<sub>x</sub>) emissions.
- Project construction shall follow all requirements of the Santa Barbara County APCD, and shall institute Best Available Control Technology (“BACT”) where necessary to reduce emissions below threshold levels. Mitigations must be required whenever project-specific construction impacts for NO<sub>x</sub> or reactive organic gases (“ROG”) are identified as potentially significant. The following is a list of control strategies that may be used:
  - Standard diesel construction equipment is used and emission factors from EPA publication AP-42 are used to estimate emissions, proper implementation of the following mitigation measures package shall be considered to achieve up to a 40 percent reduction in NO<sub>x</sub> emissions and a 15 percent reduction in ROG emissions (exhaust hydrocarbons plus aldehydes), from the standard emission factors. All of the following shall be implemented when feasible, in order to be given these emission reduction credits, for each piece of eligible construction equipment:
    - Maintain engine and emissions system in proper operating condition;
    - Implement two-degree engine timing retard;
    - Install high pressure fuel injectors; and
    - Use reformulated diesel fuel.
  - Alternatively, the applicant may elect to demonstrate a 40 percent NO<sub>x</sub> reduction for the total emissions for the project’s construction equipment mix or on a fleet-wide

- basis (i.e., some construction machinery may be replaced with lower emitting equipment, some may be over-controlled and some under-controlled. The applicant shall provide sufficient information to the monitoring agency to verify the NO<sub>x</sub> reduction. The following should be considered in demonstrating the 40 percent reduction.
- Diesel equipment in the project's construction equipment mix, that emit less than 6.9 gms/bhp-hr of NO<sub>x</sub>, according to manufacturer's specifications, are considered mitigated to the maximum extent feasible.
  - All diesel vehicles are required to use reformulated diesel fuel. Use of reformulated diesel alone can reduce NO<sub>x</sub> emissions by approximately 4 percent and ROC emissions by 15 percent in older engines.
  - Wherever feasible, diesel equipment such as, pumps and generators, may be replaced by electric equipment. Although gasoline-powered equipment with catalytic converters may be used, evaporative emissions may cancel any exhaust emission benefits. Clean-fueled vehicles may be substituted for diesel or gasoline-powered vehicles, if feasible.
- To make up for any shortfall caused by not implementing or partially implementing the recommended control technology by off-site mitigation measures, the APCD should be contacted to determine appropriate off-site measures for the project.
- All earthmoving activities will require proper implementation of the following measures in order to fully mitigate fugitive dust emissions:
    - During construction, use water trucks or sprinkler systems to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this should include wetting down such areas in the late morning and after work is completed for the day. Increased watering frequency should be required whenever the wind speed exceeds 15 mph. Reclaimed water should be used whenever possible.
    - Minimize amount of disturbed area and reduce on-site vehicle speeds to 15 miles per hour or less.
    - If importation, exportation, and stockpiling of fill material is involved, soil stockpiled for more than two days shall be covered, kept moist, or treated with soil binders to prevent dust generation. Trucks transporting fill material to and from the site shall be tarped from the point of origin.
    - After clearing, grading, earth moving or excavation is complete, treat the disturbed area by watering, or revegetating, or by spreading soil binders until the area is paved or otherwise developed so that dust generation will not occur.
    - The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust off-site. Their duties shall include holiday and weekend periods when work may not be in progress. The name and telephone number of such persons shall be

- provided to the Air Pollution Control District prior to land use clearance for finish grading of the structure.
- Prior to land use clearance, the applicant shall include, as a note on a separate information sheet, these dust control requirements. All requirements shall be shown on grading and building plans.
  - Energy conservation measures are recommended to reduce the need for natural gas and electricity. Measures to reduce the consumption of energy include the following:
    - Install light-colored roofing, energy-efficient built-in appliances, lighting and temperature controls and window treatments to reduce energy consumption.
    - Install low NO<sub>x</sub> or solar water and pool heaters.
    - Landscape with drought-tolerant, deciduous trees to shade buildings in the summer and allow for passive solar heating in the winter.
    - Design building orientation to maximize natural lighting and passive solar heating and cooling.
    - Use low-emission building materials such as water-based paints, and bricks, stone or concrete (instead of asphalt) for parking lots.
  - GHG emissions will be reduced as a result of the use of mandated emissions reductions of criteria pollutants, primarily NO<sub>x</sub>. The construction equipment to be used will be new and meet current energy efficiency guidelines.

**Scope of EIR:**

- Assess air quality impacts associated with grading and construction activities from development of the proposed project, including greenhouse gases.
- Assess the adequacy of recommended mitigation measures and revise, add to, or amplify as necessary, including standard emission control conditions applied by the Santa Barbara APCD.
- Assess the adequacy of identified site-specific and cumulative air quality impacts in the area and revise, add to, or amplify as necessary.
- Assess cumulative air quality impacts as well as the project's contribution to those impacts.
- Assess residual impacts of the project.

**BIOLOGICAL RESOURCES**

**Impact Discussion:**

A Biological Resources Assessment was conducted by Katherine Rindlaub Biological Consulting in April and June of 1995. A field survey revealed very low habitat diversity, consisting mainly of non-native grassland. No listed wildlife or plants species were found. Only two (2) plants, one shrub California coffeeberry and curly dock, grow more than a few inches in height on the site. The survey also revealed marginal wildlife habitat values. The project site was also surveyed by Levine Fricke (LFR) for sensitive vascular plants, sensitive wildlife species and sensitive habitat in April 2001. Site observations revealed no sensitive plant or wildlife species on site. The LFR survey

concluded that, while the site has the potential to support some of the sensitive species listed on the California Natural Diversity Data Base (CNDDDB), none were observed. The LFR survey also concluded that the site does not represent high quality habitat and is not contiguous with other high quality habitat for the sensitive species listed in the CNDDDB.

Overall, the site contributes incrementally to the overall loss of biological habitats, but the site itself contains no significant habitats or resources.

**Potential Mitigation:**

No significant environmental impacts are likely, therefore no mitigation is required.

**Scope of EIR:**

- Verify the determinations of the Rinlaub 1995 and LFR 2001 reports that the site does not contain significant habits for sensitive species.

**CULTURAL RESOURCES**

**Impact Discussion:**

The entire Key Site 17 was subject of a Phase I cultural resources records search and pedestrian survey conducted by ISERA in 1995 for the Orcutt Community Plan. The survey concluded that there are no archaeological resources within Key Site 17 (Orcutt Community Plan EIR 95-EIR-01, 1995, Sections 5.7-1 and 5.7-2).

**Potential Mitigation:**

Several County documents include policies, standards and mitigation measures in accordance with CEQA to help ensure that new development does not have a significant impact on cultural resources, including the Environmental Thresholds and Guidelines Manual and “Archaeological Element of the Santa Barbara County Heritage Management Plan, Cultural Resources Guidelines.” Projects are generally required to avoid impacting significant archaeological resources to the extent feasible. Additional studies that may include a significance assessment and mitigation of impact excavations (Phase 2 and 3) are required when it is infeasible to avoid significant archaeological resources. The Phase I study of the 19-acre site analyzed in the Orcutt Community Plan EIR did not identify any historical resources as defined by CEQA. Nevertheless, a mitigation measure requiring that work be stopped or redirected and County Guidelines are followed in the event of an unanticipated discovery would mitigate any adverse impact to cultural resources to a less than significant level.

**Scope of EIR:**

- Obtain and incorporate the results of the previous Phase I study.
- Incorporate into the document the results of the SB 18 Consultation conducted by Santa Barbara County.

- Based on the current project design, determine which mitigation measures would apply to the project.
- List applicable mitigation measures and residual impact.

## **ENERGY**

### **Impact Discussion:**

The proposed project would receive electricity from Pacific Gas & Electric. New development of the site would not place a substantial increase in demand upon existing sources of energy or require the development of new sources of energy. Thus, the project would not result in significant impacts to energy resources and no further evaluation in the EIR is necessary. Mitigation measures would not be required.

## **FIRE PROTECTION**

### **Impact Discussion:**

The introduction of up to 257 residences at this proposed location would place structures and people within a mostly developed area, limiting the exposure to fire hazard areas. The site is not within a County-designated high fire hazard area. Therefore, future development at this site would not expose structures, residents, or occupants to high fire hazards.

Fire protection service for the Orcutt area is provided by the Santa Barbara County Fire Department. The project site would be served by Station 21 (three (3) on-duty firefighters), located at 335 Union Avenue. This station is located approximately three (3) blocks north of the project site, thus response time would be under 5 minutes. Back up assistance would also be available from County Station 22 (four (4) on-duty firefighters), located at 1596 Tiffany Park Court as needed.

The increase in population as a result of 257 additional units would incrementally worsen the service ratios, and there is an existing need for a new fire station in Orcutt to provide improved fire protection service to the community. Fair share development fees would be applied toward construction of such a facility. While the need for a new station has been identified, SBCFD has not selected a specific site for the new fire station. The fire station would be subject to CEQA environmental analysis and any identified mitigation measures. A precise evaluation of environmental impacts would be speculative because the location of such a facility is unknown at this time. The potential future development of 257 senior housing units on Key Site 17 would increase the ratio of firefighter to resident, causing it to fall further below County fire protection standards. This would be considered a *potentially significant* impact.

Additionally, the project would add to the cumulative impacts from the build-out of the Orcutt Community Plan. These *potentially significant* impacts include:

- *Inadequate number of firefighters.* At build-out, current substandard ratio of firefighters to residents served would increase, resulting in *potentially significant* impacts to public health



and safety due to fewer responding firefighters, potentially longer response times, and the potential for conflicting calls without adequate back up.

- *Fiscal impacts to fire district.* When combined with ongoing budget shortfalls, the inadequate revenue stream generated by new development would create *potentially significant* impacts to public health and safety as the Fire Protection District may have inadequate funding to hire new firefighters.

### **Potential Mitigation:**

- Each residential unit shall be assessed a mitigation fee.
- All new development shall adhere to access, building, and water availability standards as outlined in the Uniform Fire Code, unless directed otherwise by the Fire Department. Two routes of ingress and egress shall be provided for all developments.

### **Scope of EIR:**

- Assess the adequacy of recommended mitigation measures and revise, add to, or amplify as necessary.
- Identify mitigations as necessary to mitigate project impacts. Identify residual impact levels.
- Assess the cumulative impacts on fire protection and assess the project's contributions to those impacts.

### **GEOLOGY AND SOILS**

The County of Santa Barbara Environmental Thresholds and Guidelines Manual (2006) states that impacts are potentially significant with regard to geology if the proposed development activity, including all proposed mitigation measures, could result in substantially increased erosion, landslides, soil creep, mudslides, and unstable slopes. In addition, impacts are considered significant when people or structures would be exposed to major geologic hazards upon implementation of the project. If the project involves any of the following, impacts related to geology are potentially significant:

- *The project site or any part of the project is located on land having substantial geologic constraints, as determined by Planning and Development or Public Works. Areas constrained by geology include parcels located near active or potentially active faults and property underlain by rock types associated with compressible/collapsible soils or susceptible to landslides or severe erosion. Special problem areas designated by the Board of Supervisors have been established based on geologic constraints, flood hazards and other physical limitations to development;*
- *The project results in potentially hazardous geologic conditions such as the construction of cut slopes exceeding a grade of 1.5 horizontal to 1 vertical;*
- *The project proposes construction of a cut slope over 15 feet in height as measured from the lowest finished grade; and*
- *The project is located on slopes exceeding 20% grade.*

*Fault Rupture.* Fault rupture can occur along or immediately adjacent to faults as the result of an earthquake. According to the Santa Barbara Seismic Safety and Safety Element, Key Site 17 is approximately 2.5 miles from two faults: the Orcutt/Casmalia Fault and the Santa Maria Fault. Potential for fault rupture at the proposed site is low.

*Ground Shaking* This site is subject to moderate ground shaking. However, implementation of UBC Seismic Zone 4 building standards would reduce the hazards from ground shaking to a Class III, *less than significant*, level.

*Erosive/Expansive Soils.* Moderate hazards from erosive soils are likely to be present on the project site and should be discussed in more detail in the Subsequent EIR.

*Landslides.* According to the County Safety Element, there is no potential for landslides in the project area. According to Soil Conservation Survey information, the soil type underlying the rezone site has a moderate erosion potential.

Any geologic issues present on an individual development site would be limited to that site and would not contribute to any cumulative impacts to the rest of the community. Rather, any specific geologic hazards associated with each individual site would be limited to that site without affecting other areas. Therefore, cumulative geologic hazard impacts would be Class III, *less than significant*.

Potentially significant impacts on soil erosion would result if soils were exposed for an extended period of time. With application of County grading standards, grading and slope stability impacts could be considered Class II, *potentially significant but mitigable*.

### **Potential Mitigation:**

1. Structures shall be designed to earthquake standards of the International Building Code. **Plan Requirements and Timing:** Prior to plan check, the applicant shall submit building plans indicating standards to the satisfaction of Building & Safety Division. **Monitoring:** Building inspectors shall site inspect prior to occupancy clearance.
2. Excavation and grading shall be limited to the dry season of the year (April 15 – November 1) unless a P&D-approved Grading and Erosion Control Plan is in place and all measures therein are in effect. **Plan Requirements:** The Grading and Erosion Control Plan shall be designed to minimize erosion and shall include the following:
  - a. Detailed plans and report prepared by a licensed geologist or engineer for any permanent erosion control structures.
  - b. Methods such as retention basins, drainage diversion structures and spot grading shall be used as appropriate to reduce siltation into adjacent drainages or roadways during the grading and construction activities.
  - c. Provisions to reseed exposed graded surfaces with ground cover to minimize erosion. Graded areas that are to be built upon shall be revegetated within four weeks of completion of grading activities with deep-rooted, drought-tolerant species wherever possible and in accordance with the project design guidelines to minimize

the potential for oversaturation and erosion. Surfaces graded for placement of structures shall be seeded with ground cover if construction does not commence within four weeks of grading completion. This requirement shall be noted on all grading and building plans.

- d. All cut and fill slopes on the property shall be no steeper than 2:1 (horizontal to vertical) without the use of engineered retaining walls.
- e. All fill material shall be recompact to engineered standards as specified within the Uniform Building Code or by a qualified soils engineer and as approved by P&D.
- f. Recommendations regarding the placement of fill material, recompact, and grading methods contained in required soils reports for any given phase of construction shall be implemented.

**Timing:** The Grading and Erosion Control Plan for each project shall be submitted for review and approved by P&D and Flood Control prior to approval of any Land Use Permits for grading. The applicant shall notify Permit Compliance prior to commencement of demolition and/or grading. Applicable components of the grading plan shall be implemented during demolition and grading activities and prior to occupancy clearance. **Monitoring:** Grading inspectors shall monitor technical aspects of the grading activities. Permit Compliance shall site inspect during grading to monitor dust generation and four weeks after grading completion to verify seeding and/or that construction has commenced in areas graded for structures.

#### **Scope of EIR:**

- Assess the geologic impacts associated with grading and site preparation for a 257 senior residential project.
- Assess the adequacy of recommended mitigation measures and revise, add to, or amplify as necessary.
- Identify residual impact levels of the project after mitigation.

### **HAZARDOUS MATERIALS**

#### **Impact Discussion:**

The Orcutt Pump station is located in close proximity to the project site. It is likely that Key Site 17 was historically part of an oil pipeline corridor between the Orcutt Hill oil production facilities and the Orcutt Pump station. Additionally, an easement to the Pacific Coast Oil Co. and Pinal Dome Oil Co. for pipelines was recorded in 1905 for the central parcels. Thus, build-out of the 257 senior housing units could expose future residents to possible hydrocarbon soil contamination, due to the likelihood of historic oil pipelines having been located on-site.

Orcutt Community Plan Development Standards for Risk of Upset/Hazardous Materials include DevStd RISK-O-1.1, which requires parcel inspection by County Petroleum Office personnel to determine the existence of hazardous substances on the property, or immediately abutting properties, prior to County acceptance of an application for development. DevStd RISK-O-1.3 and

RISK-O-1.4 require remediation and/or development setbacks in the vicinity of know contaminated soil and oil /gas pipelines. A Phase I Environmental Site Assessment was prepared to determine the environmental liabilities based upon from activities, at or near the site, which may have involved, or resulted in the use storage, disposal, and/or release of hazardous or potentially hazardous substances to the environment<sup>1</sup>. The Assessment concluded that no evidence was observed of hazardous substances or petroleum products at the Site.

**Potential Mitigation:**

- Design of the Senior Housing Development (adjacent to operations involving a HMBP) shall be designed to minimize potential conflicts. Review and approval by County Environmental Health Services Department (“EHS”) and Santa Barbara County Fire is required. If a site shows signs of contamination, The EHS requires a preliminary site assessment involving numerous soil tests. If test results are above EHS action levels for Maximum Contaminant Levels for groundwater, remedial action would be overseen by the County Protection Services Division Site Mitigation Unit.

**Scope of EIR:**

- Obtain and incorporate the results of the previous Phase I Assessments.
- Assess the adequacy of identified impacts in the area and revise, add to, or amplify as necessary.
- Assess the adequacy of recommended mitigation measures and revise, add to, or amplify as necessary.

**FLOODING/ WATER QUALITY**

**Impact Discussion:**

Site drainage would likely be provided by a system of drainage inlets that would direct water to an onsite detention basin located on-site. If construction grading occurs during the rainy season or in the event of heavy storms, soils from the site could be eroded, and transported to the drainages within and adjacent to the site. Uncontrolled discharges of sediment during grading operations can impact water quality.

Grading activities and vegetation removal during construction could result in short-term water quality impacts associated with increased erosion and the potential transport of pollutants into affected creeks. Construction projects of one or more acres are subject to National Pollution Discharge Elimination System Phase II (non-point source) permit regulations, which require development of a Storm Water Quality Management Plan (SWQMP) to minimize water quality degradation through storm water monitoring, establishment of Best Management Practices (BMP), implementation of erosion control measures and implementation of spill prevention and containment measures during operation of the project. In addition, erosion and sediment control

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<sup>1</sup> Phase I Environmental Site Assessment, Proposed Orcutt Union School Site No. 17, Old Town South Orcutt, CA. Tetra Tech, Inc., February 26, 2001.

measures are required during construction to minimize erosion and associated impacts to water quality. Development of comprehensive plans for both construction and operation of the project would reduce potential effects to surface water quality from pollutant inputs associated with construction and operations to less than significant levels.

### **Potential Mitigation:**

Mitigation would likely include a combination of structural and non-structural Best Management Practices during construction and operation of the project to minimize water quality impacts, such as erosion and sedimentation control, vegetated swales and other drainage features to treat runoff before it enters nearby drainages, minimization of impervious surfaces, etc.

- Landscape plans shall be required for all new development in areas of sandy soils to ensure revegetation of graded areas. All landscape plans shall be reviewed by the County BAR; landscape securities (bonds) shall be required unless expressly waived by P&D.
- Erosion control measures, such as plantings or hard surfaces, shall be incorporated into the drainage plan for all project drainages as required by the Flood Control District and P&D.
- All development shall contribute its proportionate share of installation and maintenance for a regional retention basin. Prior to land use clearance, the development shall purchase capacity within regional recharge basins as determined appropriate by the Flood Control District (flooding volumes shall be noted on all Development Plans). In the event a regional retention basin to serve the site is unplanned and/or unavailable, the development shall provide on-site retention facilities with a sufficient capacity to reduce site runoff to County Flood Control District standards. Wherever possible, on-site facilities shall be dual use.
- Pervious construction materials (e.g., turf-block, non-grouted brick, gravel, etc.) shall be used where appropriate in all developments in order to minimize the amount of runoff conveyed offsite.
- The developer shall limit excavation and grading to the dry season of the year (April 15 – November 1) unless a P&D approved erosion control plan is in place and all measures therein are in effect. All exposed graded surfaces shall be reseeded within four weeks of completion of grading activities with native ground cover to minimize erosion.
- The developer shall submit a Storm Water Pollution Prevention Plan (“SWPPP”) which must be included in the building construction application and submitted to the RWQCB.
- The developer shall implement Low Impact Design measures. Bioswales, in addition to alternate control measures (as deemed necessary), shall be implemented in order to remove pollutants from on-site storm water runoff

### **Scope of EIR:**

- Assess impacts to water resources and flooding associated with a 257 residential unit project, including water quality, flood hazards, and long term hydrological changes. Include an analysis of short-term impacts due to construction activities.
- Identify mitigation measures necessary to reduce impacts to less than significant levels.
- Evaluate cumulative impacts to water resources and flooding and identify the project’s contribution to those impacts

- Assess the adequacy of recommended mitigation measures and revise, add to, or amplify as necessary
- Assess the adequacy of identified site-specific and cumulative geologic impacts in the area and revise, add to, or amplify as necessary.
- Assess residual impacts of the project after mitigation.

## **NOISE**

The project site fronts Rice Ranch Road to the south. The existing County adopted Noise map (1997) for this area does not show a noise contour along Rice Ranch Road. However, according to the Orcutt Community Plan, a 22-foot wide strip of land along the projects southern boundary is exposed to noise levels in excess of 60 dB from traffic volumes along Rice Ranch Road (Impact Sciences, Inc., 1995). The OCP further suggests that future traffic volumes along Rice Ranch Road are expected to increase significantly, resulting in a 14-foot wide strip of land being exposed to noise levels in excess of 65 dB, with the 60 dB noise contour extending an additional 46 feet beyond the existing 60 dB contour.

Residential uses and schools are considered sensitive noise receptors. Future potential development of 257 senior housing units could expose some residents (i.e., residences on the Hartnell/Wells (Stonegate) property and across Soares Ave) to noise levels in excess of 65 dB (due to traffic noise along Rice Ranch Road). Additionally, residents and school facilities located within 1,600 feet, could be exposed to short-term grading and construction generated noise levels exceeding the County threshold of 65 dB CNEL.

Cumulatively, build-out under the Orcutt Community Plan could result in *potentially significant* noise impacts along major travel corridors (i.e., Hwy 135, 101, 1, Clark Avenue, Bradley Road, Lakeview Road, and UVP) due to increased traffic volumes on roadways which may expose existing and future residential developments and other sensitive noise receptors to significant noise levels of 65 dB or greater.

### **Potential Mitigation:**

Development projects shall locate sensitive land uses beyond the roadway 65 dB CNEL contours to the greatest extent possible. Sensitive uses can be located within the contour and have the exterior and interior noise levels reduced to with County standards by incorporating attenuation measures into the project design. Therefore, the following measures are to be considered when sensitive uses are proposed within the 65 dB CNEL contours of the study area roadways:

- Noise-sensitive uses proposed in areas exceeding 65 dB CNEL shall be designed so that interior noise levels attributable to exterior sources do not exceed 45 dB CNEL when doors and windows are closed. An acoustical analysis of the noise insulation effectiveness of proposed construction shall be required, showing that the building design and construction specifications are adequate to meet the prescribed, interior noise standard. Noise insulation construction techniques may include air conditioning for all units, and double-paned windows and wall insulation for all window and wall locations with lines of sight to the noise source.

- Noise-sensitive uses proposed in areas exceeding 65 dB CNEL shall be designed so that noise levels in exterior living spaces will be less than 65 dB CNEL. An acoustical analysis of proposed projects shall be required, indicating the feasibility of noise barriers, site design, building orientation, etc. to meet the prescribed exterior noise standard.
- Construction within 1,600 ft of sensitive receptors shall be limited to weekdays between the hours of 7 a.m. and 4 p.m. only. Noise attenuation barriers and muffling of grading equipment may also be required. No construction shall occur on State holidays (e.g., Thanksgiving, Labor Day). Construction equipment maintenance shall be limited to the same hours. Non-noise generating construction activities such as interior painting are not subject to these restrictions. Construction equipment generating noise levels above 95 dB may require additional mitigation.

### **Scope of EIR:**

- Assess potentially new or substantially greater environmental impacts due to noise generated by short-term construction and long-term operational noise.
- Prepare an acoustical analysis for a 257 senior housing project on the project site.
- To the extent that the Project will create more traffic on roads evaluated in the OCP EIR, the noise impacts along such roads would also require environmental review in the Project EIR.
- Assess the adequacy of recommended mitigation measures and revise, add to, or amplify as necessary.
- Assess cumulative impact levels and the contribution of the proposed project to these cumulative impacts.

### **PUBLIC SERVICES**

#### **Impact Discussion:**

Solid Waste: The California Integrated Waste Management Act of 1989 (State Assembly Bill 939) required all cities and counties to develop a Source Reduction and Recycling Element (SRRE) for diverting 50% of their solid waste from landfills by the year 2000. City and county governments throughout the state of California responded by adopting waste diversion programs to meet the requirements of AB 939. To comply with the goals set by AB 939, the County of Santa Barbara requires a reduction in solid waste generation for all new development projects in the County.

County waste characterization studies estimate that implementation of a source reduction and recycling program could reduce the total volume of waste generated by new development projects by approximately 50%.<sup>2</sup>

The proposed future development project entails the creation of 257 senior housing units on 9.53± acres. Pursuant to the County Thresholds and Guidelines Manual, solid waste generation for these units would equal:

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<sup>2</sup> Santa Barbara County Environmental Thresholds and Guidelines Manual (1995).

$$1.5 \text{ people}^3/\text{unit} \times 257 \text{ units} \times 0.95 \text{ tons/year} = 366.23 \text{ tons of solid waste / year}$$

Required source reduction, recycling and composting could reduce the waste stream by approximately 50% resulting in a total generation of approximately 183 tons of solid waste per year. This is below the County's 196 tons per year threshold. New pending thresholds for construction and demolition waste would not likely be triggered by the proposed project given the level of proposed development. Nonetheless, standard conditions requiring the recycling of demolition waste would be imposed at the time of future development. Therefore, impacts to solid waste would be less than significant. Additionally, the project's contribution to cumulative solid waste impacts would also be less than significant.

Police Protection: The estimated current population of the Orcutt-Santa Maria area is 34,520 persons, (Santa Barbara County Regional Growth Forecast, 2007). Buildout of a senior care facility on Key Site 17 could increase the population of Orcutt by approximately 386 (1.5 people x 257 units = 385.5) bringing the total population of unincorporated Santa Maria Valley to 34,906<sup>4</sup>. With at least three sheriffs on patrol at all times, the service ratio would change to 1:11,635. It should be noted that three sheriffs is a minimum standard, but often times there are more than three on duty (Gingras, 2009). If additional support is needed, the Santa Barbara County Sheriff Department (SBCSD) has the ability to call in additional deputies for assistance. SBCSD has four squadrons with five deputies on each squadron; therefore, it is possible that up to 20 deputies would be available if needed<sup>5</sup>.

The increase in population resulting from the development of Key Site 17 would cause the police officer to population ratio to be further exceeded, increasing demand on existing resources. In addition, according to SBCSD, as housing densities increase, demand for police protection service also increases. However, SBCSD has indicated that SBCSD's Orcutt Station could accommodate the additional deputies necessary to provide adequate police protection services. Furthermore, additional outside support is provided through Mutual Aid Agreements with the Santa Maria and Guadalupe Police Departments and the California Highway Patrol. Therefore, the increase in population associated with buildout of Key Site 17 would not require the construction of new or expanded SBCSD facilities, and impacts to police services would be Class III, *less than significant* and will not be further evaluated in the EIR.

Water and sewer service for the residential developments would be provided by Golden State Water Company and Laguna County Sanitation District (LCSD), respectively. Prior to a formal development plan application being deemed complete for processing, the applicant must provide P&D with a draft contract agreement for supplemental water from the City of Santa

<sup>3</sup> The number of people per unit may vary depending upon the type of senior housing developed. According to the applicant, the current trend for assisted living, special Alzheimer's care, and skilled nursing care is one (1) person per room, however, 2-4 percent of the units may be semi-private, with two (2) persons per room. Independent Care can also vary, with 1 or 2 people in each room

<sup>4</sup> The sheriff's station located 812 West Foster Road serves not only Orcutt but unincorporated Santa Maria Valley as well, therefore the entire population of unincorporated Santa Maria Valley was included in the service ratio calculations.

<sup>5</sup> If 20 deputies were on duty, the service ratio would be 1:1,745.



Maria that would serve the proposed development. Existing regional and project-area conditions regarding potable water supplies and ground water conditions should be described based on information contained in the OCP FEIR. This information should be updated to reflect new information, including information on both groundwater usage and supply and recent deliveries of water from the State Water Project. According to data provided by the applicant (Attachment B), a 257 senior housing unit project could increase the demand on the Santa Maria Groundwater Basin by 25.7 acre feet per year (Water Use Factor of 0.10 acre-feet / year per unit).

Cumulatively, these units will contribute to the ongoing and increased overdraft of the Santa Maria Groundwater Basin by generating an increase in net water demand at the time of the Orcutt Community Plan's build-out. A variety of short- and long-term water supply mitigation measures were evaluated in the OCP FEIR. Proposed short-term measures should be summarized, and long-term measures that were considered to be feasible should be summarized and if necessary updated.

Wastewater: The existing Laguna County Sanitation District plant has a rated capacity of 3.7 million gallons per day (mgd) and a permitted capacity of 2.4 mgd. Flow through the wastewater treatment plant has averaged 2.27 mgd from 1997 to 2001. The LCSD has extended trunk lines to serve the backside of the Hartnell/Wells (Stonegate property).

There is no County project-specific threshold for wastewater. However, using a wastewater factor of approximately 90 gallons per person per day<sup>6</sup>, the proposed future development project would generate approximately 23,130 gallons per day (gpd) of effluent<sup>7</sup>. The existing LCSD treatment plant is operating at its regulated capacity; a long-term demand for additional services would exceed the treatment plants physical capacity. As a result, this impact would be considered *potentially significant*.

Cumulatively, the build-out of the Orcutt Community Plan (up to 6,300 homes) and potentially 6,300 additional water softeners and low-flow fixtures will increase the TDS level and could create potentially significant impacts to groundwater quality due to the degradation of the District's effluent. Potential development allowed under the Orcutt Community Plan would also occur where no truck or feeder lines currently exist or are proposed (Sites #12, 15, 22, and 33), creating *potentially significant* impacts to the provision of public services due to the lack of access to public sewer service. In addition, the planning area is larger than the service area of the Sanitation District. New development is proposed in several areas not currently served by the District, creating potentially significant impacts to the provision of public services due to the lack of access to public sewer service and the increased potential demand for septic systems. If all currently undeveloped Key Sites were developed, the LCSD would have to expand their rated capacity to 4.5 million gallons per day (Personal Communication, LCSD - Marty Wilder, December 2009).

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<sup>6</sup> Metcalf and Eddy Wastewater Engineering. Page 19.

<sup>7</sup> The amount of wastewater produced varies dramatically with level of senior housing service. This number (i.e., 23,130 gpd) represents a senior housing facility with all 257 units being independent living, each with their own kitchen and on-site laundry services. The more likely scenario of the facility having a common dining room and some off-site laundry services would produce substantially less wastewater.

### **Potential Mitigation:**

- The project will use replacement canisters for water softening rather than home salt-based softening units, with such measures included in both proposed CC&Rs and as a condition of project approval.
- The applicant shall pay the trunk and/or feeder line fees as appropriate for the project.

### **Scope of EIR:**

- Confirm the water demand for the project based on proposed development acreage, number of residences, and consumptive use factors that are contained in the *County's Environmental Thresholds Manual*.
- Review the 2009 Laguna County Sanitation District Sewer Collection System Mast Plan and determine if trunk sewer capacity and other offsite facilities are appropriately sized to accommodate a senior housing facility consisting of 257 units.
- Identify mitigation measures necessary to reduce impacts to less than significant levels.
- Assess the adequacy of recommended mitigation measures and revise, add to, or amplify as necessary.
- Assess the adequacy of identified impacts in the area and revise, add to, or amplify as necessary.
- Describe the existing regional and project-area conditions regarding police protection wastewater treatment facilities, and potable water supplies and ground water conditions based on information contained in the OCP FEIR.
- Cumulative impact analysis should also be conducted in light of the project scope, anticipated development in the region, and the permitted and anticipated capacities of the respective facilities.
- The Subsequent Project EIR should evaluate the following environmental impacts, which were not explicitly analyzed in the OCP EIR:
  - Need for increased police protection;
  - Need for increased health care services;
  - The distance from police, and health care services.
- Assess residual impacts of the project after mitigation.

## **RECREATION**

### **Impact Discussion:**

Based on average occupancy of 1.5 persons per unit, a 257 unit senior care facility would generate an estimated 385 residents. Based on the County standard of 4.7 acres of parkland per 1,000 residents, this would generate a need for approximately 1.82 acres of parkland (0.385 residents/park acre x 4.7 acres = 1.82 acres). OCP Key Site 17 Development Standard KS17-3 requires the construction of at least  $\frac{3}{4}$  of an acre of a public park on this portion of Key Site 17. This would leave a deficit of park space of approximately 1.07 acre of developed park space. While there is no proposal to construct a park at this time, development impact mitigation fees would be assessed on any new residential development, and these fees would be used to develop

new parklands elsewhere in the Orcutt area. However, Development Standard KS17-3 also requires that the public neighborhood park front the western portion of Soares Avenue. The intent of the OCP and this requirement is that build out of Key Site 17 would create a 1-2 acre contiguous neighborhood park space for the Old Town area. It is important to note that the applicant has requested a modification to Development Standard KS17-3 to allow flexibility in where their portion of the  $\frac{3}{4}$  of an acre park would be constructed. This flexibility could result in the development of two smaller isolated parks on Key Site 17. According to discussions with County Parks Department staff, the development of two smaller park areas would not provide the same community benefit of one large contiguous neighborhood park (personal Communication, County Parks – Claude Gaciacelay, December 2009). Moreover, County Parks Department staff believes that the development of two smaller park areas on Key Site 17 would lessen the opportunity for viable recreational facilities to be developed in this portion of Orcutt. Thus, impacts on recreational facilities would be *potentially significant*.

### **Potential Mitigation:**

All relevant Revised Key Site 17 Development Standards have been incorporated into these mitigation measures shown in *italics*. See Appendix A for a comparison between the Current and Revised Key Site 17 Development Standards.

- *Any discretionary development shall provide for a dedication and construction of a 1-2 acre public neighborhood park located on the project site. Parcels 105-330-004 and 105-134-004 shall each contribute at least  $\frac{3}{4}$  of an acre to this park.*
- Payment of County Parks Development Impact Mitigation Fees.

### **Scope of EIR:**

- Assess the impacts associated with the development of two smaller isolated parks vs. one larger park area that would provide recreational opportunities to the diverse population of the surrounding area.
- Provide the applicable setting information from the OCP FEIR (Volumes I and II) with an emphasis on existing deficiencies in park, recreation, and trail facilities.
- Summarize the park impacts that were identified by the OCP FEIR that apply to the proposed project.
- Assess the adequacy of recommended mitigation measures and revise, add to, or amplify as necessary.
- Assess the adequacy of identified impacts in the area and revise, add to, or amplify as necessary.

## **TRANSPORTATION/CIRCULATION**

### **Impact Discussion:**

The maximum reasonably foreseeable “worst case scenario” for the developed project’s trip generation would include 257 independent living senior housing units<sup>8</sup>. Trip generation estimates

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<sup>8</sup> 20 Residences per acre with a 35 percent density bonus.

were developed for these units based on data derived from the ITE Land Use Code 251 – Senior Adult Housing – Detached Units. See Table 3.

Land Use	Size	Average Daily Trips	Peak Hour Trips	
			AM	PM
Senior Housing (Independent Living Units - Detached)	257	1,208	74	91

However, the Average Daily Trips and Peak Hour Trips depicted in Table 3 will likely be significantly reduced by a senior housing developer who chooses to construct a facility with a mix of levels of care and/or attached units. Table 4 below provides examples of other mixes of levels of care other than a 100% independent living facility. The data in Table 4 indicates that there could be up to a 33% reduction in “worst case scenario” Average Daily Trips, and a 33% / 22% reduction in AM/PM trips respectively.

Levels of Care Offered	Size	Average Daily Trips	Peak Hour Trips	
			AM	PM
Example 1: <i>Independent Living – 20%</i> <i>Skilled Nursing* – 40%</i> <i>Assisted Living* – 40%</i>	51.4 units 102.8 units 102.8 units	809	58	83
Example 2: <i>Independent Living (Flats)– 30%</i> <i>Independent Living (Apartments) – 30%</i> <i>Assisted Living* – 40%</i>	77.1 units 77.1 units 102.8 units	875	50	71

\* Calculated with a 1.2 bed to 1 room ratio.

The peak hour trips generated by the project will be distributed within the Orcutt Planning Area and are outlined in Table 5 below. The added trips will need to be predicted assuming access would be provided from the north via Soares Avenue at First, Pacific, and Gray Streets (which connect to Clark Avenue), and via a connection to Rich Ranch Road. Furthermore, Table 5 lists the AM and PM Peak Hour existing volume to capacity ratios (V/C) and existing levels of service for each of the study-area intersections.

Intersection	Control	Existing AM V/C / LOS	Existing PM V/C / LOS	PHT Added
Clark Ave / SR 1	2-Way Stop	9.2 sec. / A	9.1 sec. / A	TBD
Clark Ave / Blosser Rd.	1-Way Stop	10.2 sec. / B	9.9 sec / A	TBD
Clark Ave. / SR 135 SB Ramps	Signal	0.58 / A	0.55 / LOS A	TBD
Clark Ave. / SR 135 NB Ramps	Signal	0.62 / A	0.61 / LOS B	TBD
Clark Ave. / Orcutt Rd.	Signal	0.66 / B	0.65 / LOS B	TBD

Source: Old Town Orcutt Traffic, Circulation, and Parking Study (2008)

The number of peak hour trips generated by the senior housing project should be calculated using the data presented within Table 4 and Table 5 in order to determine any project-specific impacts at the specific study-area intersections. A general overview of the existing data in the County’s 2008 Study shows that peak hour intersection levels of service would remain at LOS C assuming 10-year traffic conditions. With the addition of the proposed project, further analysis is warranted and should include the intersection of Rice Ranch Road and Orcutt Road.

It is possible that development of the site would require construction of roadway connections in order to gain access from Soares Avenue and Rice Ranch Road. These connections to Soares Avenue should align with the existing streets north of Soares (Pacific Street and Gray Street); and the connection to Rice Ranch Road should be designed for adequate sight distances (a curve in the roadway is located to the west).

Cumulative Intersection Level of Service

Cumulative traffic forecasts for the project were derived from the Orcutt Traffic Model outlined within the *Old Town Orcutt Traffic, Circulation, and Parking Study* (2008). This cumulative model assumes 10-year land use scenarios for the City of Santa Maria and Orcutt and incorporates several street network improvements planned or programmed with the 10-year horizon in Orcutt and the southern portion of Santa Maria.

Planned improvement that would have a significant effect on traffic flows in the Old Town Orcutt area includes the *Union Valley Parkway Extension project*, which entails the construction of a new interchange with U.S. Highway 101 and the extension of the Union Valley Parkway as a four-lane arterial to Blosser Road. The new connection would relieve through traffic from other east-west arterials such as Clark Avenue. Other improvements with the 10-year horizon include the extensions of Airpark Drive, Hummel Drive and Stillwell Road.

Levels of service for the study-area intersections should be recalculated based upon the 10-year PM peak hour traffic forecasts derived from the Orcutt Traffic Model. Two model runs were completed for each cumulative scenario. The first forecast includes Clark Avenue from Broadway to Dyer Street as a two-lane facility per the *Old Town Orcutt Streetscape Concept Plan*; the second forecast includes Clark Avenue as a four-lane facility. Table 6 lists the cumulative intersection volume to capacity ratio (V/C) and levels of service for the study-area intersections during average PM peak hour periods. The table also shows the peak hour trip additions from the senior housing project at each intersection.

<b>Intersection</b>	<b>Traffic Control</b>	<b>Average PM Peak Hour Delay or V/C (2-Lane Clark Avenue)</b>	<b>Average PM Peak Hour Delay or V/C (4-Lane Clark Avenue)</b>	<b>PHT Added</b>
Clark Ave / SR 1	2-Way Stop	9.9 sec / LOS A	9.9 sec / LOS A	TBD
Clark Ave / Blosser Rd.	1-Way Stop	11.2 sec / LOS B	11.7 sec / LOS B	TBD
Clark Ave. / SR 135	Signal	0.52 sec / LOS A	0.52 sec / LOS A	TBD

SB Ramps				
Clark Ave. / SR 135 NB Ramps	Signal	0.59 sec / LOS A	0.62 sec / LOS B	TBD
Clark Ave. / Orcutt Rd.	Signal	0.67 sec / LOS B	0.69 sec / LOS B	TBD

*Source: Old Town Orcutt Traffic, Circulation, and Parking Study (2008)*

Similarly to the aforementioned existing traffic analysis, the cumulative overview of the number of peak hour trips generated by the senior housing project should be calculated in order to determine any project-specific impacts at the specific study-area intersections. Further analysis is needed and should include the intersection of Rice Ranch Road and Orcutt Road.

**Potential Mitigation:**

- The project applicant shall develop a Transportation Demand Management Program (“TDMP”). TDMP measures could include carpooling, bicycling, compressed work weeks (for employees onsite), use of transit, etc.
- The applicant shall pay Development Impact Mitigation Fees specified by the Public Works Transportation Division fee for Congregate Care Facilities.

**Scope of EIR:**

- Complete traffic counts and analysis for the intersection of Rice Ranch Road and Orcutt Road including peak hour trips added for existing and cumulative conditions.
- Prepare a traffic study analyzing the ingress/egress of the project site.
- Coordinate with County of Santa Barbara Public Works staff and prepare traffic study which assesses the ingress/egress of the project site and the impacts of the project on area roads and intersections.
- Assess cumulative impacts to transportation/circulation and identify the project’s contribution to those impacts.
- Identify mitigation measures to reduce impacts to less than significant levels.
- Assess residual impacts of the project after mitigation.
- Evaluate short-term construction-related traffic impacts.

**6.0 PROJECT ALTERNATIVES**

Pursuant to Section 15126.6 of the CEQA Guidelines, the EIR shall consider and analyze a reasonable range of alternatives to the proposed project. The alternatives selected should be capable of avoiding or lessening any significant environmental effects of the proposed project. The EIR shall include a discussion and analysis of the following four alternatives:

- No Project Alternative
- Reduced Project Alternative
- Redesigned Project Alternative
- Off-site Project Alternative

The specific features of these alternatives will be worked out early on in the EIR analysis.

## **7.0 CUMULATIVE IMPACTS**

- The Subsequent Project EIR should evaluate the potential for cumulatively significant impacts for the following issues:
  - Transpiration/Traffic
  - Air Quality
  - Noise
  - Fire Protection
  - Aesthetics
  - Increased demand on regional parks, water resources, and waste water treatment and landfill capacity.

### **Summary**

The scoping described above is intended to provide the public, responsible agencies with a summary of the preliminarily identified environmental issue areas concerning the project. P&D staff will be responsible for identifying all potential environmental impacts of the project and developing mitigation measures/conditions of approval to meet current standards to address project specific impacts and the project's contribution to cumulative impacts as appropriate for each of the impact areas outlined above.

The application, project plans and technical reports in reference to the applicant's request are available and may be reviewed at the County of Santa Barbara Planning & Development Department located at 624 West Foster Road, Suite C, Santa Maria, CA 93455-3623.

If you have questions about this project, please contact EIR project manager, John Zorovich at (805) 934-6297.

### **ATTACHMENTS**

Attachment A: Key Site 17 Policy and Development Standards Comparison Table

Attachment B: San Luis Obispo County Water Use Factors Table

**ATTACHMENT A: Key Site 17 Policy and Development Standards Comparison Table**

<b>Attachment A: Comparison of Revised and Old Key Site 17 Development Standards</b>			
<b>Old</b>		<b>Revised</b>	
<b>Policy /Development Standard</b>	<b>Description</b>	<b>Policy /Development Standard</b>	<b>Description</b>
Policy KS17-1:	Key Site 17 is designated Res 8.0 and zoned SLP. Any proposed development on Key Site 17 shall comply with the following development standards.	Policy KS17-1:	Portions of Key Site 17 are designated Res 8.0 and zoned SLP (e.g., the Stonegate development) and the balance of the proposed development on Key Site 17 (APNs 105-134-004, 005; 105-330-005, 006) is designated Res. 20 and zoned DR 20 to accommodate a 100% senior housing development.
<b>DevStd KS17-1:</b>	Any discretionary development shall include a landscape buffer consisting of drought-tolerant trees and shrubs of sufficient density to partially screen the proposed development from Rice Ranch Road, Soares Avenue, and Dyer Street. The buffer along Soares Avenue shall be integrated with the planned park (see Figure KS17-1). A meandering trail as shown on Figure KS17-1 shall also be developed.	<b>DevStd KS17-1:</b>	Any discretionary development shall include a landscape buffer consisting of drought-tolerant trees and shrubs of sufficient density to partially screen the proposed development from Rice Ranch Road, Soares Avenue, and Dyer Street. The buffer along Soares Avenue shall be integrated with the planned park A meandering trail along Rice Ranch Road, as shown on Figure KS17-1, shall also be developed.
<b>DevStd KS17-2:</b>	Homes located on the periphery of the site and those adjacent to the neighborhood park shall be one-story, except as noted in Action KS17-6. Any two story development shall be visually compatible with, and shall not significantly block long-range southerly views from, Old Town Orcutt.	<b>DevStd KS17-2:</b>	To ensure neighborhood compatibility, development located on Soares Avenue shall be one-story. Any development on the interior of the site(s) shall be visually compatible with and shall not significantly block long-range southerly hillside views from Old Town Orcutt.
<b>DevStd KS17-3:</b>	Any discretionary development shall provide for a dedication and construction of a 1-2 acre public neighborhood park fronting along the western portion of Soares Avenue as conceptually depicted on Figure KS-17-	<b>DevStd KS17-3:</b>	Any discretionary development shall provide for a dedication and construction of a 1-2 acre public neighborhood park located on the project site. Parcels 105-330-004 and 105-134-004 shall each contribute at



<b>Attachment A: Comparison of Revised and Old Key Site 17 Development Standards</b>			
<b>Old</b>		<b>Revised</b>	
<b>Policy /Development Standard</b>	<b>Description</b>	<b>Policy /Development Standard</b>	<b>Description</b>
	2. Parcels 105-330-004 and 105-134-004 shall each contribute at least ¾ of an acre to this park and the park shall be a minimum of 100 feet wide where it fronts Soares Avenue.		least ¾ of an acre to this park.
<b>DevStd KS17-4</b>	Development on the site shall facilitate pedestrian access to Old Town. The developer(s) shall coordinate with Santa Maria Area Transit (SMAT), and shall provide either a bus turn-out pocket along a public road (e.g., Rice Ranch Road), or a bus stop within the site, if requested by SMAT.	<b>DevStd KS17-4</b>	Development on the site shall facilitate pedestrian access to Old Town. The developer(s) shall coordinate with Santa Maria Area Transit (SMAT), and shall provide either a bus turn-out pocket along a public road (e.g., Rice Ranch Road), or a bus stop within the site, if requested by SMAT.
<b>DevStd KS17-5</b>	Any access to Rice Ranch Road from this site shall be limited to one point from APN 105-330-06 and shall be coordinated to the greatest degree feasible with access to Site 13.	<b>DevStd KS17-5</b>	Any access to Rice Ranch Road from this site shall be limited to one point from APN 105-330-06 and shall be coordinated to the greatest degree feasible with access to Site 13.
<b>DevStd KS17-6</b>	If an application is filed for A 100% senior housing project, as defined by California Civil Code § 51 et. seq, on Assessors Parcels 105-134-04, -05; 105-330-05, -06 or -08, the County should consider redesignating and rezoning affected parcels to Res. 20 and DR 14. However, to ensure neighborhood compatibility, the homes fronting Soares Avenue and the homes adjacent to the neighborhood park should be single family on lots at least 6,000 s.f. in size. In addition, buildings on APNs 105-330-05, -06 and -08 may be two stories in height but should be of low profile and screened to the greatest degree feasible.	<b>Action KS17-6</b>	A 100% senior housing project on Assessors Parcels 105-134-04, -05; 105-330-05, -06 or -08, shall comply with California Civil Code §51 et Seq and Government Code §65915-65918.
		<b>DevStd KS17-7</b>	To ensure neighborhood compatibility

<b>Attachment A: Comparison of Revised and Old Key Site 17 Development Standards</b>			
<b>Old</b>		<b>Revised</b>	
<b>Policy /Development Standard</b>	<b>Description</b>	<b>Policy /Development Standard</b>	<b>Description</b>
			and maintain visual resources (i.e., long- range southerly hillside views from Old Town Orcutt), buildings should be of low profile and screened and/or softened with vegetation to the greatest degree. Development shall also consider the use of the Old Town Orcutt Design Guidelines to guide the architectural style and character of the proposed structures and other building elements.
<b>Residential Development Standards for 100% Senior Housing</b>			
None		<b>Parking:</b>	<p>Parking standards for senior housing shall be determined based upon the type of senior housing (i.e., independent living, assisted living, and skilled nursing). Parking for group housing (skilled nursing/assisted living) projects shall be calculated based upon number of persons. Parking for projects with units that include a kitchen (independent living/assisted living) shall be calculated based on the number of beds or per guest room.</p> <p>Should the parking standards require modification based upon a specific project requirements, the requested modification shall be evaluated based upon the following:</p> <ol style="list-style-type: none"> <li>1. The modification is minor in nature and will result in a better architectural or site design, as approved by the Board of Architectural</li> </ol>

<b>Attachment A: Comparison of Revised and Old Key Site 17 Development Standards</b>			
<b>Old</b>		<b>Revised</b>	
<b>Policy /Development Standard</b>	<b>Description</b>	<b>Policy /Development Standard</b>	<b>Description</b>
			<p>Review, and/or will result in greater resource protection than the project without the modification.</p> <p>2. The project will be compatible with the neighborhood, and will not create an adverse impact to aesthetics, community character, or public views.</p> <p>3. Any modification of parking or loading zone requirements will not adversely affect the demand for on-street parking in the immediate area.</p>
		<b>Height:</b>	The maximum height for a 100% senior housing project shall be 35 feet. The 35-foot maximum may allow the project to reach three stories on the interior (refer to DevStd KS17-2) of the site as long as the long range southerly hillside view from Old Town Orcutt are preserved.
		<b>Coverage:</b>	A 100% senior housing project shall have a maximum site coverage of 60%.

Attachment B: San Luis Obispo County Water Use Factors

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*SAN LUIS OBISPO WATER USE FACTORS*

USE CATEGORY	WATER USE FACTOR (acre-feet/year)	Indoor Use (% of total)	Toilet Use (% of indoor)
<b>Apartments (see also "condominium")</b>			
In complex	0.18/apartment	60	50
Added to site with existing dwelling(s)	0.12/apartment	100	50
Senior complex	0.10/apartment	60	50
Auto repair	0.03/1000 sq. ft. gross floor area	80	60
Auto sales	0.37/acre site area	not available	
Bank or S&L			
Downtown (w/o landscaping)	0.04/1000 sq. ft. gross floor area	100	80
Suburban (w/ landscaping)	0.16/1000 sq. ft. gross floor area	30	80
Bar	0.30/1000 sq. ft.	80	80
Carwash (mechanical, w/ recovery)	0.12/1000 vehicles/day or 10/site	95	5
Carwash (added to Service Station Site)	2.78/site	n/a	n/a
Church	0.11/1000 sq. ft. gross floor area	40	80
Church w/ school or day care	0.14/1000 sq. ft. gross floor area	50	80
<b>Commercial building - mixed tenancy (Office, retail, and service activities, excluding restaurants and laundries)</b>			
Service-commercial or manufacturing zone	0.06/1000 sq. ft. gross floor area	70	80
Neighborhood commercial	0.30/1000 sq. ft. gross floor area	90	70
Condominium, residential	0.21/dwelling	60	50
<b>Dwelling - see "apartment," "house," and "condominium"</b>			
<b>Food service (retail)</b>			
Full-service restaurant (3 meals, dish washing)	1.32/1000 sq. ft. gross floor area	90	70

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Attachment B: San Luis Obispo County Water Use Factors

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USE CATEGORY	WATER USE FACTOR (acre-feet/year)	Indoor Use (% of total)	Toilet Use (% of indoor)
<b>Food service (retail) - continued</b>			
Fast-food or takeout with on-site food prep.	0.54/1000 sq. ft. gross floor area	80	80
Take-out with minimal on-site food prep. (deli, donut shop, juice bar, etc., with less than .200 sq. ft. customer seating)	0.30/1000 sq. ft. gross floor area	80	80
Group housing (includes fraternities, sororities, boarding houses, convalescent facilities)	0.08/occupant	40	60
Hair salon, barber	0.20/1000 sq. ft. gross floor area	90	50
Health club, w/aquatics	0.26/1000 sq. ft. gross floor area	80	40
Without aquatics	0.14/1000 sq. ft. gross floor area	80	40
<b>House (single-family residence)</b>			
Lot 0 - 0.09 acre	0.21/dwelling	60	50
Lot 0.1 - 0.25 acre	0.30/dwelling	60	50
Lot .26 acre or more	0.60/dwelling	30	50
	<small>(Note: May be reduced to 0.45/dwelling if there is recorded easement running with land, to forest irrigated planting area to 3,000 sq. ft.)</small>		
Laboratory, analytical	0.10/1000 sq. ft. gross floor area	80	50
Laundromat	11/site		not available
Manufacturing (other than beverages, chemicals)	0.22/1000 sq. ft. gross floor area	90	40
Mobile home park	0.14/mobile home	70	50
<b>Motel</b>			
Guest rooms only	0.13/room	60	50
Guest rooms plus restaurant, shop, meeting rooms	0.43/room	70	50

Attachment B: San Luis Obispo County Water Use Factors

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USE CATEGORY	WATER USE FACTOR (acre-feet/year)	Indoor Use (% of total)	Toilet Use (% of indoor)
Offices			
Building trades contracting	0.032/1000 sq. ft. gross floor area	70	75
General, nonmedical	0.066/1000 sq. ft. gross floor area	70	75
Medical, dental (Chiropractor same as general offices)	0.20/1000 sq. ft. gross floor area	90	50
Office - converted from house (no floor area increase)			
Nonmedical	none		
Medical/dental	0.21/house converted	not available	
Park (with restroom, irrigated turf)	1.4/acre		not available
Incl. community bldg.	1.7/acre		not available
Restaurant - see food service			
Service station			
With Mini-Mart	0.77/ site	70	80
Without Mini-Mart	0.52/ site	70	80
Store (retail)			
Downtown center with existing landscaping	0.028/1000 sq. ft. gross floor area	100	80
Freestanding, with landscaping	0.088/1000 sq. ft.	80	70
Department store, with incidental salon/coffee	0.05/1000 sq. ft. gross floor area	90	70
Grocery store with produce	0.30/1000 sq. ft. gross floor area	90	40
Warehouse, wholesale	0.056/1000 sq. ft.	80	75

## **APPENDIX B**

### **Air Quality**

- **URBEMIS Output**
- **SCREEN3 Output**

## **URBEMIS Output**



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Urbemis 2007 Version 9.2.4

Combined Annual Emissions Reports (Tons/Year)

File Name:

Project Name: Orcutt Key Site 17 Rezone

Project Location: Santa Barbara County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
2010 TOTALS (tons/year unmitigated)	0.04	0.35	0.20	0.00	0.27	0.02	0.29	0.06	0.02	0.07	33.36
2010 TOTALS (tons/year mitigated)	0.04	0.35	0.20	0.00	0.02	0.02	0.04	0.00	0.02	0.02	33.36
Percent Reduction	0.00	0.00	0.00	0.00	93.01	0.00	87.25	92.99	0.00	72.04	0.00
2011 TOTALS (tons/year unmitigated)	3.96	3.93	5.72	0.00	0.02	0.27	0.29	0.01	0.25	0.26	624.05
2011 TOTALS (tons/year mitigated)	3.96	3.93	5.72	0.00	0.02	0.27	0.29	0.01	0.25	0.26	624.05
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	4.23	0.46	6.56	0.02	0.99	0.96	610.17

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	1.40	1.60	13.77	0.01	1.76	0.34	914.25

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	5.63	2.06	20.33	0.03	2.75	1.30	1,524.42

Construction Unmitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

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	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
2010	0.04	0.35	0.20	0.00	0.27	0.02	0.29	0.06	0.02	0.07	33.36
Fine Grading 12/01/2010-12/31/2010	0.04	0.35	0.20	0.00	0.27	0.02	0.29	0.06	0.02	0.07	33.36
Fine Grading Dust	0.00	0.00	0.00	0.00	0.27	0.00	0.27	0.06	0.00	0.06	0.00
Fine Grading Off Road Diesel	0.04	0.35	0.18	0.00	0.00	0.02	0.02	0.00	0.02	0.02	32.14
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.23
2011	3.96	3.93	5.72	0.00	0.02	0.27	0.29	0.01	0.25	0.26	624.05
Building 01/01/2011-12/31/2011	0.60	2.74	4.79	0.00	0.01	0.17	0.19	0.01	0.16	0.16	509.43
Building Off Road Diesel	0.44	2.04	1.41	0.00	0.00	0.15	0.15	0.00	0.14	0.14	210.76
Building Vendor Trips	0.04	0.48	0.40	0.00	0.00	0.02	0.02	0.00	0.02	0.02	93.37
Building Worker Trips	0.12	0.22	2.98	0.00	0.01	0.01	0.02	0.00	0.01	0.01	205.31
Asphalt 06/01/2011-12/31/2011	0.20	1.18	0.89	0.00	0.00	0.10	0.10	0.00	0.09	0.09	111.47
Paving Off-Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.19	1.16	0.69	0.00	0.00	0.10	0.10	0.00	0.09	0.09	97.31
Paving On Road Diesel	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.10
Paving Worker Trips	0.01	0.01	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.06
Coating 06/01/2011-12/31/2011	3.16	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.15
Architectural Coating	3.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.15

Phase Assumptions

Phase: Fine Grading 12/1/2010 - 12/31/2010 - Default Fine Site Grading Description

Total Acres Disturbed: 9.53

Page: 4

**6/29/2010 11:28:00 AM**

Maximum Daily Acreage Disturbed: 2.38

Fugitive Dust Level of Detail: Default

10 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Paving 6/1/2011 - 12/31/2011 - Default Paving Description

Acres to be Paved: 2.38

Off-Road Equipment:

4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day

1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day

1 Paving Equipment (104 hp) operating at a 0.53 load factor for 8 hours per day

1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 1/1/2011 - 12/31/2011 - Default Building Construction Description

Off-Road Equipment:

1 Cranes (399 hp) operating at a 0.43 load factor for 6 hours per day

2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day

1 Generator Sets (49 hp) operating at a 0.74 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

3 Welders (45 hp) operating at a 0.45 load factor for 8 hours per day

Phase: Architectural Coating 6/1/2011 - 12/31/2011 - Default Architectural Coating Description

Rule: Residential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250



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2011	3.96	3.93	5.72	0.00	0.02	0.27	0.29	0.01	0.25	0.26	624.05
Building 01/01/2011-12/31/2011	0.60	2.74	4.79	0.00	0.01	0.17	0.19	0.01	0.16	0.16	509.43
Building Off Road Diesel	0.44	2.04	1.41	0.00	0.00	0.15	0.15	0.00	0.14	0.14	210.76
Building Vendor Trips	0.04	0.48	0.40	0.00	0.00	0.02	0.02	0.00	0.02	0.02	93.37
Building Worker Trips	0.12	0.22	2.98	0.00	0.01	0.01	0.02	0.00	0.01	0.01	205.31
Asphalt 06/01/2011-12/31/2011	0.20	1.18	0.89	0.00	0.00	0.10	0.10	0.00	0.09	0.09	111.47
Paving Off-Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	0.19	1.16	0.69	0.00	0.00	0.10	0.10	0.00	0.09	0.09	97.31
Paving On Road Diesel	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.10
Paving Worker Trips	0.01	0.01	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.06
Coating 06/01/2011-12/31/2011	3.16	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.15
Architectural Coating	3.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.15

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Fine Grading 12/1/2010 - 12/31/2010 - Default Fine Site Grading Description

For Soil Stabilizing Measures, the Apply soil stabilizers to inactive areas mitigation reduces emissions by:

PM10: 84% PM25: 84%

For Soil Stabilizing Measures, the Replace ground cover in disturbed areas quickly mitigation reduces emissions by:

PM10: 5% PM25: 5%

For Soil Stabilizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

For Soil Stabilizing Measures, the Equipment loading/unloading mitigation reduces emissions by:

PM10: 69% PM25: 69%

For Unpaved Roads Measures, the Reduce speed on unpaved roads to less than 15 mph mitigation reduces emissions by:

PM10: 44% PM25: 44%

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For Unpaved Roads Measures, the Manage haul road dust 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	0.03	0.35	0.15	0.00	0.00	0.00	451.56
Hearth	1.58	0.11	6.27	0.02	0.99	0.96	158.36
Landscape	0.01	0.00	0.14	0.00	0.00	0.00	0.25
Consumer Products	2.29						
Architectural Coatings	0.32						
<b>TOTALS (tons/year, unmitigated)</b>	<b>4.23</b>	<b>0.46</b>	<b>6.56</b>	<b>0.02</b>	<b>0.99</b>	<b>0.96</b>	<b>610.17</b>

Area Source Changes to Defaults

Page: 1

**6/29/2010 11:27:40 AM**

Urbemis 2007 Version 9.2.4

Combined Summer Emissions Reports (Pounds/Day)

File Name:

Project Name: Orcutt Key Site 17 Rezone

Project Location: Santa Barbara County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007



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Summary Report:

CONSTRUCTION EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
2010 TOTALS (lbs/day unmitigated)	3.78	30.55	17.40	0.00	23.81	1.57	25.38	4.97	1.45	6.42	2,901.13
2010 TOTALS (lbs/day mitigated)	3.78	30.55	17.40	0.00	1.66	1.57	3.24	0.35	1.45	1.80	2,901.13
2011 TOTALS (lbs/day unmitigated)	48.56	36.57	48.99	0.02	0.12	2.65	2.78	0.04	2.43	2.48	5,416.98
2011 TOTALS (lbs/day mitigated)	48.56	36.57	48.99	0.02	0.12	2.65	2.78	0.04	2.43	2.48	5,416.98

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	14.57	1.96	2.37	0.00	0.01	0.01	2,477.10

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	7.70	8.30	74.58	0.05	9.64	1.86	5,099.00

SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	22.27	10.26	76.95	0.05	9.65	1.87	7,576.10

Construction Mitigated Detail Report:

CONSTRUCTION EMISSION ESTIMATES Summer Pounds Per Day, Mitigated

<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
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**6/29/2010 11:27:40 AM**

Time Slice 12/1/2010-12/31/2010	<u>3.78</u>	<u>30.55</u>	<u>17.40</u>	<u>0.00</u>	<u>1.66</u>	<u>1.57</u>	<u>3.24</u>	<u>0.35</u>	<u>1.45</u>	<u>1.80</u>	<u>2,901.13</u>
Active Days: 23											
Fine Grading 12/01/2010-12/31/2010	3.78	30.55	17.40	0.00	1.66	1.57	3.24	0.35	1.45	1.80	2,901.13
Fine Grading Dust	0.00	0.00	0.00	0.00	1.66	0.00	1.66	0.35	0.00	0.35	0.00
Fine Grading Off Road Diesel	3.71	30.42	15.73	0.00	0.00	1.57	1.57	0.00	1.44	1.44	2,794.41
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.07	0.13	1.67	0.00	0.01	0.00	0.01	0.00	0.00	0.00	106.72
Time Slice 1/3/2011-5/31/2011	4.62	21.09	36.81	0.02	0.11	1.32	1.43	0.04	1.20	1.24	3,918.72
Active Days: 107											
Building 01/01/2011-12/31/2011	4.62	21.09	36.81	0.02	0.11	1.32	1.43	0.04	1.20	1.24	3,918.72
Building Off Road Diesel	3.39	15.67	10.85	0.00	0.00	1.14	1.14	0.00	1.05	1.05	1,621.20
Building Vendor Trips	0.29	3.70	3.06	0.01	0.03	0.13	0.16	0.01	0.12	0.13	718.21
Building Worker Trips	0.94	1.72	22.91	0.01	0.08	0.05	0.14	0.03	0.04	0.07	1,579.31

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Time Slice 6/1/2011-12/30/2011	<b><u>48.56</u></b>	<b><u>36.57</u></b>	<b><u>48.99</u></b>	<b><u>0.02</u></b>	<b><u>0.12</u></b>	<b><u>2.65</u></b>	<b><u>2.78</u></b>	<b><u>0.04</u></b>	<b><u>2.43</u></b>	<b><u>2.48</u></b>	<b><u>5,416.98</u></b>
Active Days: 153											
Asphalt 06/01/2011-12/31/2011	2.63	15.43	11.58	0.00	0.01	1.33	1.34	0.00	1.23	1.23	1,457.13
Paving Off-Gas	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.48	15.15	9.07	0.00	0.00	1.33	1.33	0.00	1.22	1.22	1,272.04
Paving On Road Diesel	0.01	0.10	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.40
Paving Worker Trips	0.10	0.19	2.48	0.00	0.01	0.01	0.01	0.00	0.00	0.01	170.70
Building 01/01/2011-12/31/2011	4.62	21.09	36.81	0.02	0.11	1.32	1.43	0.04	1.20	1.24	3,918.72
Building Off Road Diesel	3.39	15.67	10.85	0.00	0.00	1.14	1.14	0.00	1.05	1.05	1,621.20
Building Vendor Trips	0.29	3.70	3.06	0.01	0.03	0.13	0.16	0.01	0.12	0.13	718.21
Building Worker Trips	0.94	1.72	22.91	0.01	0.08	0.05	0.14	0.03	0.04	0.07	1,579.31
Coating 06/01/2011-12/31/2011	41.31	0.04	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	41.13
Architectural Coating	41.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.02	0.04	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	41.13

Construction Related Mitigation Measures

The following mitigation measures apply to Phase: Fine Grading 12/1/2010 - 12/31/2010 - Default Fine Site Grading Description

For Soil Stabilizing Measures, the Apply soil stabilizers to inactive areas mitigation reduces emissions by:

PM10: 84% PM25: 84%

For Soil Stabilizing Measures, the Replace ground cover in disturbed areas quickly mitigation reduces emissions by:

PM10: 5% PM25: 5%

For Soil Stabilizing Measures, the Water exposed surfaces 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

For Soil Stabilizing Measures, the Equipment loading/unloading mitigation reduces emissions by:

PM10: 69% PM25: 69%

For Unpaved Roads Measures, the Reduce speed on unpaved roads to less than 15 mph mitigation reduces emissions by:

PM10: 44% PM25: 44%

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For Unpaved Roads Measures, the Manage haul road dust 2x daily watering mitigation reduces emissions by:

PM10: 55% PM25: 55%

Area Source Unmitigated Detail Report:

AREA SOURCE EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	0.15	1.94	0.82	0.00	0.00	0.00	2,474.29
Hearth - No Summer Emissions							
Landscape	0.12	0.02	1.55	0.00	0.01	0.01	2.81
Consumer Products	12.57						
Architectural Coatings	1.73						
<b>TOTALS (lbs/day, unmitigated)</b>	<b>14.57</b>	<b>1.96</b>	<b>2.37</b>	<b>0.00</b>	<b>0.01</b>	<b>0.01</b>	<b>2,477.10</b>

Area Source Changes to Defaults

Operational Unmitigated Detail Report:

OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Congregate care (Assisted Living) Facility	7.70	8.30	74.58	0.05	9.64	1.86	5,099.00
<b>TOTALS (lbs/day, unmitigated)</b>	<b>7.70</b>	<b>8.30</b>	<b>74.58</b>	<b>0.05</b>	<b>9.64</b>	<b>1.86</b>	<b>5,099.00</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Congregate care (Assisted Living) Facility	9.53	3.00	dwelling units	257.00	771.00	5,597.61
					771.00	5,597.61

Vehicle Fleet Mix

Vehicle Type	Percent	Type	Non-Catalyst	Catalyst	Diesel
Light Auto	46.3		1.3	98.3	0.4
Light Truck < 3750 lbs	16.6		1.8	94.6	3.6
Light Truck 3751-5750 lbs	20.4		1.0	98.5	0.5
Med Truck 5751-8500 lbs	7.5		0.0	100.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.5		0.0	73.3	26.7
Lite-Heavy Truck 10,001-14,000 lbs	1.0		0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	1.1		0.0	27.3	72.7
Heavy-Heavy Truck 33,001-60,000 lbs	0.3		0.0	33.3	66.7
Other Bus	0.1		0.0	0.0	100.0
Urban Bus	0.1		0.0	0.0	100.0
Motorcycle	3.7		62.2	37.8	0.0
School Bus	0.2		0.0	0.0	100.0
Motor Home	1.2		8.3	83.4	8.3

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	9.9	5.6	6.1	5.7	4.1	5.7
Rural Trip Length (miles)	15.0	15.0	15.0	15.0	10.0	10.0
Trip speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			

% of Trips - Commercial (by land use)

Operational Changes to Defaults

## **SCREEN3 Output**

07/30/11  
20:29:15

\*\*\* SCREEN3 MODEL RUN \*\*\*  
\*\*\* VERSION DATED 96043 \*\*\*

C:\Lakes\Screen View\Site17.scr

SIMPLE TERRAIN INPUTS:

SOURCE TYPE = AREA  
EMISSION RATE (G/(S-M\*\*2)) = 0.600000E-08  
SOURCE HEIGHT (M) = 3.0000  
LENGTH OF LARGER SIDE (M) = 110.0000  
LENGTH OF SMALLER SIDE (M) = 110.0000  
RECEPTOR HEIGHT (M) = 1.0000  
URBAN/RURAL OPTION = RURAL

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.  
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

MODEL ESTIMATES DIRECTION TO MAX CONCENTRATION

BOUY. FLUX = 0.000 M\*\*4/S\*\*3; MOM. FLUX = 0.000 M\*\*4/S\*\*2.

\*\*\* FULL METEOROLOGY \*\*\*

\*\*\*\*\*  
\*\*\* SCREEN AUTOMATED DISTANCES \*\*\*  
\*\*\*\*\*

\*\*\* TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES \*\*\*

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DIR (DEG)
10.	0.5766E-01	3	1.0	1.0	320.0	3.00	45.
100.	0.1244	5	1.0	1.0	10000.0	3.00	45.
200.	0.1265	6	1.0	1.0	10000.0	3.00	45.
300.	0.1013	6	1.0	1.0	10000.0	3.00	45.
400.	0.8193E-01	6	1.0	1.0	10000.0	3.00	45.
500.	0.6783E-01	6	1.0	1.0	10000.0	3.00	45.

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 10. M:  
145. 0.1354 6 1.0 1.0 10000.0 3.00 45.

\*\*\*\*\*  
\*\*\* SUMMARY OF SCREEN MODEL RESULTS \*\*\*  
\*\*\*\*\*

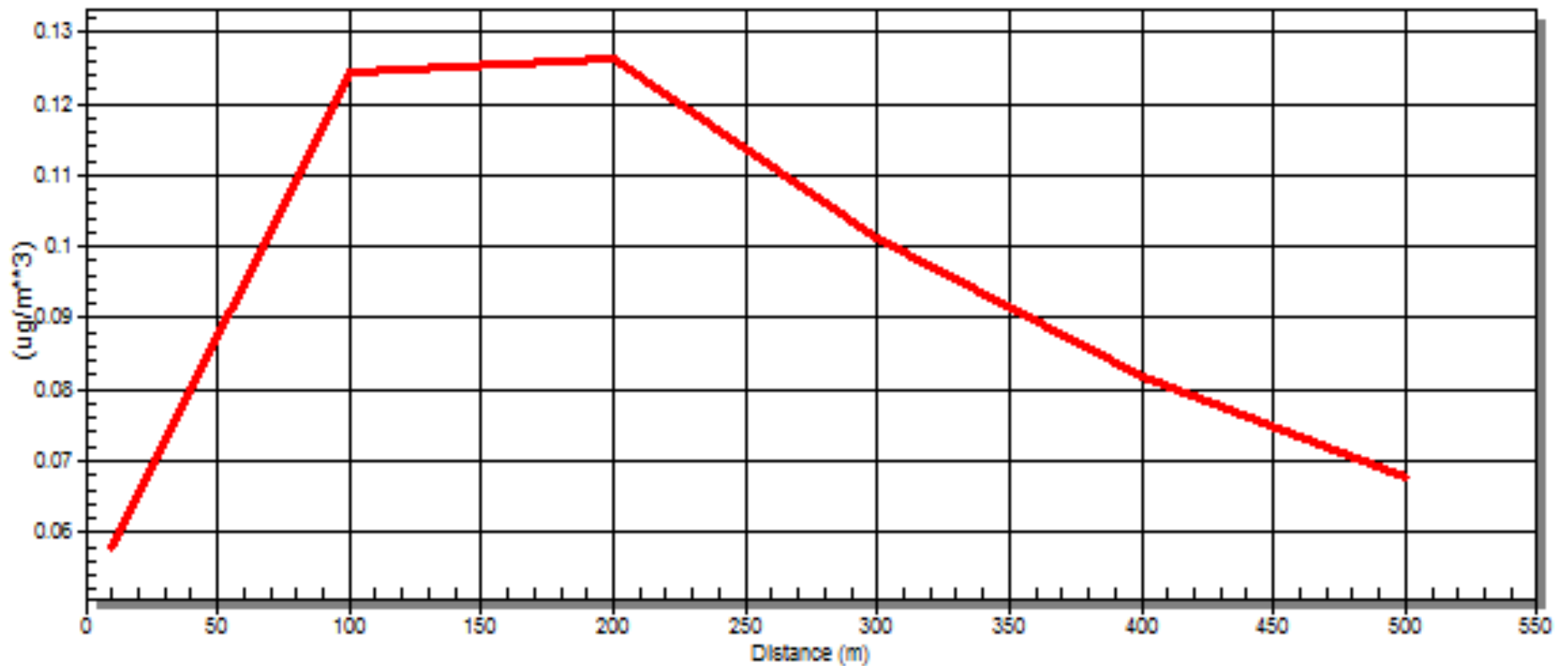
CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	0.1354	145.	0.

\*\*\*\*\*  
\*\* REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS \*\*  
\*\*\*\*\*



## Automated Distance Vs. Concentration

Terrain Height = 0.00 m.



07/07/10  
13:10:37

\*\*\* SCREEN3 MODEL RUN \*\*\*  
\*\*\* VERSION DATED 96043 \*\*\*

Key Site 17

SIMPLE TERRAIN INPUTS:

SOURCE TYPE = AREA  
EMISSION RATE (G/(S-M\*\*2)) = .110000E-07  
SOURCE HEIGHT (M) = 3.0000  
LENGTH OF LARGER SIDE (M) = 110.0000  
LENGTH OF SMALLER SIDE (M) = 110.0000  
RECEPTOR HEIGHT (M) = 1.0000  
URBAN/RURAL OPTION = RURAL

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.  
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

MODEL ESTIMATES DIRECTION TO MAX CONCENTRATION

BUOY. FLUX = .000 M\*\*4/S\*\*3; MOM. FLUX = .000 M\*\*4/S\*\*2.

\*\*\* FULL METEOROLOGY \*\*\*

\*\*\*\*\*  
\*\*\* SCREEN AUTOMATED DISTANCES \*\*\*  
\*\*\*\*\*

\*\*\* TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES \*\*\*

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	MAX DIR (DEG)
50.	.1618	4	1.0	1.0	320.0	3.00	45.
100.	.2280	5	1.0	1.0	10000.0	3.00	45.
200.	.2319	6	1.0	1.0	10000.0	3.00	45.
300.	.1858	6	1.0	1.0	10000.0	3.00	45.
400.	.1502	6	1.0	1.0	10000.0	3.00	45.
500.	.1243	6	1.0	1.0	10000.0	3.00	45.

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 50. M:  
145. .2482 6 1.0 1.0 10000.0 3.00 45.

\*\*\*\*\*  
\*\*\* SUMMARY OF SCREEN MODEL RESULTS \*\*\*  
\*\*\*\*\*

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	.2482	145.	0.

\*\*\*\*\*  
\*\* REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS \*\*  
\*\*\*\*\*

## **APPENDIX C**

### **Biological Resources**

- **Vascular Plant List**

## **Vascular Plant List**

**APPENDIX C**

**Vascular Plants Observed at Orcutt Union School District Key Site 17 Project Site  
(May 24, 2010)**

(\*indicates non-native species)

<b>GROUP</b>	
<b>Family</b>	
<i>Scientific Name</i>	<b>Common Name</b>
<b>FLOWERING PLANTS -- DICOTS</b>	
Anacardiaceae	
* <i>Schinus molle</i>	Peruvian pepper tree
Asteraceae	
<i>Ambrosia psilostachya</i>	western ragweed
* <i>Anthemis cotula</i>	dog-fennel
<i>Baccharis pilularis</i>	coyote brush
* <i>Carduus pycnocephalus</i>	Italian thistle
* <i>Conyza bonariensis</i>	Buenos Aires horseweed
<i>Conyza</i> sp.	horseweed
<i>Deinandra increscens</i> ssp. <i>increscens</i>	grassland tarweed
* <i>Logfia gallica</i> [<= <i>Filago gallica</i> ]	narrowleaf cottonrose
* <i>Gnaphalium luteo-album</i>	cudweed
<i>Heterotheca grandiflora</i>	telegraph weed
* <i>Hypochaeris glabra</i>	smooth cat's ear
<i>Isocoma menziesii</i>	goldenbush
* <i>Lactuca serriola</i>	prickly lettuce
* <i>Chamomilla suaveolens</i>	pineapple weed
* <i>Helminthotheca echioides</i> [<= <i>Picris echioides</i> ]	bristly ox-tongue
* <i>Senecio vulgaris</i>	common groundsel
* <i>Sonchus asper</i>	prickly sow-thistle
* <i>Sonchus oleraceus</i>	common sow-thistle
Brassicaceae	
* <i>Capsella bursa-pastoris</i>	shepherd's purse
* <i>Raphanus sativus</i>	wild radish
* <i>Sisymbrium irio</i>	London rocket
Caryophyllaceae	
* <i>Polycarpon tetraphyllum</i>	Four-leaved polycamp
* <i>Silene gallica</i>	windmill pink
* <i>Spergula arvensis</i>	corn spurry
* <i>Spergularia rubra</i>	sand spurry
Chenopodiaceae	
* <i>Chenopodium</i> sp.	goosefoot
* <i>Salsola tragus</i>	Russian thistle
Euphorbiaceae	
<i>Croton setigerus</i>	prostrate spurge
Fabaceae	
* <i>Lotus corniculatus</i>	bird's foot treefoil
* <i>Acmispon americanus</i> [<= <i>Lotus purshianus</i> ]	lotus
<i>Lupinus</i> sp.	lupine
* <i>Medicago lupulina</i>	black medic
* <i>Medicago polymorpha</i>	California burclover

<b>GROUP</b>	
<b>Family</b>	
<i>Scientific Name</i>	<b>Common Name</b>
<i>*Melilotus indicus</i>	yellow sweet clover
<i>*Trifolium hirtum</i>	rose clover
<i>*Trifolium repens</i>	white clover
<i>*Vicia benghalensis</i>	vetch
<i>*Vicia s. sativa</i>	spring vetch
Fagaceae	
<i>Quercus agrifolia</i>	coast live oak
Geraniaceae	
<i>*Erodium botrys</i>	long-beaked filaree
<i>*Erodium moschatum</i>	white-stemmed filaree
Malvaceae	
<i>*Malva nicaeensis</i>	bull mallow
<i>*Malva parviflora</i>	cheeseweed
<i>*Modiola caroliniana</i>	Carolina bristle mallow
Myrsinaceae <sup>1</sup>	
<i>*Anagallis arvensis</i>	scarlet pimpernel
Plantaginaceae	
<i>*Plantago coronopus</i>	cut leaf plantain
<i>*Plantago lanceolata</i>	English plantain
Polygonaceae	
<i>*Polygonum aviculare</i> ssp. <i>depressum</i> [<= <i>Polygonum arenastrum</i> ]	common knotweed
<i>*Rumex acetosella</i>	sheep sorrel
<i>*Rumex crispus</i>	curly dock
Rosaceae	
<i>*Rubus</i> sp.	blackberry
Salicaceae	
<i>Salix</i> sp.	willow
<b>FLOWERING PLANTS -- MONOCOTS</b>	
Poaceae	
<i>*Avena barbata</i>	slender oat
<i>*Avena fatua</i>	common wild oat
<i>*Bromus catharticus</i>	rescue grass
<i>*Bromus diandrus</i>	ripgut brome
<i>*Bromus hordeaceus</i>	soft chess
<i>*Cynodon dactylon</i>	Bermuda grass
<i>*Hordeum murinum</i>	foxtail barley
<i>Leymus triticoides</i>	alkali rye
<i>*Lolium multiflorum</i>	Italian rye grass
<i>*Pennisetum clandestinum</i>	Kikuyu grass
<i>*Piptatherum miliaceum</i>	mountain millet
<i>*Polypogon monspeliensis</i>	rabbit foot grass
<i>*Vulpia myuros</i>	rattail fescue
Juncaceae	
<i>Juncus bufonius</i>	common toad rush

<sup>1</sup> *Anagallis arvensis* was previously placed in the family Primulaceae.

## **APPENDIX D**

### **Hazardous Materials**

- **Preliminary Endangerment Assessment**
- **Phase I Environmental Site Assessment**
- **Natural Gas Pipeline Risk Analysis Study**

## **Preliminary Endangerment Assessment**



Job No. 11524-01

**Preliminary Endangerment Assessment  
Proposed Orcutt Union School  
Site No. 17  
Old Town South  
Orcutt, California**

*Prepared for:*

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Orcutt Union School District  
501 Dyer Street  
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*Prepared by:*

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December 18, 2001

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## 1.0 INTRODUCTION

This document presents results of a Preliminary Endangerment Assessment (PEA) for the proposed Orcutt Union School District (School District) elementary school (Orcutt Union School Site No. 17) to be located northwest of the intersection of Dyer Road and Rice Ranch Road, south of Old Town Orcutt (collectively hereinafter referred to as “Site”) (Figure 1). This PEA Report is being submitted by Tetra Tech, Inc. (Tetra Tech) on behalf of the School District.

The PEA field investigation, laboratory analysis program, and screening level human health and ecological risk assessment were conducted in accordance with the *Sampling Strategy for PEA for the Proposed Orcutt Union School Site No. 17* dated May 25, 2001 (Sampling Strategy) (Tetra Tech 2001b). This PEA Report was prepared, and work at the Site was conducted, in accordance with the guidelines of the California Environmental Protection Agency (Cal EPA) Department of Toxic Substances Control (DTSC), as detailed in the *Preliminary Endangerment Assessment Guidance Manual* (Cal EPA DTSC 1994, second printing 1999). A project-specific direction on the scope of the PEA work plan and the PEA report was provided by the DTSC. Project scoping meeting and a Site visit were held with representatives of the DTSC, Tetra Tech, and the School District on May 17, 2001.

### 1.1 PEA OBJECTIVES

In accordance with Assembly Bill 2644, the State of California has adopted an environmental policy requiring that all new school sites obtain “No Further Action” designation before proceeding with acquisition and/or construction. The DTSC has agreed to work cooperatively with the School District to provide environmental reviews of proposed sites for new schools. The review process requires completion of a Phase I Environmental Site Assessment (ESA) report for each proposed school site. A PEA is performed if any indication of a potential environmental hazard is identified by the Phase I ESA.

The overall objectives of the PEA include

- Evaluating historical information for indications of the past use, storage, disposal, or release of hazardous wastes/substances at the Site;
- Establishing a field sampling and analysis program to assess the nature of anthropogenic and naturally occurring hazardous wastes/substances that may be present in soil, surface water, or groundwater at the Site, their concentration and general extent; and
- Assessing the potential threat to public health and/or the environment posed by anthropogenic and naturally occurring hazardous constituents that may be present at the Site using a residential land-use scenario.

Based on information developed during the PEA and the conservative human and ecological risk evaluation using the PEA Guidance Manual (Cal EPA DTSC 1994, second printing 1999), the DTSC will make an informed decision regarding potential risks posed by the Site. Possible outcomes of the PEA decision include the requirement for further investigation through the Remedial Investigation/Feasibility Study (RI/FS) process if the Site is found to be significantly impacted by hazardous substance release(s); the need to perform a Removal Action if localized impacts by hazardous substances release(s) are found; and issuance of a “No Further Action” finding if the Site is found not to be significantly impacted and risks to human health and the environment are found to be within acceptable levels based on the conservative screening level risk assessment.

## **1.2 SCOPE OF WORK**

The scope of work to prepare this PEA included

- Preparing a Phase I ESA (Tetra Tech 2001a) in accordance with the American Society for Testing and Materials (ASTM) Standard 1527.00 (ASTM 2000) researching available Site background information regarding former and current land use, performing a Site reconnaissance, reviewing a database of regulatory agency records for the Site area, and reviewing data available in regulatory agency files for the Site and vicinity;
- Holding scoping meetings and discussions with DTSC and the School District representatives for development of the Sampling Strategy;
- Preparing the PEA Sampling Strategy (Tetra Tech 2001b);
- Performing field sampling in accordance with the Sampling Strategy to collect field and laboratory data to assess environmental conditions at the Site;
- Preparing of a Preliminary Endangerment Assessment report (Tetra Tech 2001c) documenting the field sampling results for work performed as described in the Sampling Strategy;
- Preparing a screening level human health and ecological risk assessment;
- Preparing and implementing a Public Participation Plan (prepared by the School District, under the direction and guidance of the DTSC); and
- Preparing this PEA Report.

Numerous information sources were reviewed as part of the background research for the PEA Sampling Strategy. These sources were reviewed to develop an understanding of current and past land uses and practices that may have involved the handling, use, storage, and/or disposal of hazardous substances or wastes. Because information regarding Site-specific waste handling and/or disposal practices was not available, information was obtained and used to develop a general Site history in an attempt to identify potential sources of chemical impact.

The background research for the PEA Sampling Strategy was developed based on information from the Phase I ESA conducted by Tetra Tech (Tetra Tech 2001a) for the Site and comments from the DTSC at a scoping meeting held at the Site on May 17, 2001. Specific sources of information reviewed and activities performed in conducting the background research include:

- Site zoning and land-use maps;
- Current and historical U.S. Geological Survey (USGS) 7½-minute topographic maps;
- Geologic maps and hydrogeologic data;
- Building department records;
- Available historical aerial photographs;



- Environmental database list searches;
- Agency files at federal, state, and local regulatory agencies and offices for the Site;
- Agency files for listed facilities within one-quarter mile of the Site that were identified as having a potential to have impacted the Site;
- Site owner/operator records (if available);
- A Site reconnaissance and observations of the area within one-quarter mile of the Site;
- Interviews with persons knowledgeable of Site history and operations;
- Reports of prior investigations and remedial activities performed at the Site; and
- Available applicable information from School District files.

The Phase I ESA included seven supporting appendices that contain backup documentation for the Site background research. These appendices are not repeated in this PEA Report, and the reader is referred to the Phase I ESA for supporting documentation.

A sampling and analysis program was conducted to evaluate the potential presence of chemical constituents in shallow soils beneath the Site. Three main areas of concern were evaluated in the Field Sampling Assessment (FSA): former Christmas tree production area, oil field activities, and former School District underground fuel storage tanks. The potential presence of pesticides; toxic heavy metals (including total lead and arsenic); hydrogen sulfide (H<sub>2</sub>S), methane (CH<sub>4</sub>), and fixed gases (carbon dioxide [CO<sub>2</sub>], carbon monoxide [CO], oxygen [O<sub>2</sub>], and nitrogen [N<sub>2</sub>]); benzene, toluene, ethylbenzene, and xylene (BTEX); and C<sub>4</sub>-C<sub>10</sub> carbon range total volatile hydrocarbons (TVHs) were evaluated in these three areas on the Site. The sampling and analysis program was presented in the Sampling Strategy (Tetra Tech 2001b).

A field sampling assessment consisting of two phases: a soil sampling assessment and a soil gas sampling assessment. The field and laboratory program included:

- Collection and laboratory analyses of 7 surface and 7 subsurface soil samples from 6 locations for assessment of potential organochlorine pesticide residue in the Christmas tree production area;
- Collection and laboratory analyses of 5 surface soil samples for assessment of potential pesticide related toxic heavy metals including lead and arsenic, in the Christmas tree production area;
- Collection and laboratory analyses of 4 surface soil samples at 4 offsite locations (undisturbed areas along the public easement adjacent to Rice Ranch Road south of the Site boundary) at depths of 0 to 0.5 foot below ground surface (bgs) to collect data on background metal concentrations;
- Collection and analyses of 14 soil gas samples from 14 regularly spaced onsite locations, along the Site perimeter at a depth of 10 feet, for methane, hydrogen sulfide, and fixed

gases (CO<sub>2</sub>, CO, O<sub>2</sub>, and N<sub>2</sub>) that may have been released from crude oil and natural gas transmission lines, crude oil storage tanks, and an oil processing plant, located within 0.25- to 0.5-mile southwest and west of the Site, and gas emissions from oil fields in the Site vicinity;

- Collection and analyses of 2 soil gas samples from 2 locations at a depth of 10 feet in the public easement along Dyer Road for BTEX and TVH vapors that may have been generated from fuel released from two underground storage tanks (USTs) formerly located on School District property;
- Validation of laboratory data to assure that Data Quality Objectives (DQOs) were met and the data were suitable for use in the human health and ecological screening evaluation.

Data collected from the field and laboratory analytical program used to determine the human health and ecological risk assessment for the Site did not identify constituents of potential concern (COPCs). Without COPCs at a site, all exposure pathways are incomplete and receptors are not exposed to any COPCs. As a result of this determination, there are no known health risks to either human or ecological receptors at this Site and quantitative health risks were not evaluated.

### **1.3 PEA REPORT FORMAT**

This PEA Report is organized in general accordance with the format presented in Chapter 3 of the DTSC's PEA Guidance Manual. This PEA Report contains the following sections:

- Section 1 presents an Introduction and Summary of PEA Objectives and PEA Report Format.
- Section 2 presents a Site Description of the proposed Elementary School Site.
- Section 3 includes Site History and Background Information.
- Section 4 defines the Phase I ESA Data Gaps.
- Section 5 contains a description of the Site Environmental Setting.
- Section 6 presents a discussion of Sampling Activities and Results.
- Section 7 includes the Human Health and Ecological Screening Evaluation.
- Section 8 presents Community Profile information and the Public Participation Plan implementation.
- Section 9 includes a summary of Quality Assurance Project Plan (QAPP) implementation.
- Section 10 describes Health and Safety Plan implementation.
- Section 11 summarizes Field Variances from the DTSC approved Sampling Strategy.

- Section 12 presents a discussion of Applicable or Relevant Laws and Regulations Pertaining to School Sites.
- Section 13 presents Conclusions of the PEA.
- Section 14 presents Recommendations of the PEA.
- Section 15 presents a Disclaimer for this PEA Report.
- Section 16 lists References cited in the document.

**2.0 SITE DESCRIPTION AND LOCATION**

**2.1 SITE NAME**

The Site has been identified by the School District as the proposed Orcutt Union Elementary School Site No. 17 located in Old Town South, Orcutt, California.

**2.2 SITE ADDRESS**

The Site has not been assigned an address. The Site is located northwest of the intersection of Rice Ranch Road and Dyer Road and south of Soares Avenue.

**2.3 SITE OWNER**

The four western parcels are owned by Winston B. Grigg and Katherine H. Grigg, Trustees of the Winston B. Grigg and Katherine H. Grigg Living Trust.

The fifth eastern parcel, located at the northwest corner of Dyer Street and Rice Ranch Road, is owned by Donovan I. Griffith and Rhea Rehark-Griffith. A lot split in progress at the time of the Phase I ESA defines the boundaries of the western and northern portions of the parcel owned by Rhea Rehark-Griffith that is under consideration. The southeastern portion of the parcel including the house and outbuildings is not included in the proposed Site.

**2.4 DESIGNATED CONTACT PERSON**

Mr. Gary Black, Assistant Superintendent, Orcutt Union School District, is the designated contact person.

**2.5 MAILING ADDRESS**

The project mailing address is:

Orcutt Union School District  
501 Dyer Street  
Orcutt, California 93457

**2.6 TELEPHONE NUMBER**

The telephone number for Mr. Black is (805) 938-8917.

**2.7 OTHER SITE NAMES**

The Site has no other names.

**2.8 U. S. ENVIRONMENTAL PROTECTION AGENCY IDENTIFICATION NUMBER**

Based on a review of the regulatory database search report and contacts with regulatory agencies, discussed further below, the site has not been issued a U.S. Environmental Protection Agency (U.S. EPA) Identification Number.

**2.9 CALSITES DATABASE NUMBER**

Based on a review of the regulatory database search report and contacts with regulatory agencies, discussed further below, the site is not identified in the CalSites database.

**2.10 ASSESSOR'S PARCEL NUMBERS, LEGAL DESCRIPTION, AND MAPS**

Information regarding Assessor's Parcel Numbers (APNs) relating to the site and maps depicting parcel boundaries were obtained from the Santa Barbara County Assessor's Office and through Title Runners Real Estate and Legal Services of Santa Barbara (Title Runners) (Appendix E, Tetra Tech 2000a). The APNs for the Site are 105-330-05, 105-330-06, 105-330-08, 105-134-04, and 105-134-05.

The current legal description of the Site recorded in the County of Santa Barbara is:

**Parcel One**

That portion of the northwest quarter of Section 15, Township 9 North, Range 34 West, San Bernardino Meridian, in the County of Santa Barbara, State of California, according to the official plat thereof, described as follows:

Commencing at a brass cap monument marked "R.H.J.L.S.2019" set at the intersection of the boundary line, common to said Section 15 and Rancho Todos Santos Y San Antonio with the South Boundary of the Town of Orcutt, according to map filed in the Office of the Santa Barbara County, surveyors as C.S. Map No 856; thence along said common boundary South 1°14'00" West 834.99 feet to the Northwest corner of the land described in the Deed to the County of Santa Barbara, recorded February 8, 1967 as Instrument No. 3547 in Book 2180, Page 921 of Official Records, records of said County and the true point of beginning, said true point of beginning being the beginning of a non-tangent curve, concave Northerly, having the radius of 808.00 feet, a radial line of said curve to said true point of beginning, bears South 19°51'35" West, thence along the Northerly boundary line of said land Easterly along said curve through a central angle of 19°09'20" an arc distance of 270.14 feet; thence tangent to said curve, South 89°17'45" East 132.69 feet; thence parallel with said common boundary line North 1°14'00" East 675.45 feet to the Southerly line of Soares Avenue, as described in the deed to the County of Santa Barbara, recorded November 26, 1952 in Book 1111, Page 425 of Official records, in the Office of the County Recorder of said County; thence along said Soares Avenue, North 89°39'45" West 398.26 feet to said common boundary line; thence along said common boundary line, South 1°14'00" West 628.16 feet to the true point of beginning.

APN# 105-134-04 and 105-330-05

**Parcel Two**

Parcel 1 of the Parcel Map No. 11091, in the County of Santa Barbara, State of California, as shown on Parcel Map filed in Book 6, Page 26 of Parcel Maps, in the Office of the County Recorder of said County.

APN# 105-134-05 and 105-330-06.

**Parcel Three**

That portion of the northwest quarter of Section 15, Township 9 North, Range 34 West, San Bernardino Meridian, in the County of Santa Barbara, State of California, according to the official plat thereof, described as follows:

Commencing at a brass cap monument marked "R.H.J.L.S.2019" set at the intersection of the Southerly boundary of the Town of Orcutt with the common boundary line, between Section 15 and Rancho Todos Santos Y San Antonio as shown on the map filed in the Office of the County Surveyor of said County as C.S. Map No 856; thence along said common boundary South 1°14'00" West 834.99 feet to the Northwest corner of the land described in the Deed to the County of Santa Barbara, recorded February 8, 1967 as Instrument No. 3547 in Book 2180, Page 921 of Official Records, records of said County being a point on the curve concave Northeasterly having a radius of 808.00 feet, a radial line of said curve to said point bears South 19°51'35" West; thence Southeasterly along said curve and Northerly boundary line of land to the County, through a central angle of 19°09'20" an arc distance of 270.14 feet; thence tangent to said curve South 89°17'45" East 132.69 feet to the true point of beginning; thence continuing along said Northerly boundary line, South 89°17'45" East 510.09 feet to the beginning of a tangent curve on said boundary line, concave Northwesterly having a radius of 15.00 feet; thence northeasterly along said curve through a central angle of 90°19'30" an arc distance of 23.65 feet to a point in the Westerly boundary line of Dryer Street, 60.00 feet wide as described in the deed to the County of Santa Barbara, recorded April 5, 1922 in Book 198, Page 368 of Deeds, records of said County; thence along said Westerly boundary line North 0°22'45" East 663.63 feet to the intersection with the Southerly boundary line Soares Avenue, as described in the deed to the County of Santa Barbara, recorded November 26, 1952 in Book 1111, Page 425 of Official Records, records of said County; thence along said Southerly line North 89°39'45" West 515.10 feet more or less to the intersection with a line that is parallel with the above-mentioned common boundary between Section 15 and the Rancho Todos Los Santos y San Antonio and which passes through the true point of beginning; thence along said parallel line South 1°14'00" West 675.45 feet to the true point of beginning.

Except therefrom all of that portion of said land lying Easterly of the westerly line and of the Southerly prolongation of said Westerly line of the land described in the deed to Orcutt Union School District recorded August 28, 1961 as Instrument No. 30147 in Book 1867, Page 706 of Official Records of said County.

APN# 105-330-08

Copies of the information obtained by Title Runners Real Estate and Legal Services of Santa Barbara are included in the Phase I ESA (Tetra Tech 2001a: Appendix E).

**2.11 TOWNSHIP, RANGE, SECTION, AND MERIDIAN**

Based on the USGS 7½-Minute Topographic Series, Orcutt Quadrangle Map, California, dated 1959 (photorevised 1978), the Site is located in the northeast quarter of Section 15, Township 9 North, Range 34 West, of the San Bernardino Baseline and Meridian. The geographic coordinates of the Site are Latitude 34° 51'40.7" North, Longitude 120° 26' 39.8" West.

**2.12 SITE LAND ZONING**

Zoning information available from the County of Santa Barbara Department of Planning and Zoning (2001) indicates the Site is zoned for small lot plan (SLP) (Tetra Tech 2001a). Small lot planning is defined by the Santa Barbara County ordinance that states the purpose and intent of SLP is to provide and make available housing for low, medium, or moderate income households in an urbanized area (SBCPD 2001).

**2.13 SITE MAPS AND PHOTOGRAPHS**

A map showing the Site location is included as Figure 1. A Site plan map depicting the Site, sampling locations, and surrounding area, is included as Figure 2. Site photographs taken during the reconnaissance can be viewed in Appendix B of the Phase I ESA (Tetra Tech 2001a).

### **3.0 SITE HISTORY AND BACKGROUND INFORMATION**

#### **3.1 SITE STATUS / HISTORICAL SITE INFORMATION**

##### **3.1.1 Property Ownership**

The five assessor's parcels that comprise the proposed Site are included in the Chain of Title search. Title Runners, located in Santa Barbara, California, conducted a chain-of-title search dating from August 1948 to January 31, 2001 (Appendix E, Tetra Tech 2001a). The four western parcels are currently deeded to Winston B. Grigg and Katherine H. Grigg, Trustees of the Winston B. Grigg and Katherine H. Grigg Living Trust. These records indicate that the Grigg family has owned the four parcels since May 1969. The fifth parcel located in the northwest corner of Dyer Street and Rice Ranch Road is currently deeded to Donovan I. Griffith and Rhea Rehark-Griffith. The Griffiths have owned the property since November 1968. The southeast section of the Griffith property where the house and outbuildings are located is not included in the Site. Both the Griggs and Griffiths obtained their properties from the Soares family who previously owned these properties and several surrounding properties since at least August 1948.

##### **3.1.2 Facility Ownership/Operators**

There are no facilities with separate ownership at the Site.

##### **3.1.3 Business Type**

The four western parcels of the Site have been vacant land from at least 1938 through 1997, based on data reviewed in historical topographic maps and aerial photographs. The property has not been used for agricultural production nor have any pesticides been used at the property (Griggs 2001). For a short period during the late 1970's to early 1980's, the land was used as a horse pasture. The land is vacant and undeveloped at present.

The fifth and eastern parcel of the Site, the northeast section and western half of the parcel, contains numerous pine trees, remains of a Christmas tree farm endeavor (Saleen 2001). The southeast portion of the parcel where a residential building, garage, workshop, and gardening shed are located, is not included in the Site. The current property use is residential.

##### **3.1.4 Records Review**

###### **3.1.4.1 Historical Topographic Map Review**

A review of historical topographic maps on file at the University of California, Santa Barbara, and obtained from ERD dated 1942, 1947, 1959, 1967, and 1974 indicated that the Site has been vacant since 1947 (Appendix D, Tetra Tech 2001a). The Site is located in the Old Town South area of Orcutt. Old Town Orcutt is situated on an upland between two forks of Orcutt Creek that flow west and converge approximately 1/4 mile west of the Site.

On the topographic map dated 1942, Highway 1 is located adjacent to the creek in Graciosa Canyon, passes two oil storage tanks west of Orcutt, and turns left on Clark Street. Rice Ranch Road ends at Broadway Street, southeast of Old Town Orcutt. Two more oil storage tanks are located approximately 0.5 mile southwest of the Site. The Site is vacant, but a building is indicted southeast of the Site (farmhouse). Orcutt Union School is east of the Site. Numerous oil wells and well pads are indicated in the lower portion of the map, the closest being approximately 1.5-mile south on Graciosa Ridge.



On the topographic map dated 1947, two storage tanks and oil pits are located southwest of the intersection of Highway 1 and Clark Street, west of Orcutt. Two additional storage tanks approximately 0.5-mile southeast of the Site have access roads from Highway 1. Additional farmyard building(s) have been added. Orcutt Union School appears unchanged. The oil fields on Graciosa Ridge are clearly visible.

On the 1959 topographic maps, the Site and surrounding areas looks much the same as on the 1947 map. The farmhouse building adjacent to the Site looks smaller than on the previous 1947 map. It appears that some of the farmyard building(s) have been removed.

On the 1967 topographic map, Union School has more buildings and is configured differently. The Orcutt Union School District office building is situated northeast of the Site. One of the storage tanks south of Clark Street has been removed. A major highway (Highway 1) is now adjacent to the old Highway 1 and is routed farther west of Orcutt. An interchange connects Highway 1 with Highway 135 southwest of Orcutt. Highway 135 extends at least as far north as Patterson Road. A golf course is located to the south of Highway 135, approximately 1 mile south of the Site. Several additional developed areas are visible east of Orcutt.

The 1974 topographic map looks much the same as the 1967 map. Another development is indicated on the map north of Orcutt. Rice Ranch Road has been constructed at its current location.

### **3.1.4.2 Historical Aerial Photograph Review**

Acquisition and review of historical aerial photographs of the Site and surrounding area dating from 1938 through 1997 were obtained from the Alexandria Map and Imaging Library at the University of California Santa Barbara (Appendix C, Tetra Tech 2001a).

Tetra Tech reviewed the historical aerial photographs dating 1938, 1943, 1954, 1961, 1974, 1980-1, 1989, 1994 and 1997 of the site and surrounding area. The photographs reviewed for this assessment were selected to document historical site conditions. The aerial photographs indicated that the Site area had been undeveloped vacant land since 1938.

The aerial photograph dated 1938 shows that the four parcels that comprise the western portion of the Site are undeveloped vacant land. It appears that the land has been disked but no evidence of planting is visible. On the fifth parcel, several structures interpreted to be the old farmhouse, garage, and barn are visible. No vegetation appears in the farmyard area. The south fork of the Orcutt Creek is visible south of the Site, appearing much as it does today.

The aerial photograph dated 1943 appears much the same as the 1938 photograph. The field remains vacant land. There are several structures east of Dyer Street where the Orcutt Union School is located. With the exception of the farm buildings, no other structures are west of Dyer Street or between the housing subdivision and Orcutt Creek. Several storage tanks are visible northwest of Old Town Orcutt (Old Town). There are two large storage tanks on Marcum Road west of Old Town. Two additional storage tanks are clearly visible south of the Orcutt Creek, approximately 0.5-mile southwest of the Site. Oil field activity approximately 1.5-mile south of Orcutt is visible in the bottom portion of the photograph. The north and south forks of Orcutt Creek are clearly visible on either side of Old Town Orcutt, converging west of town.

The aerial photograph dated 1954, looks much the same as the 1943 photograph. The west portion of the Site has been disked around the perimeter, but vegetation is visible in the center. The land to the west of the Site remains a part of the natural drainage with a southwest gradient toward Orcutt Creek.

In the aerial photograph dated 1961, the Site looks much the same as it did in 1954. The school has additional buildings east of Dyer Street. The subdivision north of the Site has added another row of houses adjacent to the Site and bordering Soares Street. Orcutt development has expanded into areas surrounding Old Town. The Orcutt Creek drainage is visible in the upper half of the photograph. The Orcutt and Union Oil Fields are visible in the lower portion of the photograph.

In the aerial photograph dated 1967, the Site looks much the same as it did in 1961. One structure (Orcutt Union School District office) is visible southwest of the intersection of Dyer Street and Soares Avenue.

In the aerial photograph dated 1974, Rice Ranch Road has been constructed south of the site. The Site and Orcutt Union School District parcel appear unchanged. The old farmhouse and garage remain on the fifth parcel of the Site, but it appears the barn was removed. The school east of Dyer Street has expanded. The maintenance building as well as the building used by the Boy Scouts is visible. A baseball field can be seen east of the maintenance area. One of the storage tanks on Marcum Road was removed. Orcutt development has expanded farther north.

In the Firescope III aerial photograph dated 1980-81, the four western parcels appear to have been disked. The Orcutt Union School District now has two structures on their parcel. A drainage swale is visible in the northern section of the adjacent parcel west of the Site. One house is visible south of Rice Ranch Road.

In the aerial photograph dated 1989 several paths can be seen crossing the Site. There are two structures visible north of the old farmhouse. Three buildings and a parking lot are visible on the Orcutt Union School District property. Another building appears for the first time south of Rice Ranch Road.

In the 1997 aerial photograph, the Site looks much the same. A trail leads to what appears to be a small clearing in the center where an object or small structure is visible. There are numerous trees on the eastern portion of the Site. In this photograph, the Site and vicinity appear much as they do today.

### **3.1.5 Business/Manufacturing Activities**

Based on a review of historical photographs and records, manufacturing activities were not conducted on the Site.

## **3.2 SURROUNDING LAND USES**

The Allen and Glines Subdivision is situated north of the property and consists primarily of single family residential homes. The subdivision extends north of the Site from Soares Avenue to Pinal Avenue.

Bordering the west boundary of the property is an undeveloped parcel owned by Hartnell Estate Company since 1923. Plans for development of homes on the Site are under reviewed by the Town of Orcutt (Black 2001). The lot is vegetated primarily with grass and chaparral similar to the Site. In the northern portion the ground surface is hummocky and wet. A channel drains this area of the parcel toward the southwest and Rice Ranch Road. Several pits and mounded dirt piles are located in the northeast area of the parcel. The pits were dug out and dirt piled by local children for a dirt-bike obstacle course (Black 2001). A large tract of land southwest of the Site, across Rice Ranch Road, is also owned by the Hartnell Estate and consists of

approximately 358 acres of agricultural preserve land used for grazing cattle. One large petroleum storage tank remains on a hilltop in the pasture area and can be accessed by a spur road off Highway 1. Originally, two tanks had been located on the hilltop, but one was removed some time after 1989 (Refer to Section 2.4.3, Tetra Tech 2001a). The tank pad and berm for the removed tank is still noticeable. It is unclear who is responsible for the remaining tank, Unocal, TOSCO or Phillips Petroleum (Nichols 2001).

The TOSCO Operating Facility is located approximately 0.25-mile northwest of the Site across South Broadway Street. Behind the TOSCO facility and west of Marcum Road, is the Unocal processing station. Several pipelines run underground from Clark Street along Marcum Road and lead to the processing station.

South of the Site, across Rice Ranch Road, are the Loretta K. Bantz property, a single-family residence, and the Fundamental Baptist Church properties. Abutting the southeast corner of the Site is an undeveloped property owned by David and Jennifer Daniels. Plans to build a large single family residence have been approved and a notice is posted beside Rice Ranch Road at the entrance to the dirt access road. Bordering the southern boundary of these properties is the south branch of Orcutt Creek that winds through the lowland known as the "Orcutt dip". Willow and oak thickets follow the river course that extends northwest through the Hartnell Estate agricultural land. Here, the south branch joins the Graciosa Canyon creek, and the two creeks converge to join the main channel of Orcutt Creek that flows west.

The Orcutt Union School District owns properties on both sides of Dyer Street, adjacent to the Site. The district offices are located at the southwest corner of Soares Avenue and Dyer Street (Figure 2). The junior high school, existing elementary school and district maintenance facilities are located east of Dyer Street, between Pinal Street and Rice Ranch Road. The maintenance facility is located adjacent to the Griffith property. The western and northern pine tree planted portions of the Griffith parcel is proposed to be included in the Site. The school district maintains and stores district vehicles and school buses in the maintenance area. Two above ground fuel tanks and pumps for diesel and gasoline are located at the entrance to the fenced maintenance yard. A small building located south of the maintenance yard is used by the Boy Scouts of America. Fencing and ventilation duct sections are stored along the perimeter of the parking area south of the building.

### **3.3 HAZARDOUS SUBSTANCE/WASTE MANAGEMENT INFORMATION**

#### **3.3.1 Business/Manufacturing Activities**

Based on a review of historical documents, manufacturing activities were not conducted on the site.

##### **3.3.1.1 Sanborn Map Review**

While the geographic coverage of City Directories is comprehensive for most major cities, many rural areas and small towns may not be covered. No Sanborn maps were available for the Site area.

##### **3.3.1.2 California Department of Conservation Division of Oil, Gas, and Geothermal Resources Map Review**

Information on petroleum production in the Site area is maintained at the California Department of Conservation Division of Oil, Gas, and Geothermal Resources (DOGGR) Region 3 Office in Santa Maria, California. Tetra Tech obtained DOGGR Map No. 311 that indicates that no petroleum production wells are located on the Site. Two wells within a 1-mile radius of the Site are listed as abandoned and plugged.

The "Lucas No. 1" well was drilled by the Recruit Oil Company to a depth of 860 feet below ground surface (bgs) in April 1905. This well is located approximately 0.75-mile south-southeast of the Site and of the south fork of Orcutt Creek. It was abandoned in October 1905. Due to the distance from the Site, the well is not likely to have adversely affected the Site.

The "Los Nietos-Gulf S.S.T." well was drilled to a depth of 9,437 feet bgs in 1953 by the Los Nietos Company. This well is located approximately 1-mile northeast of the Site and Old Town, and north of Orcutt Creek. The well was dry and abandoned in February 1953 and a Report of Well Abandonment was filed with DOGGR. Due to its distance from the Site, the well is not likely to have adversely affected the Site.

### **3.3.1.3 Santa Barbara County Protection Services Division Files**

Tetra Tech contacted Steve Nailor and Paul Bailey of the Santa Barbara County Protection Services Division (SBCPSD) to review files and evaluate if there had been any reported hazardous waste violation at the Site. The agency records indicate there have been no waste violations at the Site (Bailey 2001) (Section 6.1.8, Tetra Tech 2001a).

Tetra Tech requested that the SBCPSD review their files for information on properties identified in the Environmental Data Resources, Inc. (EDR) database report in the area surrounding the Site. SBCPSD reported that no indications of any significant environmental impacts on the Site from offsite sources within 0.25-mile were identified. Incidences beyond 0.25-mile are not likely to adversely affect the Site. A review of SBCPSD files for other properties in the Site vicinity did not indicate that the Site has been contaminated from offsite sources.

The Orcutt Union School maintenance facility, located across Dyer Road from the Site had removed USTs and contaminated soil under guidance of the SBCPSD. Aboveground fuel tanks were installed. Several minor overspills (less than 0.1 gallon) during vehicle fueling were reportedly cleaned up by soil removal and replacement (Black 2001).

Two gasoline stations located on Clark Street in Old Town Orcutt were reported in the EDR database. These gasoline stations are approximately 0.5-mile northeast of the Site. It is unlikely that any resulting contamination to groundwater from these gasoline stations would migrate 0.5-mile to adversely affect groundwater at the Site.

A review of SBCPSD files for other properties in the Site vicinity did not indicate that the Site has been contaminated from offsite sources.

### **3.3.1.4 Santa Barbara County Agricultural Commissioner's Office Files**

The Site was not used for agricultural production for at least sixty years (prior to 1938 through present). No records of pesticide and herbicide usage during the past four years are on file with the SBCOAC. The SBCOAC does not retain files longer than four years. According to Jeff Saleen at the SBCOAC, the Site has never been used for crop production (Saleen 2001). In the 1990's, the occupant of the Griffith parcel had attempted to grow and sell Christmas trees. Many of these trees remain on the property. Irrigation lines are still visible among the trees that are presently approximately 30 feet tall. There has been no mixing or spilling of pesticides or herbicides on the Site (Griggs 2001). No evidence of pesticides storage or mixing was observed during the reconnaissance.

### **3.3.2 Onsite Waste Storage, Treatment, and Disposal**

No evidence of waste storage, treatment, or disposal on the Site was found during the reconnaissance.

### **3.3.3 Regulatory Status**

A review of selected regulatory agency databases for documented environmental concerns on the Site, or in close proximity to the site, was conducted by EDR (Appendix A, Tetra Tech 2001a). The Site is not listed on the databases reviewed.

Records available from the files of appropriate regulatory agencies were reviewed to establish the current status of facilities within a one-quarter mile radius of the site with documented environmental impacts to the subsurface. Among the 16 environmental databases searched were National Priorities List (NPL) sites; Resource Conservation and Recovery Information System - Treatment, Storage, and Disposal (RCRIS-TS) facilities; Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) sites; and California Leaking Underground Storage Tank List (LUST) sites. Each of the 16 databases was searched at a radius appropriate with ASTM E 1527-00 (ASTM 2000).

There are three California Hazardous Material Incident Report System (CHMIRS) sites within 1 mile of the Site. These are sites with known releases or spills of hazardous materials. The closest reported incident is at 201 South Broadway, approximately 0.125-mile northwest of the Site. A dry fuel gas was released into the air in January 1991. Gas dissipates quickly in the atmosphere; therefore there would not currently be any residual gas from this incident to affect the Site. The second reported release occurred at Clark Street and Orcutt Road (Highway 135) a distance of 0.5-mile northeast of the Site. A spill of 20 gallons of flammable liquid was released to the ground in August 1991. The third incident involved another release of 7 gallons of flammable fluid to the ground at Rice Ranch Road and Princeton, approximately 0.5-mile east of the Site, in February 1991. It is unlikely that the small amounts of these hazardous materials released to ground at distances of 0.5-mile from the Site have adversely affected the Site.

Two significant sites, Texaco and Unocal gasoline stations within 0.5 to 1-mile northeast of the Site are reported in the environmental database search as CORTESE sites. The CORTESE database identifies public drinking water wells with detectable levels of contamination, hazardous substance sites selected for remedial action, sites with known toxic material identified through abandoned site assessment, sites with underground storage tanks having reported releases and all solid waste disposal facilities from which there is known migration. The source for the database is the California Environmental Protection Agency/Office of Emergency Information. The relative location of each release site with respect to groundwater gradient indicates although the Site is downgradient, it is not probable that groundwater contaminants would migrate such a distance. It is not likely that these releases would affect groundwater at the Site.

Orcutt Union School was identified in the environmental database search as a HAZNET site producing hazardous waste that is disposed of at the transfer station. It is not likely that the Orcutt Union School waste generation has impacted the subject Site (refer to Section 2.4.6). No other indications of any significant environmental impacts at the Site or from nearby properties were identified in the environmental database search.

Several industries in Orcutt have implemented a Risk Management Plan (RMP) in conjunction with SBCPSD due to the proximity of residential properties and the Orcutt Union School. These records are made available to the communities as their right to know (Bailey 2001).

### **3.3.4 Site Reconnaissance Results**

On February 5, 2001, Tetra Tech performed a visual reconnaissance of the Site property. The purpose of the February 2001 reconnaissance was to evaluate the Site and neighboring properties for potential hazardous substance use, storage, and disposal, including the presence of USTs, asbestos-containing materials, PCB-containing transformers or electrical equipment, and/or evidence of soil staining, stressed vegetation, ponds, pits, sumps, suspicious odors, fill and depressions, drums and barrels, or any other condition indicative of potential contamination. A second reconnaissance was performed during June 2000 to evaluate ground surface conditions of the site.

A checklist of items of concern was completed using the information obtained during the Site reconnaissance (Appendix G, Tetra Tech 2001a).

During February 2001, photographs were taken of the Site and its adjoining properties to document current conditions (Appendix B, Tetra Tech 2001a).

#### **3.3.4.1 Storage Tanks and Drum Storage**

No evidence of storage tanks or drum storage was found during the Site reconnaissance. The adjacent Orcutt Union School District has aboveground storage tanks, approximately 500 gallons each, for fuels located in a fenced maintenance yard east of the Site. No other evidence of tanks or drum storage was observed on adjacent properties. Several gasoline stations on Clark Street have underground fuel storage tanks, a distance of 0.5-mile or greater from the Site. The Unocal Processing Station on Marcum Road, approximately 0.25-mile northwest of the Site, has a large petroleum storage tank. It is unknown if this tank is presently in use.

#### **3.3.4.2 Hazardous Substances and Petroleum Products**

No evidence of hazardous substances or petroleum products was observed at the Site. The potential that crude oil and/or natural gas condensate have been released to the subsurface at the Site was assessed as part of this PEA.

Tosco and Torch petroleum companies were contacted to determine if these companies have oil transmission pipelines located on or near the Site. Both companies reported that they did not have pipelines located in the Site area (Marcellic 2001; Nichols 2001).

Approximately 0.25 mile west of the Site, the Southern California Gas Company (SCGC) operates a 12-inch high-pressure (300-500 pounds per square inch [psi]) natural gas transmission pipeline (Grossfield 2001). The high-pressure gas pipeline is located adjacent to the eastern side of Marcum Street and extends southwest toward Highway 135. The pipeline was installed in 1953 and is under a cathodic protection system that is checked on a regular basis. There are two manual shutoff valves; one is located northwest of the Site at the intersection of Clark Street and Marcum Street and the other is located southwest of the Site approximately 200 feet north of Highway 135.

Greka Energy operates a low-pressure natural gas pipeline that fuels their refinery. The 6.625-inch, 50-psi transmission pipeline was installed in 1985 and is monitored hourly for any pressure changes

(Marroquin 2001). They also have two manual shutoff valves along the line of Marcum Road at Clark Street and at Highway 135.

The School District maintenance yard, east of Dyer Road, is adjacent to a portion of the Site. The fenced yard is used for maintaining buses and School District vehicles. Above ground gasoline and diesel fuel storage tanks, approximately 500 gallons each, is located near the entrance of the yard abutting Dyer Road. Minor spills during refueling have been remedied immediately by scraping the topsoil and refilling with clean soil (Black 2001).

No evidence of tanks or drum storage was observed on the other adjacent properties.

#### **3.3.4.3 Used Oil**

No evidence of used oil storage or release to grade was found during the reconnaissance of the Site. The School District maintenance yard produces waste oil that is disposed of at the transfer station. It is not likely that the School District maintenance yard waste generation has impacted the subject Site. No other indications of used oil disposal from nearby properties were identified during the Site reconnaissance.

#### **3.3.4.4 Pesticides/Herbicides**

The Site was not used for agricultural production for at least sixty years (prior to 1938 through present). No records of pesticide and herbicide usage during the past four years are on file with the SBCOAC. The SBCOAC does not retain files longer than four years. According to Jeff Saleen at the SBCOAC, the Site has never been used for crop production (Saleen 2001). In the 1990's, the occupant of the Griffith parcel had attempted to grow and sell Christmas trees. Many of these trees remain on the property. Irrigation lines are still visible among the trees that are presently approximately 30 feet tall. There has been no mixing or spilling of pesticides or herbicides on the open western portion of the Site (Griggs 2001). No evidence of pesticides storage or mixing was observed during the reconnaissance.

Because Christmas trees were cultivated at the Site, there is a potential that pesticides/herbicides were used on the eastern portion of the Site (Tetra Tech 2001a). The potential that pesticides and associated toxic heavy metals have been applied to surface soil on this portion of the Site was assessed as part of this PEA.

#### **3.3.4.5 Other Potential Items of Concern**

There are no other potential items of concern observed during the Site reconnaissance or revealed in background research on the Site.

#### **3.3.4.6 Potable Water Supply/Wells**

No water supply wells were observed at the Site during the reconnaissance. An irrigation well is located on the Orcutt Union School property adjacent to the Site (Black 2001). The well supplies irrigation water for school needs. For additional information on nearby wells refer to Section 3.3.1 of the Phase I ESA (Tetra Tech 2001a) and the EDR report (Appendix A, Tetra Tech 2001a).

#### **3.3.4.7 Wastewater**

No industrial wastewater is produced at the Site.

### **3.3.4.8 Storm Water**

Field observations indicate that storm water and other surface water partially percolates directly into the ground to a less permeable hardpan layer and then flows along the hardpan surface to the southwest. Overland flow drains from the Site to the south along a natural swale or southwest toward Rice Ranch Road. Excessive seasonal rainfall can cause shallow springs to seep at the surface in areas of lower relief such as swales and cut banks along Rice Ranch Road south of the Orcutt Union school where the hardpan is exposed.

### **3.3.4.9 Groundwater**

The Orcutt formation supplies water to wells in appreciable quantities only beneath the Orcutt upland, where the lower member of the Orcutt formation is one of the principal water-producing deposits. It supplies water of the perhaps the best quality in the area to the City of Santa Maria and the town of Orcutt. In the years between 1938 and 1942, water levels in these wells fell below the top of the lower member, since then they have recovered. Toward and beyond the eastern end of the upland, the lower member rises above the water table and is therefore useless as a source of supply. To the west, it becomes less productive until at the coast it is comprised mostly of clay, silt, and fine sand, and there considered a poor water-yielding deposit (Worts 1951).

The county provided hydrographic data for well 9N/34W-9R1 (9R1), indicating water level trends in the Orcutt area over the past 44 years (Appendix F, Tetra Tech 2001a). Groundwater elevation data from well readings of 9R1, located approximately 1-mile from the Site north of Clark Street at the end of Palomino Drive, can be used to approximate the high and low water levels at the Site vicinity (Ahlroth 2001). Data from the SBCWA indicates recent maximum groundwater elevation of approximately 118 feet above mean sea level (msl) (approximately 157 feet bgs) for well 9R1 in 2000. The data indicates that groundwater levels have dropped more than 70 feet during periods of drought. The lowest recorded water level in the well is approximately 46 feet above msl (229 feet bgs) recorded in 1978. Drawdown from constant pumping of the municipal wells locally affects groundwater levels in other Orcutt upland wells. The local water gradient and flow direction in the vicinity of the Site is to the southwest, similar to that of the surface topography (Brett 2001). The School District has one irrigation well east of Dyer Street on school property located within approximately 0.25-mile of the Site

Results of chemical analyses for groundwater samples from Orcutt wells that exceed the laboratory detection level are included in the EDR report (Appendix A, Tetra Tech 2001a). Chemical constituents were not detected at concentrations above the drinking water standard maximum contamination level (MCL) as defined in the California Code of Regulations (CCR) Title 22, Chapter 15 (CCR 2000). The EDR-Radius Map report contains limited information for the School District well (State of California well No. 10016). Refer to Sections 5.2.1.1, 5.2.1.2, and 5.2.1.3 for a more detailed discussion of the hydrogeology of the Site.

### **3.3.4.10 Wetlands/Pools**

No wetlands or pools were observed on the property during the reconnaissance of the Site. Several willows grow on the Site and the adjacent western parcel due to seasonal water conditions. A drainage channel trending southwest across the adjacent parcel drains toward Rice Ranch Road. A map provided in the EDR report (Appendix A, Tetra Tech 2001a) indicated that according to the National Wetlands Inventory (1994) the nearest wetlands are located within 0.25-mile south of the Site. This area is designated PFOA (palustrine, forested, temporarily flooded) and is located along the south fork of the Orcutt Creek.



#### **3.3.4.11 Sewage Disposal System/Septic Systems**

The Site does not contain structures and is not connected to the local sewer system. There are no known septic systems at the Site. Adjacent properties to the south currently use septic systems (Silva 2001). General drainage is to the south or southwest and it is unlikely that these septic systems would affect the Site.

#### **3.3.4.12 Drains/Sumps/Pits**

No drains, sumps, or vaults were observed at the Site. Several pits were scattered throughout the northern half of the Site and adjacent western parcel. These pits were excavated by local children for play forts and a bicycle obstacle course (Black 2001).

#### **3.3.4.13 Solid Waste**

No evidence of solid waste disposal was observed at the Site. Several items of trash scattered around the Site included plastic bottles, bags, aluminum cans and paper.

#### **3.3.4.14 PCB-Containing Transformers and Equipment**

A power pole with a dry-style transformer is located in the northwest corner of the Griffith parcel and services the School District's portable buildings. The dry-style transformers do not contain polychlorinated biphenyls (PCBs). In addition, power poles with transformers were observed adjacent to the Site, along the south side of Rice Ranch Road. Rice Ranch Road was constructed between 1967 and 1974. The poles were installed after that time and it is not likely that these transformers have contributed PCB contamination to the Site. Pacific Gas and Electric (PG&E) owns and is responsible for the maintenance of the transformers. On request, PG&E will evaluate the transformer dielectric fluids for PCBs. If the transformer does not contain PCBs at a concentration above 50 parts per million, PG&E will charge approximately \$2,000 to \$3,000 per transformer to perform the evaluation.

#### **3.3.4.15 Stained Soils/Stains/Stressed**

No evidence of stained soil or stressed vegetation was observed at the surface during reconnaissance of the Site. The ground surface is periodically disked and harrowed for weed abatement (Griggs 2001).

#### **3.3.4.16 Odors/ Pools of Liquids**

No odors or pools of liquids were observed during the Site reconnaissance.

#### **3.3.4.17 Asbestos-Containing Materials**

There are no structures on the Site. No visual evidence for any suspected asbestos-containing materials was observed at the Site.

#### **3.3.4.18 Lead-Based Paint**

No visual evidence for any suspected lead-based paint materials was observed at the Site.

### **3.3.4.19 Radon**

Radon is a naturally occurring, odorless, colorless gas produced by certain geologic materials. It is known to be a human carcinogen and can pose a cancer risk greater than one in one million in humans at concentrations equal to or greater than 4 pCi/L.

The EDR environmental database search indicated that the Site is in a Radon Zone Level 1 for Santa Barbara County (Appendix A, Tetra Tech 2001a). Zone Level 1 areas have a predicted average indoor screening level greater than 4 pCi/L. Because of this radon zoning classification, there is a potential that enclosed areas such as structures may contain radon at concentrations that exceed the one in one million cancer risk to humans. Eleven sites were tested in Orcutt for radon activity. One hundred percent of the sites tested were found to be <4 pCi/L. The average activity was 0.318 pCi/L for first floor living areas. Basement areas and second floor living areas were not reported. In open areas of the Site, it is unlikely that radon would pose an environmental risk.

### **3.3.4.20 Electromagnetic Radiation**

Electromagnetic radiation is not considered a significant environmental problem at this Site, since no sources of excessive electromagnetic radiation were observed or identified during the Site reconnaissance. High-power transmission lines were not observed anywhere in the vicinity of the Site.

### **3.3.4.21 Compliance Issues**

Based on observations made during the Site reconnaissance, operations performed at the Site are generally performed in accordance with applicable environmental compliance regulations. These include periodic disking of vegetation on vacant land for fire abatement (Griggs 2001).

### **3.3.4.22 Interviews**

Information obtained from interviews with the Site owners by telephone conversations was used to complete the background history of the Site. Mr. Gary Black, Assistant Superintendent of the School District, was also instrumental in providing historical and current property information.

## **3.3.5 Prior Assessments/Remediation**

### **3.3.5.1 Phase I ESA Summary**

Based on the results of the work performed for the Phase I ESA, Tetra Tech recommended that no further action is necessary. Although radon gas levels measured in the Orcutt area were minimal, a radon survey should be conducted for potential radon gas accumulation in any structures constructed on the Site. Radon-resistant construction techniques should be considered when designing the structures for the Site.

#### **4.0 PHASE I ESA DATA GAPS**

Following review of the Phase I ESA (Tetra Tech 2001a) and attending the May 17, 2001, scoping meeting, the DTSC identified the following potential areas of concern (AOCs) for the Site:

- Pesticides and associated toxic heavy metals that may be present in Site soils from former Christmas tree production activities;
- Gasoline and diesel fuel vapors may have migrated on site through the subsurface from a former leaking UST in the School District maintenance yard across Dyer Street; and
- Fugitive gas emissions have potentially migrated on site through the subsurface from crude oil and natural gas transmission lines, crude oil storage tanks, an oil processing plant, local oil field production activities, and from gas seepage from nearby oil fields.

The Sampling Strategy (Tetra Tech 2001b) was developed by Tetra Tech in conjunction with the DTSC to address these AOCs.

## **5.0 ENVIRONMENTAL SETTING**

### **5.1 FACTORS RELATED TO SOIL PATHWAYS**

#### **5.1.1 Site Topography and Surface Slope**

The Site lies at an approximate elevation of 360 feet above msl (USGS 1959). The Site terrain is essentially flat with a very gentle topographic gradient to the southwest.

#### **5.1.2 Proximity to Surface Water Bodies**

The principal streams draining the north flanks of the Casmalia and Solomon Hills in the Site vicinity are in Solomon Canyon (Orcutt Creeks) and Graciosa Canyon. The runoff of the streams is ephemeral and extremely low. Seasonal surface-water discharge also occurs on the Site following wet periods (refer to section 5.2.1.2). No wetlands or water pools were observed on the project site during the PEA assessment. The drainage swale observed is not expected to contain water on a permanent basis, therefore, the site is not expected to support aquatic plants or aquatic wildlife due to the lack of permanent surface water.

According to the environmental database report contained in the Phase I ESA (Tetra Tech 2001a: Appendix A), one area within 1 mile of the site has been classified as wetlands according to the U.S. Fish and Wildlife Service's 1994 National Wetlands Inventory. The wetland area, located southwest of Rice Ranch Road, is in the Orcutt Creek natural area.

#### **5.1.3 Evidence of Releases to the Environment**

No evidence was observed that potentially toxic substances have been released to grade at the Site (e.g., stained soil and stressed vegetation) during the February 2001 reconnaissance or subsequent visits to the Site.

#### **5.1.4 Geologic Setting**

##### **5.1.4.1 Regional Geology**

The Santa Maria Basin is a wedge shaped region between two structural provinces: the Southern California Coast Ranges (San Raphael Mountains) on the northeast and the Transverse Ranges (Santa Ynez Mountains) on the south. Physiographically and structurally, the San Raphael Mountains lie at the southern edge of the Coast Ranges which consist of northwest trending mountain ranges and valleys induced by folds and faults of the same orientation (Worts 1951). The Santa Ynez Mountains form the western part of the westward-trending Transverse Ranges and comprise folds and faults generally of the same orientation. The region included between the two ranges is a structural depression, the Santa Maria syncline, and older rocks, which are exposed in the bordering ranges, are concealed at considerable depth beneath Tertiary and Quaternary, rocks and alluvium in the basin. The major structural features of the district have a general west-northwestward trend parallel to the elongation of the lowland itself and of the basin. Minor westward- and northward-trending folds and faults however, extend across the trend of the major features (Woodring and Bramlette 1950).

#### **5.1.4.2 Local Geology**

The Site is situated on the south flank of the Santa Maria Basin in the Southern Central Coast Ranges Province of central California. The Casmalia and Solomon Hills, whose crests form the southern drainage divide of the basin, are essentially one continuous range of hills extending westward from their junction with the San Raphael Mountains near Foxen Canyon to the Pacific Ocean. These hills are separated by a low saddle at an altitude of 520 feet, known as the Graciosa Divide (Worts 1951).

#### **5.1.4.3 Stratigraphy**

Weakly consolidated dune sand deposits comprise the ground surface at the Site (Dibblee 1959). The Quaternary Orcutt formation derived from essentially non-marine deposits of sand and clay underlies the dune sands and is exposed in surrounding Orcutt areas. These slightly deformed, relatively thin deposits of upper Pleistocene age, rests unconformably upon the Paso Robles formation. It ranges in thickness from a featheredge to about 255 feet along the axis of the Santa Maria syncline. The upper member of the Orcutt formation is mostly loosely compacted massive medium-grained clean sand, stained reddish brown by ferruginous cement and interstratified with lenses of clay. Where exposed the member stands in nearly vertical cliffs. The lower member of the Orcutt formation is chiefly loosely compacted, coarse gray to white gravel and sand. Its contact with the upper member is sharp, and in surface exposures the lower member is usually intricately rilled and fluted (Worts 1951). Records of a well drilled for the Orcutt Union School District indicate that 170 feet of the upper member underlie the surface near the Site, with a 10-foot hardpan layer from 2 to 12 feet bgs. The lower member was encountered at depths of 170 to 200 feet bgs. The Orcutt formation deposits are underlain by marine and non-marine Tertiary bedrock formations, including the Paso Robles Formation, Careaga Sandstone, Foxen Mudstone, Sisquoc Formation, and Monterey Shale, to a depth of about 7,000 feet. The Franciscan Formation is encountered below the 7,000-foot depth (Woodring and Bramlette 1950).

#### **5.1.4.4 Soil Classification**

The Site surface soil type include Garey Series sandy loam (GaC2) (U.S. Department of Agriculture, Soil Conservation Service [USDA] 1972). GaC2 consists of well-drained sandy loams that develop on wind-modified terrace that have been dissected by deep drainageways. Slopes are 2 to 9 percent. The GaC2 is characterized by very slow permeability, medium surface runoff, and moderate to high water erosion hazard. These soils are typically used for shallow-rooted irrigated and dryland crops and for range. The available water capacity is 6 to 7 inches in the 60 inches of effective rooting depth. Indistinct soil bands restrict but do not prevent root and water penetration.

A variant of the Garey series are somewhat poorly drained soils in basins with larger areas of Garey sandy loam. These areas are completely surrounded by and blend into the large area of Garey sandy loam. Slopes are 0 to 5 percent. Surface runoff is slow and the erosion hazard is slight. Depth to the slowly permeable subsoil is 26 to 50 inches. A water table is 2 to 5 feet below the surface during wet seasons.

#### **5.1.4.5 Faulting**

The Santa Maria Basin and San Luis Range are within a structural fold and thrust fault area that forms a transition between the Transverse Ranges and the southern Coast Ranges. Major reverse faults and fold trends fan out from the Transverse Ranges on the south to the northwest trend of the Coast Ranges on the north. Seismic activity, rates of faulting, and coastal uplift rates are significantly lower in the Santa Maria Basin than in the adjacent Transverse Ranges (Clark *et al.* 1994).

Relatively few forms of direct evidence of active faulting (such as offset bedding or structures observed at the surface fault) have been observed in the Santa Maria Basin. However, broad bands of seismicity unrelated to surface faulting and interpretations of seismic-reflection data suggest that the region is seismically active by basement-involved fold and thrust-belt mechanisms associated with blind thrust faults (City of Santa Maria 1995).

Several active, potentially active, and inactive faults exist within the basin and region. Active faults are defined as having had surface displacement within the last 11,000 years, and potentially active faults are defined as having evidence of surface displacement in the last 11,000 to 500,000 years (California Department of Conservation, Division of Mines and Geology [CDMG] 1992, Revised 1998; City of Santa Maria 1995). The Site is located within 2 kilometers of the known Casmalia fault. The Casmalia fault is considered an active, type B fault with a maximum moment between 6.5 and 7.0 and a slip rate from 2 to 5 millimeters/year (CDMG 1992).

#### **5.1.4.6 Historical Earthquakes**

Historical earthquakes that originated in the Santa Maria region include the Los Alamos earthquakes of 1902 and 1915 (Richter Magnitudes [ $M_L$ ] 5.4 and 5.2, respectively), the 1916 Avila Beach earthquake ( $M_L$  5), the 1927 Lompoc earthquake ( $M_L$  7.0), and the 1980 Point Sal Earthquake ( $M_L$  5.1). While all of these earthquakes were felt in the Site area, no historical earthquakes have caused great amount of property damage or loss of human life in the Site area. However, the historical earthquake records of California span less than 200 years and provide only a partial indication of seismic hazards. The absence of earthquakes on many recognized active faults and fault-related folds in California probably reflects recurrence intervals greater than the historical record. In addition, there is a potential for earthquakes to occur in areas with blind thrust faults or other concealed seismogenic structures that may not have been previously recognized (Clark *et al.* 1994).

#### **5.1.5 Site Accessibility and Controls**

The Site consists of four western parcels of undeveloped vacant land and the undeveloped portion of the fifth eastern parcel historically used as residential property. The western field is fenced around the perimeter. Vehicles can access the Site from Soares Avenue through two fence openings located at the northeast and northwest corners. Chaparral, willows, pine trees and grass comprise the vegetation of the western portion of the Site. This area is frequently used by local children as a play area, and several paths wind through the vegetation.

The eastern parcel is fenced around the perimeter and accessible from Dyer Road through the residential driveway gate. The residential portion of the property is not included in the Site. Mr. David Griffith (son of Rhea Rehark-Griffith) occupies the house located at the southeast corner of the property. Permission to access the property through the gate must be obtained from the onsite owner.

#### **5.1.6 Proximity to Nearby Receptors**

The nearest sensitive receptors are single-family residences in the housing development that borders the Site on the north, houses to the south of Rice Ranch Road, the residential Griffith parcel, and Orcutt Union School (Figure 2).

Grazing land, institutional facilities, commercial businesses, and residential housing comprise most of the area within a 1-mile radius of the proposed school site. Residential areas result in modifying pre-settlement vegetation and introducing new species. Wildlife observed in these areas are typically

common species that are highly tolerant of human disturbance. Species commonly observed in residential areas include western fence lizards, mourning doves, house sparrows, wrentits, house mice, and raccoons (Mayer and Laudenslayer 1988).

According to the environmental database report contained in the Phase I ESA (Tetra Tech 2001a: Appendix A), one area within 1 mile of the site has been classified as wetlands according to the U.S. Fish and Wildlife Service's 1994 National Wetlands Inventory. The wetland area, located southwest of Rice Ranch Road, is in the Orcutt Creek natural area. This area could support aquatic species including the special-status California red-legged frog (*Rana aurora draytonii*) and California tiger salamander (*Ambystoma californiense*).

## **5.2 FACTORS RELATED TO WATER PATHWAYS**

### **5.2.1 Groundwater Pathway**

#### **5.2.1.1 Site Hydrogeologic Setting**

##### ***Regional Aquifer***

The regional aquifer in the Santa Maria basin is contained within the alluvium, and the Orcutt, Paso Robles, and Careaga formations, including localized terrace and channels deposits. The bottom of the water-bearing deposits is considered to be at the base of the Careaga sand. The main aquifer of the Santa Maria Valley area extends continuously from the head of the Sisquoc plain on the east, to the Pacific Coast on the west, and is contained within the unconsolidated deposits that fill the major syncline of the Santa Maria Valley. Beneath the eastern and larger part of the area, the main water body is unconfined; however, under the western part of the Santa Maria plain the water is confined beneath the upper member of the alluvium (Worts 1951). In the area of confined water, there is essentially no infiltration from land surface because of the low permeability of the confining beds. The area of the aquifer with unconfined water is one of potential recharge where water is able to infiltrate from the land surface down to the water table of the main water body. The regional aquifer is a principal groundwater source for the agricultural production in the City of Santa Maria and is recharged by infiltration from Twitchell Reservoir, the Sisquoc River and the Cuyama River (Ahlroth 2000). The Orcutt formation supplies water to wells in appreciable quantities only beneath the Orcutt upland, where the lower member of the Orcutt formation is one of the principal water-producing deposits. The Orcutt formation supplies water of perhaps the best quality in the area to the City of Santa Maria and the town of Orcutt. In the years between 1938 and 1942, water levels in these wells fell below the top of the lower member, since then they have recovered. Toward and beyond the eastern end of the upland, the lower member rises above the water table and is therefore useless as a source of supply. To the west, the Orcutt formation becomes less productive until at the coast it consists mostly of clay, silt, and fine sand, and is considered a poor water-yielding deposit (Worts 1951).

##### ***Perched Groundwater***

The fine-grained nature of the recent and upper Pleistocene alluvium deposits beneath the Site contain layers of less permeable hardpan with areas of perched groundwater and springs (Ahlroth 2001; Worts 1951). A thin, possibly discontinuous body of groundwater occurs beneath the central part of the Orcutt upland in dune sand deposits. It is perched above the main aquifer on fine-grained deposits or old soils of the Orcutt formation, and supplies water in small quantities to a few domestic wells. Recharge is wholly by infiltration of rainwater, and water not withdrawn is stored and eventually reaches the main aquifer below (Worts 1951). A hardpan layer of cemented sand encountered approximately 4 to 6 feet bgs and up

to 4 feet thick, inhibits vertical percolation of surface water at the Site. Infiltration of near surface groundwater is inhibited by the hardpan and drainage along the hardpan surface flows toward the southwest. Surface soil holding moisture may appear hummocky and remain wet following periods of rainfall. Natural discharge of excessive water accumulation may result in shallow springs (Ahlroth 2001).

### **5.2.1.2 Santa Barbara County Water Agency and California Department of Water Resources Groundwater Level Records**

Data was obtained and reviewed from the following wells: 9N/34W-9R1 (9R1), 09N/34W-14G01S, 09N/34W-14C01S, 09N/34W-15A01S (Oak Well), 09N/34W-13F02S, 09N/34W-12P03S, and 09N/34W-13F01S. The county provided hydrographic data for well 9R1, indicating water level trends in the Orcutt area over the past 44 years (Tetra Tech 2001a: Appendix F). Water readings of 9R1, located north of Clark Street at the end of Palomino Drive (approximately 1 mile northwest of the Site), can be used to approximate historic high and low groundwater levels at the Site vicinity (Ahlroth 2001). Data from the SBCWA indicate recent maximum groundwater elevation of approximately 118 feet above msl (approximately 157 feet bgs) for well 9R1 in 2000. The data indicates that water levels have dropped more than 70 feet during periods of drought. The lowest recorded groundwater elevation in the well is approximately 46 feet above msl (229 feet bgs) recorded in 1978. The local groundwater gradient and flow direction in the vicinity of the Site is to the southwest, similar to that of the surface topography (Brett 2001).

The EDR Radius Map report data lists six municipal potable wells in Orcutt operated by the Cal Cities Water Company: 09N/34W-14G01S, 09N/34W-14C01S, 09N/34W-15A01S (Oak Well), 09N/34W-13F02S, 09N/34W-12P03S, and 09N/34W-13F01S. One well within close proximity to the site is the "Oak Well" (1989) located south of Clark Street near Oak Street (approximately 0.4 mile northeast of the Site). The static water level is approximately 283 feet bgs, the pumping level at 295 feet bgs. Groundwater flow near the Oak well is northeast to southwest (Brett 2001). Results of chemical analyses for groundwater samples from these wells that exceed the laboratory detection level are included in the EDR report. Total dissolved solids and magnesium levels were slightly higher than the Regional Water Quality Control Board (RWQCB) water quality goals (CCR Title 22). Chemical constituents that may be of concern to human health risks were not found above the drinking water standard MCL (CCR Title 22 2000). Drawdown from constant pumping of the municipal wells locally affects groundwater levels in other Orcutt upland wells. The School District has one irrigation well east of Dyer Street on school property within 0.25-mile of the Site. The EDR-Radius Map report contains limited information for the School District well (State of California well No. 10016) (Tetra Tech 2001a: Appendix A).

### **5.2.1.3 Impacted Aquifers From Site Releases**

No evidence has been found to suggest a release or threatened release from the Site to groundwater. Therefore, aquifers are neither known nor suspected to have been impacted from Site releases.

## **5.2.2 Surface Water Pathway**

Overland flow drains from the open field (western parcels) of the Site to the south along a natural swale or southwest toward Rice Ranch Road. The percolation of water into the subsurface is locally inhibited by a less permeable hardpan layer at approximately 4 to 6 feet bgs. Excessive seasonal rainfall accumulates on the shallow hardpan draining to shallow springs that flow into the swale. The swale was moist during the reconnaissance performed during February 2001, however, it was dry in June 2001. The Orcutt upland generally slopes toward the southwest and perched groundwater flows in the subsurface above a hardpan layer (approximately 4 to 6 feet bgs at the Site for extended periods after excessive



rainfall. It appears that most surface water partially percolates directly into the ground to the hardpan layer and then flows along the impermeable surface to the southwest. All surface water that drains from the Site empties into the municipal storm drain system along Rice Ranch Road.

### **5.3 FACTORS RELATED TO AIR PATHWAYS**

#### **5.3.1 Potential Air Pathway Sources**

There is no documentation of a release of hazardous substances to the atmosphere at the Site. Based on the current site status (vacant undeveloped land), the only likely source of releases to the atmosphere is fugitive dust potentially emitted from surface soils. Fugitive gas emissions were not detected in subsurface soil during the PEA, therefore, vapors are not emitted to the atmosphere from the Site.

#### **5.3.2 Climate**

The climate of the Santa Maria area is temperate marine with an annual precipitation of approximately 11.4 inches per year. Annual average daytime temperature ranges between 45 degrees Fahrenheit and 70 degrees Fahrenheit with an average annual rainfall of 14 inches. During the summer months, the average temperatures are moderate and precipitation is low. In contrast, average winter temperatures are colder with greater precipitation (City of Santa Maria 2000). The prevailing wind direction is from the west-northwest. The wind speed varies slightly during the year with averages of 8 miles per hour mph to 10 mph from July through January and 10 to 12 mph from February through June (National Oceanic and Atmospheric Administration 2001).

## **6.0 FIELD AND SAMPLING ACTIVITIES AND RESULTS**

### **6.1 SUMMARY OF ACTIVITIES**

The field sampling activities included two phases: a soil gas vapor survey and soil sample collection. The soil gas survey was performed to assess for potential fugitive gas emissions from local oil field production activities near the Site and for fuel vapors that may have migrated subsurface from the former School District USTs. The soil sampling was performed to assess potential pesticide/herbicide usage and associated toxic heavy metals on the Griffith portion of the Site due to former Christmas tree cultivation (Tetra Tech 2001a).

Work performed includes:

- Surface and subsurface soil sample collection performed on May 20, 2001, to characterize the former Christmas tree farm area for potential organochlorine pesticides and toxic metals;
- Collection of four surface soil samples on May 20, 2001, within the easement between the Rice Ranch Road and the southern boundary of the Site to characterize background metals concentrations;
- Laboratory analyses of the former Christmas tree farm area and background soil samples;
- Performing a soil gas survey on June 4, 2001;
- Review of consultants' reports and regulatory agency records on USTs formerly located at the School District Maintenance Yard on the east side of Dyer Street north of Rice Ranch Road;
- Surveying above ground and underground oil and gas transmission pipelines locations in accordance with CCR Title 5, Section 14010(h) (CCR Title 5 2000); and
- Performing a risk analysis of aboveground and underground oil and gas transmission pipelines within 1,500 feet of the Site in accordance with CCR Title 5, Section 14010(h) (CCR Title 5 2000).

The following sections describe the sampling strategy, assessment methods and procedures, sample analysis program, sample handling, decontamination procedures, and management of investigation derived waste (IDW).

During field activities, a bound field logbook with consecutively numbered pages was used to document where, when, how, and from whom any vital project information was obtained. Logbook entries were complete and accurate enough to permit reconstruction of field activities. Each page was dated and the time of entry noted in military time. All entries were legible, written in black permanent ink, and signed by the individual making the entries. If an error was made, corrections were made by drawing a line through the error and entering the correct information. Corrections were initialed. No entries were obliterated or rendered unreadable. At a minimum, the following items were recorded in the field logbook:

- Site name and address;
- Recorder's name;
- Team members and their responsibilities;
- Weather characteristics;
- Time of site arrival/entry on site and time of site departure;
- Other personnel on site;
- A summary of any onsite meetings;
- Health and safety photoionization detector (PID) monitoring data;
- Calibration readings for any equipment used and equipment model and serial number;
- Entry of time and sample identification to correspond to the laboratory Chain of Custody;
- Deviations from sampling plans and site safety plans; and
- Changes in personnel and responsibilities as well as reasons for the changes.

A PID was used for both field screening and health and safety monitoring during soil sampling activities. The data were used as an immediate indicator of volatile organic vapors in subsurface materials. The instrument was calibrated a minimum of once per day.

Photographs were taken at all sample locations and at other areas of interest onsite. Site photographs are provided in Appendix A. Photographs serve to verify information entered in the field logbook. When a photograph was taken, the following information was written in the photo log:

- Time, date, location, and, if appropriate, weather conditions;
- Description of the subject photographed; and
- Name of person taking the photograph.

Chain-of-custody (COC) records were used to document sample collection and laboratory analyses. Separate COC forms were used for each date and matrix type of sampling. All sample shipments sent to the laboratory were accompanied by a COC record. The COC record identified the contents of each shipment and maintained the custodial integrity of the samples. Generally, a sample is considered to be in someone's custody if it is either in their physical possession, in their view, locked up, or kept in a secured area that is restricted to authorized personnel. Until receipt by the laboratory, the custody of the samples was the responsibility of the sample collector.

## **6.2 EXCAVATION UTILITY CLEARANCE**

Underground Service Alert (USA) was notified for utility clearance at the Site for locations of proposed boreholes. The Santa Maria Public Works Water and Sewer, PG&E, Verizon, AT&T, Southern

California Gas, Comcast (cable TV), and Tosco were notified by USA under ticket #353294. Utility clearance is not required for surface soil sample collection.

## **6.3 SOIL MATRIX SAMPLING AND ANALYSES**

### **6.3.1 Soil Sampling Locations and Rationale**

#### **6.3.1.1 Former Christmas Tree Production Area**

Monterey Pine trees were grown by the former occupant of the Griffith parcel portion of the Site (approximately 1.6 acres) during the early 1990s (Figure 2). The Christmas trees did not prove profitable and the business was soon abandoned (Black 2001). There is the potential that pesticides may have been sprayed on the pine trees during production. It is assumed that potential pesticides were uniformly distributed on the trees and mixing, storing, or disposal of pesticides did not take place in this area. There are no structures onsite, therefore, it is not likely that pesticide/herbicide mixing or storage occurred on the Site.

Surface and subsurface soil samples were collected at a density of two sample locations per half-acre for a total of 12 samples at 6 locations (Figure 2). In addition, two replicate samples were collected for quality control. At each sample location, samples were collected in 2-inch stainless steel sleeves from directly below the ground surface (approximately 0 to 0.5 foot bgs) and subsurface at 3 feet bgs.

Soil samples were analyzed at an offsite laboratory (American Analytics [AA]) for the following compounds: organochlorine pesticides by EPA method 8081A; California Administrative Manual (CAM 17) heavy metals (Cal EPA DTSC 2000) by EPA method 6010/7000 series; total lead by EPA method 7420; and total arsenic by EPA method 7060. The additional four soil samples collected at 3 feet bgs were held by the laboratory pending results for pesticide concentrations in surface soil to be analyzed for organochlorine pesticides if the MRL is exceeded in the associated surface soil sample.

#### **6.3.1.2 Background Metals Assessment**

Tetra Tech collected 4 surface soil background samples for metals from the public easement adjacent to Rice Ranch Road, south of the Site. The surface sample locations are shown on Figure 2. At each sample location, samples were collected from directly below the ground surface (approximately 0 to 0.5 foot bgs) in a 2-inch stainless steel sleeve. The surface soil background samples were analyzed at an offsite laboratory (AA) for CAM 17 heavy metals using EPA methods 6010/7000 series. These background samples were used in characterizing the potential human health and ecological risk/hazard from metals detected in soil. Maps and data for the Site area from the *Soil Survey of Northern Santa Barbara Area, California* (USDA 1972) have been included in this report (Appendix B).

### **6.3.2 Soil Gas Sampling Locations and Rationale**

#### **6.3.2.1 Oil Field Concerns**

Although no petroleum production wells are located onsite, the Site lies within proximity of the Orcutt and Santa Maria Oil Fields (DOGGR 1998). Local oil production-related facilities include crude oil and natural gas transmission pipelines, crude oil storage tanks, and a processing plant are located within 0.25- to 0.5-mile distance of the Site. There is a potential that toxic gas from oil field production activities or from natural seepage out of the oil fields in the Site area have been released to the Site. The soil gas

survey was performed to assess the Site for potential hazards from oil field hydrogen sulfide and methane soil vapors in the shallow subsurface.

Fourteen soil gas borings (SG-1 through SG-14) were drilled to a depth of 10 ft bgs, beneath the hardpan layer, to assess fugitive emissions. Twelve soil gas samples were collected along the north, west, and south perimeter of the western portion of the Site. Two soil gas samples were collected from the interior of the Site approximately 150 feet north of the southern boundary and 150 feet south of the north boundary (SG-12/10' and SG-13/10', respectively) (Figure 2). The soil gas samples were analyzed in a stationary mobile laboratory trailer for hydrogen sulfide, methane, and fixed gases using gas chromatographs (GCs) equipped with a thermal conductivity detector (TCD), photoionization detector (PID), and flame photometric detector (FPD).

#### **6.3.2.2 Former USTs**

Two former USTs were located in the School District maintenance facility across Dyer Street approximately 75 feet to the east side of the Site. The USTs were removed in 1986, and the excavation remediated (Earth Systems Environmental, Inc. [ESEI] 1989). This soil gas assessment was performed to assess potential gasoline and diesel vapor subsurface migration to the Site from former UST locations.

Two soil gas survey samples (samples SG-15/10' SG-16/10') were collected from the eastern Site boundary nearest the former UST locations (Figure 2) at a depth of 10 ft bgs, directly beneath the hardpan layer. The samples were analyzed by an onsite mobile laboratory for BTEX by EPA method 8020 modified; and methyl tert-butyl ether (MTBE) and C<sub>4</sub>-C<sub>10</sub> carbon range TVH using EPA method 8015 modified.

#### **6.3.2.3 Radon**

The Site is located in a Radon Zone Level 1 area; this indicates that there is a potential for enclosed areas to contain radon at levels that pose a one in one million human cancer risk (EDR 2001) (Tetra Tech 2001a: Appendix A). No radon samples were collected during the PEA because there are no structures on the Site. A radon survey will be conducted for potential radon gas accumulation in any structures planned for the Site. Radon resistant construction techniques should be considered when designing structures for the Site.

#### **6.3.2.4 Oil and Gas Transmission Pipelines**

Tetra Tech contacted the Tosco, Torch, Greka, and the SCGC for information on oil and gas high-pressure transmission pipelines located within 1,500 feet of the Site in accordance with CCR Title 5, Section 14010 (h) guidelines for school sites (CCR Title 5 2000). Both SCGC and Greka operate high-pressure natural gas transmission lines that are located along the east side of Marcum Street between Clark Street and Highway 135. Tetra Tech surveyed the location of the pipelines using a Trimble Pro XR mapping grade global positioning system to determine if they were within 1,500 feet of the Site specified by the Title 5 guidelines. The SCGC and Greka natural gas transmission pipelines are within 1,300 feet of the Site. See Section 12 for additional information regarding guideline regulations and required risk assessment associated with the transmission pipelines near the Site.

### **6.3.3 Soil Sample Collection Procedures**

Soil samples were collected to evaluate potential pesticide contamination and associated toxic heavy metals contamination in the former Christmas tree production area. Background surface soil samples

were collected offsite to evaluate background metal concentrations in the Site area for comparison to onsite metal concentrations. Six surface soil samples and corresponding subsurface soil samples, and two replicate samples were collected from the former Christmas tree farm area. Four background surface soil samples were collected in the Rice Ranch Road easement between the road and the southern Site boundary. The background sample locations (SS-1 through SS-4) are shown on Figure 2. The surface soil background samples were analyzed at an offsite laboratory for CAM 17 metals.

The surface soil samples were collected from 0 to 0.5 feet bgs and the subsurface soil samples from 2.5 to 3.0 feet bgs. The samples were collected using a stainless steel sample driving apparatus in 2-inch diameter, 3.0 inch long pre-cleaned stainless steel sample sleeves. The surface samples were collected from borings drilled with a stainless steel hand auger. All sample equipment was cleaned in a solution containing Alconox, rinsed with potable water, final rinsed with deionized water, and air dried prior to sampling each boring.

During sampling, a PID calibrated with iso-butylene gas was used to monitor the presence and concentration of soil organic vapors at the sample locations (calibration procedures for the PID are discussed below in Section 6.3.5, Field Instrument Calibration). Soil was collected in a resealable plastic bag, sealed, and allowed to offgas for 3 to 5 minutes before organic vapor levels were measured with the PID. The organic vapor readings were recorded on field logs prepared by the field geologist during sampling activities. The following sampling information was recorded on the field logs: sample number and location, date and time, sample depth, lithologic description in accordance with the Standard Test Method for the Classification of Soils (ASTM 1990a, b), description of any visible evidence of soil contamination (i.e., odor, staining), and organic vapor monitor readings.

Following sample collection, the ends of each sample sleeve were sealed with Teflon sheets and plastic end caps, and the samples were labeled and placed in an ice chest containing pre-cooled artificial ice pending delivery to the analytical laboratory with COC records. Sampling equipment was washed using a non-phosphate solution, rinsed with tap water, and finally rinsed with de-ionized water between sampling events. The sample equipment was air dried or dried with clean paper towels before being used again. Sampling equipment was decontaminated between each sample collection point by the same method.

Surface soil samples and two subsurface soil samples collected from the Christmas tree production area were analyzed for organochlorine pesticides. Four surface soil samples were analyzed for CAM 17 metals, and two surface soil samples were analyzed for total lead and total arsenic. The two subsurface samples analyzed for organochlorine pesticides were also analyzed for total lead and total arsenic. The remainder of the subsurface soil samples were held by the laboratory to be analyzed only if organochlorine pesticides were detected in correlating surface soil samples at concentrations in excess of MRLs.

### **6.3.3.1 Soil Gas Sample Collection**

The soil gas survey was performed to assess the Site for potential hazards from oil field hydrogen sulfide and methane soil vapors in the shallow subsurface. The soil gas survey locations are shown on Figure 2. Interphase Environmental, Inc. (Interphase) performed the soil gas sample collection and analyses. Interphase, a state certified laboratory, has performed similar soil gas survey projects for PEAs under the DTSC at new school sites. A description of the sample collection procedures is provided below.

The soil gas sample collection was performed by Interphase using a heavy-duty, truck-mounted Model 5400 Geoprobe sampling system (Appendix E). This unit is especially equipped for soil gas sampling. Sampling probes consist of 4-foot section of flush-threaded, 1.25 inch hardened alloy steel rod tipped by

an expendable steel point. A cap designed for pounding is screwed in at the upper end of a section of drive rod and a point holder is attached to the lower end of the rod. A drive point is inserted into the point holder then the probe assembly is pushed down from the ground surface by running the hydraulic hammer. The sample tubing is not carried in the probe rod during probe driving, but rather inserted down the bore hole once the appropriate depth (10 feet bgs for this project) is reached. After the probe was advanced to the desired depth, it was retracted one inch to separate the drive tip from the point holder. The soil around the probe rod was excavated to one foot bgs and filled with bentonite chips, then hydrated with distilled water for approximately 10 minutes prior to sampling. This reduces the potential for ambient air to be drawn into the sample from the ground surface.

Gas samples were collected from the point holder adapter mounted on the distal (deep) end of the sampling train. A stainless steel adapter was connected to 0.25-inch clean, virgin polyethylene tubing lowered down the bore of the prone drill string, and mated to the point holder adapter. O-ring connections enable the system to deliver a vacuum-tight seal to assure that the sample is collected at the bottom. To ensure collection of a representative sample, discrete volumes of gas were purged using a vacuum pump to rid the tubing of atmospheric air and allow subsurface gas to fill the tubing. The volume of tubing used per sample determined the volume of air removed. After purging the sampling system and allowing it to return to atmospheric pressure, a syringe needle was inserted through the wall of a silicon tubing attached to the above ground end of the sample tube. A 10 cubic centimeter aliquot of soil gas was withdrawn from the probe. Duplicate samples are always collected but analyzed only as needed. Soil gas samples were collected in gas tight, glass and Teflon syringes equipped with a built-in on-off valve (Dynatech A-2).

Soil gas analyses were performed onsite in a stationary trailer mobile laboratory (TML) equipped with a Varian 3400, temperature programmable gas chromatograph (GC) with a DB-624 and DB-1 Megapore columns, a personal computer (PC) based integration system for chromatographic data and the following detectors: a Tracor Model 1000 electrolytic conductivity detector (ELCD), a Varian flame ionization detector (FID), and a Tracor Model 703 photoionization detector (PID). Soil gas was analyzed within 30 minutes of collection in order to preserve the integrity of the sample. For each soil gas sample injected into the analytical instrument, the TML performs three simultaneous analyses by splitting the injection to two chromatographic columns leading to three detectors. Analyses by modified EPA method 8010 and 8020 employ a DB-624 Megabore capillary column leading to a photoionization detector (PID) and an electrolytic conductivity detector (ELCD). The modified EPA method 8015 employs a DB-1 Megabore capillary column that leads to a flame ionization detector (FID) (Appendix E, Interphase Section 2.1). The modified EPA method 8015 is suitable for the analysis of total volatile hydrocarbons or total petroleum hydrocarbons. The analyses were performed in accordance with Los Angeles Regional Water Quality Control Board (LARWQCB) *Interim Guidance for Active Soil Gas Investigation* (IGASGI) (LARWQCB 1997). The soil gas survey results are summarized in Tables 8 and 9 and the soil gas survey field laboratory reports are included in Appendix D.

### ***Oil Field Activities***

Sixteen soil gas samples, SG-1 through SG-16, were collected from approximately 10 feet bgs at the Site. Twelve soil gas samples were collected along the north, west, and south perimeter of the western portion of the Site. Two soil gas samples were collected from the interior of the Site approximately 150 feet north of the southern boundary and 150 feet south of the north boundary (SG-12/10' and SG-13/10', respectively). Fourteen of the soil gas samples (samples SG-1/10' through SG-14/10') were analyzed for hydrogen sulfide and methane, and fixed gases using GCs equipped with a TCD, PID, and FPD.

### ***Former USTs***

Four soil gas samples were collected from two locations approximately 6 feet from the Site fence along Dyer Road within the road easement. The two locations are across Dyer Road from the former School District USTs. Two soil gas samples (SG-15/10' and SG-16/10') and two duplicate samples collected from the eastern Site boundary nearest the former UST locations (Figure 2) were analyzed for BTEX by EPA method 8020M and for MTBE and C<sub>4</sub>-C<sub>10</sub> carbon range TVH using EPA method 8015M.

#### **6.3.4 Field Instrument Calibration**

A PID was used for health and safety monitoring and field screening during soil sampling. The data were used as an immediate indicator of volatile organic vapors in subsurface materials.

The Photovac 2020 PID must be calibrated in order to display concentration in units equivalent to parts per million (ppm). A Span Gas, containing a known concentration of an ionizable gas or vapor, is used to set the sensitivity. Isobutylene at 100 ppm in air was used as the Span Gas. The steps for calibrating instrument are as follows:

1. Turn the PID on and press the enter button. Press the button indicating calibration. Press the button indicating zeroing. Allow the PID to zero to ambient conditions. This allows for local conditions and humidity.
2. Connect the Tedlar airbag tube to the Span Gas cylinder outlet port and open the turncock.
3. Open the Span Gas cylinder gauge flow control knob about halfway to start the flow, allowing the gas to fill the bag until expanded but not tight. Close the gas cylinder gauge flow control knob. Close the turncock on the tedlar bag to prevent gas from escaping and remove the Tedlar airbag tube from the cylinder gas outlet port.
4. When the PID zeroing step is complete, press the button indicating "set". Press the button indicating "calibration". Set the calibration to 100.0 ppm and press enter.
5. Secure the air tube and bag to the intake of the PID. Allow the PID to stabilize and display the gas reading. The display should indicate 100.0 ppm. Disconnect the calibration adapter tube from the PID. The PID is now calibrated and ready for use.

The instrument was calibrated at least once per day.

#### **6.3.5 Sample Analysis**

A summary of the total number of samples collected for onsite and offsite analyses for this sampling effort including the sample analytes, analytical methods, container type, preservative, and holding times were included on Table 1 of the Sampling Strategy (Tetra Tech 2001b) and are shown on Table 1 of this PEA, in Section 6.0 of the AA QAPP (Appendix E), and in Section 2 of the Interphase QAPP (Appendix E). The detection limits associated with the methods presented above and with regulatory thresholds are provided in Tables 2 and 3.

The following samples (including field quality control [QC] samples) were collected and analyzed as part of this PEA effort.



### **6.3.5.1 Former Christmas Tree Production Area**

A total of seven surface (0 to 0.5 foot bgs) soil, including one replicate, and three subsurface (3 feet bgs) soil samples, including one replicate, were collected for laboratory analysis for organochlorine pesticides by EPA method 8081A. In addition, four subsurface samples were sent to the laboratory and held for pesticide analysis pending results of the surface samples.

A total of five surface soil samples, including one replicate, were analyzed for CAM 17 heavy metals (Cal EPA DTSC 2000) by EPA methods 6010/7000.

A total of five soil samples (three surface and two subsurface) including one surface soil replicate, were analyzed for total arsenic by EPA method 7060 and total lead by EPA method 7420.

### **6.3.5.2 Background metals assessment**

Four background surface soil samples were analyzed for CAM 17 heavy metals (Cal EPA DTSC 2000) using EPA methods 6010/7000.

### **6.3.5.3 Oil Field Activity**

A total of 15 soil gas samples (including one duplicate soil gas sample) were collected from the perimeter of the Site to assess fugitive gas emissions from crude oil and natural gas pipelines, crude oil storage tanks, the oil processing plant, and oil fields in the vicinity for onsite analyses by Interphase's mobile laboratory (see section 6.3.3.1) for hydrogen sulfide, methane, and fixed gases using GCs equipped with a TCD, PID, and FPD.

### **6.3.5.4 Former USTs**

Four soil gas samples (including two duplicate soil gas samples) were collected within the road easement on the west side of Dyer Road across from the adjacent former UST location in the School District maintenance yard and analyzed for BTEX using EPA method 8020M, and MTBE and C<sub>4</sub>-C<sub>10</sub> carbon range TVH using EPA method 8015M.

## **6.3.6 Soil Sample Handling Procedures**

### **6.3.6.1 Sample Containers and Preservatives**

Soil sample containers required for the specified analyses are generally provided to Tetra Tech immediately prior to the sampling event. The containers are pre-cleaned prior to sample collection. Preservatives are not required for soil samples.

### **6.3.6.2 Sample Packing and Shipping**

To identify and manage samples obtained in the field, sample labels were affixed to each sample container. The sample labels included the following information:

- Project number;
- Site name;

- Sample location number;
- Sample identification number;
- Sampler's initials;
- Date and time of collection; and
- Preservative, if any.

Following collection and labeling, samples were immediately placed in a sample cooler for temporary storage. The protocol for sample packaging was as follows:

1. Sample containers were placed in clear, plastic, leak-resistant resealable bags prior to placement in the ice chest.
2. Samples shipped were placed in the cooler and packed with packaging materials to minimize the potential for disturbance and/or breakage of the sample containers.
3. Artificial ice packs were placed in the coolers to keep samples chilled during transport to the analytical laboratory.
4. The COC form was placed in a water-resistant plastic bag and taped to the inside of the cooler lid.
5. Strapping tape was placed around all coolers before they were shipped to the laboratory.
6. A self-adhesive custody seal was placed across the front closure of the cooler.

When the sampling ended late in the day the samples were stored in a secured location (i.e., the Tetra Tech Santa Barbara, California, office) in a sample storage refrigerator at 4 degrees Celsius under appropriate COC procedures until they were picked up by the analytical laboratory. The samples collected for pesticide assessment and background samples collected for metals assessment on May 31, 2001, were stored at the Tetra Tech Santa Barbara office until June 1, 2001, when they were shipped, arriving at the analytical laboratory on June 1, 2001. Prior to shipping to the analytical laboratory, the sample-shipping cooler was restocked with frozen blocks of artificial ice to keep the samples chilled during transport.

### **6.3.6.3 Sample Documentation**

#### ***Field Logbooks***

Field sampling procedures, including where, when, how, and from whom any vital project information was obtained was recorded by Tetra Tech personnel in the field logbooks. Logbook entries are complete and accurate enough to permit reconstruction of field activities. Bound logbooks with consecutively numbered pages were used. Each page was dated and the time of entry noted in military time. All entries were legible, written in black ink, and signed by the individual making the entries. Language was factual, objective, and free of personal opinions or other terminology which might prove inappropriate. If an error was made, a line was crossed through the error and the correction was entered. Corrections were dated and initialed. No entries were obliterated or rendered unreadable.

Entries in the field logbook included at a minimum the following for each sample date:

- Site name and address;
- Recorder's name;
- Team members and their responsibilities;
- Time of site arrival/entry onsite and time of site departure;
- Other personnel on site;
- A summary of any on site meetings;
- Deviations from sampling plans and site safety plans;
- Changes in personnel and responsibilities as well as reasons for the changes;
- Levels of safety protection; and
- Calibration readings for any equipment used and equipment model and serial number.

At a minimum, the following information was recorded during the collection of each sample:

- Sample identification number;
- Sample location and description;
- Site sketch showing sample location and measured distances;
- Sampler's name(s);
- Date and time of sample collection;
- Designation of sample as composite or grab;
- Type of sample (i.e., matrix);
- Type of preservation;
- Type of sampling equipment used;
- Field observations and details important to analysis or integrity of samples (e.g., heavy rains, odors, colors); and
- Instrument readings (e.g., PID).

#### **6.3.6.4 Boring Logs**

The boring logs were prepared under the direct supervision of and, signed by, a California Registered Geologist. A lithologic description of the materials encountered and collected was maintained on boring logs compiled by the field geologist. Soils were classified in accordance with the Unified Soil Classification System (ASTM 1990a; ASTM 1990b), and descriptions included soil type, particle size and distribution, color (using the Munsell soil color chart), moisture content, and evidence of contamination (discoloration, unusual odors). The percent recovery for each soil sample collected was recorded on the logs. The soil samples were screened for the presence of elevated organic vapor concentrations using a PID, and the measurements were recorded on the boring log.

Soils from borings B-1 through B-6 collected in the Christmas Tree production area were similar and varied only slightly in color and moisture content. The surface soil from boring B-1 is described as a silty sand, dark brown (7.5YR 3/3), fine grained, subangular, poorly graded, dry, some silt, Orcutt Formation. At 3.0 feet bgs in boring B-1, the soil is a silty sand, strong brown (7.5 YR 4/6), fine grained, subangular to subrounded, poorly graded, some silt, slightly moist, Orcutt Formation.

Soils collected along Rice Ranch Road for background metals samples SS-1 through SS-4 were alike and therefore, only soil from sample SS-1 was described. The surface soil from sample SS-1 is a silty sand, dark brown (7.5 YR 3/3), very fine grained, poorly graded, subangular to subrounded, dry, some silt, few grass pieces, Orcutt Formation.

#### **6.3.6.5 Chain-of-Custody Records**

The COC records are used to document sample collection and shipment to laboratory for analysis. All sample shipments for analyses were accompanied by a COC record. Form(s) were completed and sent with the samples for each shipment. The COC record identified the contents of each shipment and documented the custodial integrity of the samples. Generally, a sample is considered to be in someone's custody if it is either in someone's physical possession, in someone's view, locked up, or kept in a secured area that is restricted to authorized personnel. Until receipt by the laboratory, the custody of the samples is the responsibility of the sample collector. COC procedures are further discussed in Section 6.3 of the AA QAPP and Section 2.6.5 of the Interphase QAPP (Appendix E).

The shipping containers in which samples were stored (usually a sturdy picnic cooler or ice chest) were sealed with self-adhesive custody seals any time they were not in someone's possession or view before shipping. All custody seals were signed and dated.

#### **6.3.6.6 Photographs**

Photographs were taken at every sample location and at other areas of interest at the Site. They verify information entered in the field logbook. When a photograph was taken, the following information was written in the logbook or recorded in a separate field photography log:

- Time, date, location, and, if appropriate, weather conditions;
- Description of the subject photographed; and
- Name of person taking the photograph.

### **6.3.7 Decontamination Procedures**

All equipment that came into contact with potentially contaminated soil or water was decontaminated consistently as to assure the quality of samples collected. Disposable equipment intended for one time use was not decontaminated, but packaged for appropriate disposal. Equipment was decontaminated prior to and after each use. All drilling and sampling devices used were decontaminated using the following procedures:

- Non-phosphate detergent and tap water wash, using a brush if necessary;
- Tap water rinse;
- Initial deionized/distilled water rinse; and
- Final deionized/distilled water rinse.

Equipment was decontaminated in a pre-designated area, and clean bulky equipment was stored on plastic sheeting in uncontaminated areas. Cleaned small equipment was stored in plastic bags. Materials stored more than a few hours were also covered.

### **6.3.8 Soil Sample Analytical Procedures**

Offsite analytical services for soil samples were provided by AA. AA, a state certified laboratory, performed the analyses at an offsite laboratory. Chain of Custody records and laboratory results are included in Appendix C. The following soil samples (including field QC samples) were collected and analyzed as part of the PEA field investigation:

- Seven surface soil samples and three subsurface soil samples, were collected for laboratory analysis for organochlorine pesticides by EPA method 8081A. In addition, four subsurface samples were sent to the laboratory and held for pesticide analyses pending results of the surface samples.
- Five surface soil samples were analyzed for CAM 17 heavy metals (Cal EPA DTSC 2000) by EPA methods 6010/7000.
- Five soil samples (three surface and two subsurface) were analyzed for total arsenic by EPA method 7060 and total lead by EPA method 7420.
- Four background surface soil samples were analyzed for CAM 17 heavy metals (Cal EPA DTSC 2000) using EPA methods 6010/7000.

### **6.3.9 Soil Matrix Analytical Results**

A summary of the soil analysis results is provided in Tables 4 through 6. AA's laboratory report is provided in Appendix C. Following is a summary of analytical results from the soil-sampling program.

#### **6.3.9.1 Organochlorine Pesticides**

No organochlorine pesticides were detected at concentrations above laboratory MRLs (Tables 2 and 4). Because organochlorine pesticides were not detected at concentrations exceeding the MRLs, the four

subsurface soil samples being held by the laboratory were not analyzed for organochlorine pesticides or metals.

Based on a review of *Sampling Strategy for the Preliminary Endangerment Assessment for the Proposed Orcutt Union School Site No. 17* (Tetra Tech 2001b), the DTSC requested that the two subsurface samples analyzed for organochlorine pesticides (samples B-1-3 and B-3-3) also be analyzed for total arsenic and total lead. These samples were held by the laboratory and analyzed as requested (Table 6). Total arsenic was detected in subsurface soil sample B-1-3 at a concentration of 1.0 milligrams per kilogram (mg/kg), slightly above the MRL of 0.5 mg/kg. Total arsenic was not detected above the MRL in subsurface soil sample B-3-3. Subsurface samples B-1-3 and B-3-3 were also analyzed for total lead. Total lead was not detected above the MRL in either of the samples. The analysis results for these samples are consistent with the other samples collected at the Site.

### **6.3.9.2 Metals**

All metal concentrations were either below the laboratory MRLs or at concentrations within the range of background values indicating they are naturally occurring (Tables 5, 6, and 7). No metals were detected at concentrations above CCR Title 22 total threshold limit concentrations (TTLCs) or soluble threshold limit concentrations (STLCs) for hazardous waste (CCR Title 22 2000b). Based on Tetra Tech's extensive sample data on surface soils in the Site area from Vandenberg Air Force Base, the metal concentrations detected in the samples collected at the Site for this assessment are typical for naturally occurring soils derived from dune sands.

### **6.3.9.3 Background Metals**

The metal concentrations at the Site are within the range of background metal concentrations as determined from the samples collected offsite along Rice Ranch Road. This indicates that they are within naturally occurring levels (Tables 5, 6, and 7). Metal concentrations detected in the samples collected at the Site are typical for naturally occurring soils derived from dune sands as determined from numerous samples collected by Tetra Tech from similar soil at Vandenberg Air Force Base.

### **6.3.10 Soil Gas Matrix Analytical Procedures**

Onsite analytical services for soil gas analyses were provided by Interphase in their stationary mobile laboratory trailer. The following soil gas samples were collected and analyzed as part of the PEA field investigation:

- Fifteen soil gas samples collected from the perimeter of the Site were analyzed onsite in Interphase's stationary mobile laboratory trailer (See section 6.3.4.3) for hydrogen sulfide, methane, and fixed gases using GCs equipped with a TCD, PID, and FPD.
- Four soil gas samples collected within the road easement across from the adjacent former UST location were analyzed for BTEX using EPA method 8020M and MTBE and C<sub>4</sub>-C<sub>10</sub> carbon range TVH using EPA method 8015M.

### **6.3.11 Soil Gas Matrix Analytical Results**

A summary of the soil gas analysis results is provided in Tables 8 and 9. Interphases's laboratory report is provided in Appendix D. Following is a summary of analytical results from the soil gas sampling program.

### 6.3.11.1 Hydrogen Sulfide, Methane, and Fixed Gases

Hydrogen sulfide was detected in samples SG-6/10', SG-9/10', SG-10/10', SG-11/10', and SG-14/10' at a concentration of 1 ppm and in sample SG-4/10' at a concentration of 2 ppm. The laboratory MRL is 1 ppm. As hydrogen sulfide is naturally occurring at low levels and the detected values are essentially at the laboratory's detection limit of 1 ppm, the results of the soil gas samples do not indicate that the Site has been contaminated with hydrogen sulfide. O<sub>2</sub>, N<sub>2</sub>, and CO<sub>2</sub> were detected at concentrations consistent with atmospheric air. Carbon monoxide and methane were not detected at concentrations above laboratory detection limits of 0.1 percent or 1 ppm, respectively (Table 8). No apparent evidence of crude oil contamination was noted during sampling.

### 6.3.11.2 BTEX, MTBE, and TVH

In the two samples (SG-15/10' and SG-16/10') collected on Dyer Street across from the former UST site, *m,p*-xylenes were detected at 1.5 micrograms per liter (µg/L) in sample SG-15/10' (boring SG-15 at 10 feet bgs) slightly above the detection limit of 1 µg/L; however, *m,p*-xylenes were not detected in the duplicate sample (SG-15/10' Dup) at concentrations above the MRL of 1 µg/L (Table 9). This indicates that the only xylene detected on the Site is likely a laboratory artifact and that the Site is not contaminated with xylenes. No other analytes were detected.

## 6.4 DISPOSAL OF INVESTIGATIVE DERIVED WASTE

In the process of collecting environmental samples during the field sampling program, different types of potentially contaminated IDW were generated that included the following:

- Used personal protective equipment;
- Disposable sampling equipment;
- Soil cuttings; and
- Decontamination fluids.

The EPA's National Contingency Plan requires that management of IDW comply with all applicable or relevant and appropriate requirements to the extent practicable. The sampling plan followed the *Office of Emergency and Remedial Response (OERR) Directive 9345.3-02* dated May 1991, which provides guidance for managing IDW. In addition, other legal and practical considerations that may affect the handling of IDW were considered.

Listed below are the procedures that were followed for handling the IDW:

- Used PPE and disposable equipment were bagged and placed in a municipal refuse dumpster. These wastes are not considered hazardous and can be sent to a municipal landfill. Any PPE and disposable equipment that was disposed of that could have been reused was rendered inoperable before disposal in the refuse dumpster.
- Decontamination water was emptied to grade on Site near the driveway area and away from the investigation areas. Drums were not deemed practical because of the children playing in the field. The drums would have likely been tampered with by the children (empty drums were observed in the adjacent fields to the west). To eliminate exposing

the children to decontamination fluids, the non-phosphate, detergent containing decontamination water (approximately 1.5 to 2 gallons) was emptied to grade at the end of the day.

- Displaced soil from surface sampling was replaced in each hole after sampling. Soil cuttings from the hand augered borings in the former Christmas tree production area were shoveled back into each borehole when sampling was completed.

## **6.5 DISCUSSION OF RESULTS**

The assessment soil sample analytical results are presented in Tables 4 through 7 with associated laboratory MRLs. The soil gas survey results are presented in Table 8 and 9.

### **6.5.1 Organochlorine Pesticide Concentrations in Soil**

Based on the laboratory analytical results, organochlorine pesticides are not present in the former Christmas tree farm area of the Site. It is not likely that they were applied in this area of the Site.

### **6.5.2 Metals Concentrations in Soil**

Based on a comparison between the metal concentrations for samples collected from the former Christmas tree farm area of the Site and the background metals samples, the metal concentrations at the Site are within the range of background values indicating they are within naturally occurring levels. Metal concentrations detected in the samples collected at the Site are typical for naturally occurring soils derived from dune sands as determined from numerous samples collected by Tetra Tech from similar soil at Vandenberg Air Force Base. The results from the additional metal analyses (total arsenic and total lead) performed on subsurface soil samples B-1-3 and B-3-3 were consistent with these conclusions.

### **6.5.3 Soil Gas Survey Results**

The soil gas survey data indicate that the Site subsurface has not been contaminated by hydrogen sulfide and methane gas from the near by oil fields, or from volatile organic vapors from the former USTs located in the School District maintenance yard.



## 7.0 HUMAN HEALTH AND ECOLOGICAL SCREENING EVALUATION

### 7.1 INTRODUCTION

The PEA screening evaluation for human health and ecological effects consists of three steps: (1) identifying potentially complete exposure pathways based on the conceptual site model (CSM); (2) identifying COPCs; and (3) estimating exposures to the COPCs and the associated potential health risks. In compliance with the PEA guidance (DTSC 1994, second printing 1999), a residential land-use scenario is assumed in evaluating potential human health risks. The ecological screening evaluation identifies potential exposures to ecological receptors that currently occupy the Site, could occupy the Site, or occupy areas affected by the Site. The findings of the human health and ecological screening evaluation are summarized in the risk characterization summary.

The components required by the DTSC for the human health and ecological risk screening evaluation of Orcutt Union School Site No. 17 was discussed in a telephone conference between the DTSC, Tetra Tech, and the Orcutt Union School District on September 14, 2001. The DTSC agreed that based on their review of the Preliminary Assessment sample data results (Tetra Tech 2001c), that no COPCs were identified at the Site, and that without COPCs, potential exposure pathways are incomplete and a statistical analysis of human health and ecological risk can not be performed (DTSC 2001). The following discussions on the CSM development, chemical groups, and risk characterization support this finding.

### 7.2 CONCEPTUAL SITE MODEL

A CSM provides a description of the links between chemical sources at a site, the chemicals detected at the site, the mechanisms by which chemical transport or migration may occur in the environment, and the receptors potentially exposed to environmental media at the site. Within a CSM, an exposure pathway describes the route by which a chemical may migrate from a source to an exposed receptor. An exposure pathway is considered to be complete when it has all four the following factors: (1) source(s) of chemical releases to the environment, (2) a transport medium (*e.g.*, soil, water, air), (3) a point where receptors may be exposed, and (4) an exposure route through which chemical uptake occurs (*e.g.*, ingestion). A CSM that identifies the potential sources, transport media, exposure points, and exposure routes for both human and ecological receptors at the Site is shown in Figure 3.

The Site is described in Chapters 2 through 5.

### 7.3 CHEMICAL GROUPS

The chemical analysis results are presented in sections 6.3.9 and 6.3.11. The results are summarized below (also, see section 6.5):

- **Organochlorine pesticides:** All analytes were below the laboratory MRLs (Table 4).
- **Metals in soil:** All metals were either below the laboratory MRLs or consistent with background concentrations (Tables 5, 6, and 7).

- **Hydrogen sulfide, methane, and fixed gases in soil gas:** All gases were consistent with ambient air or were below the laboratory MRLs (Table 8), except for hydrogen sulfide (see below).
- **BTEX, MTBE, and TVH in soil gas:** All analytes were below the laboratory MRLs (Table 9), except for *m,p*-xylenes (see below).

Hydrogen sulfide was detected in soil gas samples at 1 to 2 ppm (Table 8). The results of the soil gas samples do not indicate that hydrogen sulfide is a COPC at the Site because hydrogen sulfide is naturally occurring at low levels and the detected values are essentially at the laboratory MRLs of 1 ppm. Xylenes (*m,p*-) were detected in one soil gas sample slightly above the laboratory MRLs of 1 ppm, but were not detected in the associated duplicate of that sample (Table 9). This indicates that the xylene detected on the Site is likely a laboratory artifact and that xylenes are not a COPC at the Site.

Overall, the results of the soil and soil gas analyses indicate that there are no COPCs on the Site.

#### **7.4 RISK CHARACTERIZATION**

The potential for health risks at a site exists only when there are COPCs present at a site with complete exposure pathways. When any one of the parts of an exposure pathway (see Section 7.2) are missing, it is considered to be incomplete. At this Site, no COPCs were found. Without COPCs at a site, all exposure pathways are incomplete and receptors are not exposed to any COPCs. As a result of this determination, there are no health risks to either human or ecological receptors at this Site and quantitative health risks were not evaluated.

## 8.0 COMMUNITY PROFILE

A Public Participation Plan (PPP) was prepared for the Site by the School District under the direction and guidance of the Cal EPA DTSC. The following information was extracted from the PPP.

### 8.1 COMMUNITY BACKGROUND/PROFILE INFORMATION

Orcutt is an incorporated agricultural community located 15 miles inland from the coast of California, 165 miles north of Los Angeles, and 275 miles south of San Francisco. Housing costs remain among the most affordable in the area, attracting many young families and retired persons. The City’s current population estimate is approximately 28,830.

The Site is located in Orcutt, an unincorporated part of the County of Santa Barbara, and is generally bounded by Soares Avenue to the north, Dyer Street to the east, and Rice Ranch Road to the south. The western Site boundary is approximately 660 feet east of Broadway (Figure 1). The Hartnell Estate property borders the parcel on the west. The development located north of Soares Avenue is zoned Residential (7R1), and the properties located south of Rice Ranch Road are zoned Residential (DR1 and DR5) and consist of a considerable amount of open space. The property adjacent to the northeast boundary of the Site is zoned PI (Professional and Institutional) and is occupied by School District office facilities.

The community demographic profile is as follows:

<u>Population:</u>	
2000 Census	28,830
<u>Households:</u>	
1990 Census	10,420
<u>Occupied Housing Units (1990 Census):</u>	
Owner occupied	8,671
Renter occupied	1,749
<u>Estimated population by race (1990 Census):</u>	
White	86.7%
Black	1.4%
Asian	3.2%
Hispanic Origin*	14.4%
* Includes white, black, and Asian persons who identify themselves as being of Hispanic origin.	
<u>Age (2000 Census):</u>	
Age 0-14	21.8%
Age 15-24	11.2%
Age 24-54	39.4%
Age 55 and older	27.5%

**8.2 COMMUNITY CONCERNS**

The project has not generated much public attention. Feedback from the School Board meetings and newspaper articles indicate there is no public objection or concern. The few responses to the District's public hearing show support for the project. The planned school and playing fields will be a positive addition for our student population and adult community members.

## **9.0 QUALITY ASSURANCE PROJECT PLAN IMPLEMENTATION**

An integral part of the PEA sampling and analysis plan is the QA/QC program to ensure the reliability and compatibility of all data generated during the PEA. The QAPP provides specific descriptions of the field and laboratory procedures to be used for verifying and maintaining performance quality for collection of environmental samples and subsequent chemical analysis. The QAPP sets forth the policies, procedures, and activities for the identification and documentation of the precision, accuracy, completeness, and representativeness of the data during the performance of the PEA. Tetra Tech established field sampling activities identifying COPCs, sample collection, laboratory methods, preservatives, holding time, and method reporting limits in the Sampling Strategy (Tetra Tech 2001b: Tables 1, 2, 3). AA and Interphase QAPPs are included in Appendix E of this PEA report. The QAPP describes quality assurance and quality control measures that were used during project execution to assure that Site field and analytical data collected met project DQOs to support risk-based decisions regarding acceptability of the Site for a school site.

During the PEA investigation, a variety of data was collected. Each sample was analyzed for a number of different chemicals, depending on the rationale for sample collection. However, not all chemicals detected were attributable to an onsite release and not all of the data were of acceptable quality. Data collected were evaluated to determine which of the chemicals identified are likely to be Site-related and to assess whether the reported concentrations for these chemicals are of acceptable quality for use in the screening evaluation.

### **9.1 EVALUATION OF ANALYTICAL METHODS**

The analytical methodology used for data collection was assessed for appropriateness for use in the screening evaluation. Analytical results that are not specific for a particular compound or results of screening analytical methods (e.g., PID readings) are not used for the quantitative risk assessment.

### **9.2 EVALUATION OF DETECTION LIMITS**

Detection limits associated with the analytical data were reviewed before eliminating chemicals because they were not detected. In some cases, the detection limit for a chemical may be greater than the corresponding standards, criteria, or concentrations derived from toxicity reference values; therefore, the chemical may be present at levels greater than these corresponding reference concentrations, which may result in undetected risk. In other cases, a particular detection limit may be significantly higher than positively detected values in other samples in a data set. After considering these cases and any other reasonable explanations why contaminants may not have been detected, chemicals that were not detected in any medium were eliminated. If information existed to indicate that the chemicals were present, they were not eliminated. For example, if chemicals with similar fate and transport characteristics were detected frequently in soil gas, and some of these chemicals were also detected frequently in soil, then the undetected chemical may be present in the soil and additional assessment may be needed to confirm their presence.

### **9.3 EVALUATION OF QUALIFIED DATA**

For analytical results, various qualifiers pertaining to the quality of the data are attached to certain data by either the laboratories conducting the analysis or by persons conducting the data evaluation (procedures for data validation are discussed in section 9.3 of the AA QAPP and section 2.6.4 of the Interphase QAPP [Appendix E]). There were no qualifiers on the chemical data for this investigation and the data were used for the screening evaluation.

## **9.4 COMPARISON OF SITE WITH BACKGROUND DATA**

Metals are naturally occurring elements, many of which were detected in the soil samples. Site-specific metal data were compared with four background samples collected from an area within the public easement along Rice Ranch Road. The data comparison was used to assess whether the Site has elevated concentrations of metals, and has been affected by metals contamination. Selection of the background data set used was discussed with the DTSC Project Manager.

All metals concentrations were either below the laboratory MRLs or at concentrations within the range of background values indicating they are within naturally occurring levels (Tables 5, 6, and 7). No metals were detected at concentrations above CCR Title 22 TTLCs or STLCs for hazardous waste (CCR Title 22 2000). Based on Tetra Tech's extensive sample data on surface soils in the Site area from Vandenberg Air Force Base, the metal concentrations detected in the samples collected at the Site for this assessment are typical for naturally occurring soils derived from dune sands.

## **9.5 IDENTIFICATION OF CHEMICALS OF POTENTIAL CONCERN**

Chemicals that are not eliminated by any of the above evaluations are considered COPCs for the Site and evaluated further through the PEA screening evaluation. If a detected chemical is believed to be non-site-related, DTSC is consulted for data evaluation. No COPCs were identified for the Site.

### **9.5.1 Organochlorine Pesticide Concentrations in Soil**

Based on the laboratory analytical results, organochlorine pesticides are not present in the former Christmas tree farm area of the Site. It is not likely that they were applied in this area of the Site.

### **9.5.2 Metals Concentrations in Soil**

Based on a comparison between the metal concentrations for samples collected from the former Christmas tree farm area of the Site and the background metals samples, the metals concentrations at the Site are within the range of background values indicating they are naturally occurring. The metal concentrations detected in the samples collected at the Site are typical for naturally occurring soils derived from dune sands as determined from numerous samples collected by Tetra Tech from similar soil at Vandenberg Air Force Base. The results from the additional metal analyses (total arsenic and total lead) performed on subsurface soil samples B-1-3 and B-3-3 were consistent with these conclusions.

### **9.5.3 Soil Gas Survey Results**

The soil gas survey data indicate that the Site subsurface has not been contaminated by hydrogen sulfide, methane, or C<sub>4</sub>-C<sub>10</sub> carbon range TVHs from the oil field concerns or from volatile organic vapors that may have migrated from the School District's former USTs.

## **9.6 FIELD VARIANCES**

As conditions in the field may vary, it was necessary to implement minor modifications to sampling as presented in the PEA sampling strategy (Tetra Tech 2001b). Field variances are summarized in section 11 and were noted in the field logbook during sampling. However, significant modifications to the approved PEA sampling strategy were not necessary.

## **10.0 HEALTH AND SAFETY PLAN IMPLEMENTATION**

Tetra Tech prepared a site-specific Health and Safety Plan (HASP) pursuant to Health and Safety Code 1910.120. A project Health and Safety plan is included as Appendix F of this PEA report. The plan:

- Identifies and describes potentially hazardous substances that may be encountered during field operations;
- Specified personal protective equipment and clothing for site activities; and
- Outlines measures to be implemented during an emergency.

Tetra Tech field personnel reviewed the HASP prior to commencing fieldwork. Prior to initiation of field activities each day, a site safety briefing was conducted to identify potential physical and chemical hazards and outline measures to be taken in event of an emergency. All onsite personnel were required to sign the site safety briefing form.

During field activities, appropriate Level D PPE was worn by all personnel within the exclusion zone. Operator breathing zone PID readings were obtained on a regular basis as required by the HASP. PID readings were 0.0 ppm. Based on these measurements, an upgrade to Level C personal protective equipment was not required.

Potential hazards to public health and safety were minimal. Access to the Site was limited by fencing around the perimeter of the Site with only two narrow unfenced locations along Soares Avenue making the Site relatively inaccessible by public vehicles. No unauthorized personnel without appropriate training were allowed within the exclusion zone during sampling operations. No incidents or emergency actions occurred during the field program.

## **11.0 FIELD VARIANCES**

The following field variance occurred during site activities:

Soil gas samples were collected from 10 feet bgs all soil gas boreholes as outlined in the PEA Sampling Strategy (Tetra Tech 2001b) except at boring SG-4 and SG-5. At SG-4, the soil gas sample was collected at 11 feet bgs and at SG-5 the soil gas sample was collected from between 10 and 10.5 feet bgs. Gas intake by the sampler mechanism at 10 feet bgs was inhibited at SG-4 and SG-5. Sample collection required lowering the sampler mechanism in 0.5 foot intervals to more porous material where acceptable flow was achieved.

All other sampling occurred without variance and according to the specifications in the PEA sampling strategy .



## 12.0 EVALUATION OF APPLICABLE OR RELEVANT LAWS AND REGULATIONS PERTAINING TO SCHOOL SITES

Public Resources Code Section 21151.8 (State of California Legislative Counsel [SCLC] 2001a) and Education Code Section 17213 (SCLC 2001b) prohibit the approval of an Environmental Impact Report (EIR) or Negative Declaration (ND) for a project involving the purchase of a school site or construction of a new elementary or secondary school unless all of the following occur:

- The EIR or ND includes information needed to determine if the property is any of the following:
  - The site of a current or former hazardous waste disposal site or solid waste disposal site and, if so, whether the wastes have been removed;
  - A hazardous substance release site identified by the California State Department of Health Services in a current list adopted pursuant to Section 25356 (SCLC 2001c) for removal or remedial action pursuant to Chapter 6.8 (commencing with Section 25300 [SCLC 2001c]) of Division 20 of the Health and Safety Code; or
  - A site that contains one or more pipelines, situated underground or aboveground, which carries hazardous substances, acutely hazardous materials, or hazardous wastes, unless the pipeline is a natural gas line that is used only to supply natural gas to that school or neighborhood.
- Facilities located within one-quarter mile of the proposed site that might reasonably emit hazardous or acutely hazardous air emissions have been identified;
- It has been determined that the health risks from facilities do not and will not constitute an actual or potential endangerment of public health to persons who attend or are employed at the school; or
- If impacts are identified, mitigation of all chronic or accidental hazardous air emissions must be made prior to school occupancy and a determination of no actual or potential endangerment shall be certified by the governing board.

A comprehensive review of relevant Background Information was undertaken for preparation of the PEA Sampling Strategy for the Site (Tetra Tech 2001b). This information is summarized in the Site Description (Chapter 2.0), Site History and Background (Chapter 3.0), Soil Sampling Locations and Rationale (section 6.3.1), and Soil Gas Sampling Locations and Rationale (section 6.3.2) of this PEA Report. On the basis of the information reviewed, there is no documentation that the Site is a current or former hazardous waste disposal site, as defined in Section 25114 of the Health and Safety Code (SCLC 2001d). The Site is not listed in regulatory agency databases as a hazardous substances release site. Information requests were sent to the following regulatory agencies for information regarding the site:

- Cal EPA Department of Toxic Substances Control;
- California Regional Water Quality Control Board, Region 3;

- California Department of Conservation, Division of Oil, Gas, and Geothermal Resources, District 3;
- County of Santa Barbara Assessor's Office;
- County of Santa Barbara Planning and Development, Building and Safety;
- County of Santa Barbara Agricultural Commissioner's Office; and
- County of Santa Barbara Water Agency; and
- Santa Barbara County Fire Department, Protection Services Division.

The DTSC indicated concern that if the tank installation excavation did not penetrate the hardpan, there is a potential that volatile organic vapors from the former UST site across Dyer Street in the maintenance area may have migrated along the top of the hardpan layer onto the Site. Tetra Tech reviewed files from the Santa Barbara County Protection Services Division (SBCPSD) on the former UST site regarding documentation on the UST removal action to assess depth of former USTs and to evaluate verification sample data from the excavation following removal of contaminated soil. Copies of the agency records and consultant reports are included in Appendix G. SBCPSD files indicate that one UST was removed from Orcutt School maintenance yard on the east side of Dyer Street during 1986 and two other USTs were removed in 1989.

SBCPSD records indicate the first UST was removed from the Orcutt School maintenance yard during November 1986 by Ventura Petroleum Services, Inc (VPS) and the UST was deleted from the agency records. Data for this UST removal include a master billing and computer entry record documenting its deletion from agency records, an invoice from VPS, UST content characterization sample results for petroleum distillate gravity and metal content, and soil sample data for one sample (apparently a composite of samples collected from the removal excavation at 5, 10, and 15 feet bgs). The UST size and type of fuel stored were not documented. VPS records indicate that approximately 1,000 gallons of fluid were removed from the tank. The soil sample was analyzed for TPH using EPA method 8015, total recoverable petroleum hydrocarbons (TRPH) using EPA method 418.1, and BTEX using EPA method 8020. TPH and TRPH were not detected at concentrations above the laboratory reporting limit of 1 mg/kg, and BTEX were not detected at concentrations above the laboratory reporting limit of 0.1 mg/kg.

The SBCPSD records indicate Beecher Enterprises removed a 1,300-gallon gasoline UST and a 6,000-gallon diesel fuel UST from the Orcutt School maintenance yard during July 1989. ESEI collected six soil and two groundwater samples from the UST removal excavation and found soil and groundwater contamination (ESEI 1989a). The samples were collected from the open tank excavation at depths of 6 to 9 feet below adjacent grade and analyzed for TPH using EPA method 8015 and BTEX using EPA method 8020. TPH in soil was detected at concentrations ranging from approximately 35 to 19,700 ppm and TPH in water was detected at concentrations ranging from approximately 900 to 4,300 ppm. The figure of the Bus Yard Site Plan included in the report depicts the former 6,000 gallon UST to be approximately 6 feet in diameter, the UST tank excavation approximately 9 feet bgs.

During August 1989, ESEI performed an assessment of the UST excavation site following the removal of the UST under County of Santa Barbara Health Care Services (HCS) regulatory oversight (ESEI 1989b). HCS provided regulatory oversight for UST sites prior to SBCPSD. The assessment included drilling eight borings for soil assessment and the installation of three groundwater monitoring wells. A trace amount of groundwater was encountered in well MW-2. None of the other monitoring wells contained

groundwater. Five soil samples and one groundwater sample were submitted for laboratory analysis. All soil and groundwater samples collected for this assessment were analyzed for TPH using EPA method 8015 and BTEX using EPA method 8020. Three soil samples and the groundwater sample were also analyzed for total lead using EPA method 7420. No contamination was detected in any of the samples collected for this assessment. The assessment report concluded that the UST related soil contamination was confined to within a few feet of the removal excavation.

ESEI remediated the UST site under HCS regulatory oversight during the fall of 1989. The contaminated soil was removed by excavation as documented by confirmatory samples and cleaned up *ex situ* using bio-remediation methodology (ESEI 1989c,d). In a letter dated January 2, 1990, the HCS indicated that the verification sampling at the Orcutt Union School UST site was below Santa Barbara County's action levels and no further testing was required.

No other records hazardous waste/substance storage, treatment, or disposal activities at the Site were obtained from these agencies.

No active or former landfills are known to be located within 0.5 mile of the Site and the Site is not known to be situated upon a current or former disposal site.

## **12.1 AGENCY FILE AND REPORT REVIEW IMPLICATIONS**

During the soil gas survey conducted by Tetra Tech in June 2001, the hardpan layer at borings SG-15 and SG-16 along Dyer Road (across from the bus yard) was encountered between 5.0 and 7.5 feet bgs. It was concluded from the ESEI assessment report (ESEI 1989b) that the USTs penetrated a depth of at least 9 feet bgs. Allowing a minimum of 6 feet for the diameter of the 6,000 gallon horizontal tank and the height of the 1,300 gallon vertical tank, and at least 3 feet for protective overburden, the former USTs would have penetrated the shallow hardpan layer. Therefore, it is unlikely that soil contamination would occur above the hardpan. The data for the UST removed in 1986 indicated that soil contamination was not encountered at that site. Review of the ESEI assessment report on the UST removed in 1989 (ESEI 1989b) indicates that the soil contamination associated with the UST removed in 1989 was restricted laterally to within several feet of the tank excavation. Subsequent reports (ESEI 1989c,d) indicate the soil contamination associated with the UST removed in 1989 was remediated. It is unlikely that soil vapors associated with the USTs formerly located at the Orcutt Union School maintenance yard have migrated to the Site. The soil vapor survey data collected by Tetra Tech during June 2001 support this finding.

## **12.2 TRANSMISSION PIPELINES**

Tetra Tech contacted the Tosco, Torch, Greka, and the SCGC for information on high-pressure transmission pipelines located within 1,500 feet of the Site in accordance with CCR Title 5, Section 14010 (h) guidelines. The Tosco and Torch petroleum companies reported that they do not operate any pipelines within 1,500 feet of the Site. Records reviewed for this assessment indicate that gasoline or jet fuel transmission pipelines are not located within 1,500 feet of the Site (Section 3.3.4.2).

### **12.2.1 Southern California Gas Company**

The SCGC operates a 12-inch diameter subsurface high-pressure (300–500 psi) natural gas transmission pipeline within 1,500 feet of the Site (Figure 2). The pipeline is located adjacent to the eastern side of Marcum Road and extends southwest toward Orcutt Highway 135. The minimum distance between the pipeline and the Site is approximately 1,280 feet from the northwest corner of the Site. The pipeline was constructed of high-grade steel in 1953 and is routinely monitored by SCGC cathodic protection

(Grossfield 2001). There are two manual emergency shut-off valves; one is located northwest of the Site at Clark Street and Marcum Road and the other is located southwest of the Site approximately 200 feet north of Highway 135 along the pipeline. A low-pressure distribution line that services the Orcutt residential areas connects with the high-pressure transmission pipeline near Clark Street.

### **12.2.2 Greka Energy**

Greka Energy operates a 6-5/8-inch diameter subsurface low-pressure (50-psi) natural gas transmission pipeline within 1,500 feet of the Site (Figure 2). The pipeline is located east of the SCGC subsurface pipeline and extends southwest toward Orcutt Highway 135. The minimum distance between the pipeline and the Site is approximately 1,230 feet from the northwest corner of the Site. The pipeline was constructed of high-grade steel in 1985 with 4 inches of plastic insulation (Marroquin 2001). The pipeline pressure is monitored daily by Greka Energy for leak protection. An automatic/manual emergency shut-off valve is located northwest of the Site at Clark Street and Highway 135.

## **13.0 CONCLUSIONS**

The four western parcels of the Site have been owned by Winston B. Grigg and Katherine H. Grigg since May 1969 and are vacant undeveloped land. The fifth parcel located at the northwest corner of Dyer Street and Rice Ranch Road is currently owned by the Griffith family. The Griffiths have owned the property since November 1968 and a lot split is in progress to divide the parcel into two separate parcels. The School District proposes to purchase the parcel comprising the western and northern portions of the current parcel where Monterey Pine trees are located. The southeast section of the Griffith property where the house and outbuildings are located, will be a separate parcel and will not be included in the Site. Both the Griggs and Griffiths obtained their properties from the Soares family who previously owned these properties and several surrounding properties since at least August 1948.

The Site is located in an area developed for residential, institutional facilities, and agricultural land use. A residential neighborhood is located north and northeast of the Site, a church and residential properties lie south of the Rice Ranch Road, agricultural grazing lands lie to the southwest, and a vacant lot to the west. The Orcutt Union Junior High School is located to the east of the Site across Dyer Road.

Research of available Site background information, including regulatory agency database lists and agency file searches, indicates the western portion of the Site was undeveloped vacant land and the eastern portion of the Site area used primarily for residential purposes. Based upon the information reviewed, the Site is not located at a known hazardous waste disposal site, hazardous substance release site, or landfill. A release of hazardous materials at the Site was not documented in data reviewed for this PEA. There is a potential that hazardous materials were released at the Site based on activities identified in the PEA background research. These include:

- Organochloride pesticides and pesticide soil contamination potential and toxic metal associated with the former Christmas tree production;
- Toxic soil gas from emissions generated from nearby oil field production activities or natural seepage; and
- Toxic soil gas from fuels that may have been released to grade at former UST sites in the School District maintenance area, approximately 100 feet east of the eastern Site boundary.

The potential risk posed from the rupture of natural gas distribution lines within 1,500 feet of the Site was also assessed in accordance with CCR Title 5 (U.S. EPA Title 5 2000).

Tetra Tech has developed the following conclusions for the PEA of the Proposed Orcutt Union School Site No. 17:

- Based on the laboratory analytical results, organochlorine pesticides are not present in the former Christmas tree farm area of the Site. It is not likely that they were applied in this area of the Site.
- Based on a comparison between the metals concentrations for samples collected from the former Christmas tree farm area of the Site and the background metals samples, the metal concentrations at the Site are within the range of background values indicating they are naturally occurring. The metal concentrations detected in the samples collected at the Site are typical for naturally occurring soils derived from dune sands as determined from

numerous samples collected by Tetra Tech from similar soil at Vandenberg Air Force Base. The results from the additional metal analyses (total arsenic and total lead) performed on subsurface soil samples B-1-3 and B-3-3 were consistent with these conclusions.

- The soil gas survey data indicate that the Site subsurface has not been contaminated by hydrogen sulfide or methane gas from the near by oil fields, or from volatile organic vapors that may have migrated from the former UST sites across Dyer Street toward the Site.
- The human health and ecological risk assessment for the Site did not identify COPCs. Without COPCs at a site, all exposure pathways are incomplete and receptors are not exposed to any COPCs. As a result of this determination, there are no health risks to either human or ecological receptors at this Site and quantitative health risks were not evaluated.
- Two subsurface natural gas pipelines are located within 1,500 feet of the Site: a 300–500 psi natural gas transmission pipeline operated by SCGC is located approximately 1,280 feet northwest of the Site and a 50 psi natural gas transmission pipeline operated by Greka Energy is located approximately 1,230 feet northwest of the Site. The pipelines are routinely monitored. It is unlikely that the natural gas transmission pipelines would adversely affect that Site.

## **14.0 RECOMMENDATIONS**

Findings of this PEA indicate the Site has not been adversely affected by former Christmas tree production, oil field activities or concerns, or the former School District USTs. Tetra Tech recommends that the risks estimated by this investigation for the proposed school site support a No Further Action determination by DTSC.

There is a potential that, in the future, enclosed areas on the Site could contain radon gas at concentrations that exceed the one in one million human cancer risk threshold. A radon survey should be conducted for potential radon gas accumulation in any structures constructed on the Site. Depending on the results of the testing, special ventilation mitigation measures could be required to lower radon gas concentrations in the buildings.

## **15.0 DISCLAIMER**

This report was compiled based partially on information supplied to Tetra Tech from outside sources and other information that is in the public domain. The conclusions and recommendations herein are based solely on the information Tetra Tech obtained in compiling the report. Documentation for the statements made in the report is on file at Tetra Tech's offices in Santa Barbara, California. Tetra Tech makes no warranty as to the accuracy of statements made by others which may be contained in the report, nor are any other warranties or guarantees, expressed or implied, included or intended by the report, except that it has been prepared in accordance with the current generally accepted practices and standards consistent with the level of care and skill exercised under similar circumstances by other professional consultants or firms performing the same or similar services. Since the facts forming the basis for the report are subject to professional interpretation, differing conclusions could be reached. Tetra Tech does not assume responsibility for the discovery and elimination of hazards that could possibly cause accidents, injuries, or damage. Compliance with submitted recommendations or suggestions does not assure elimination of hazards or the fulfillment of client's obligation under local, state, or federal laws or any modifications or changes to such laws.

None of the work performed hereunder shall constitute or be represented as a legal opinion of any kind or nature, but shall be a representation of findings of fact from records examined.

Respectfully submitted,

**TETRA TECH, INC.**

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California Certified Hydrogeologist 247;  
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September 30, 2003



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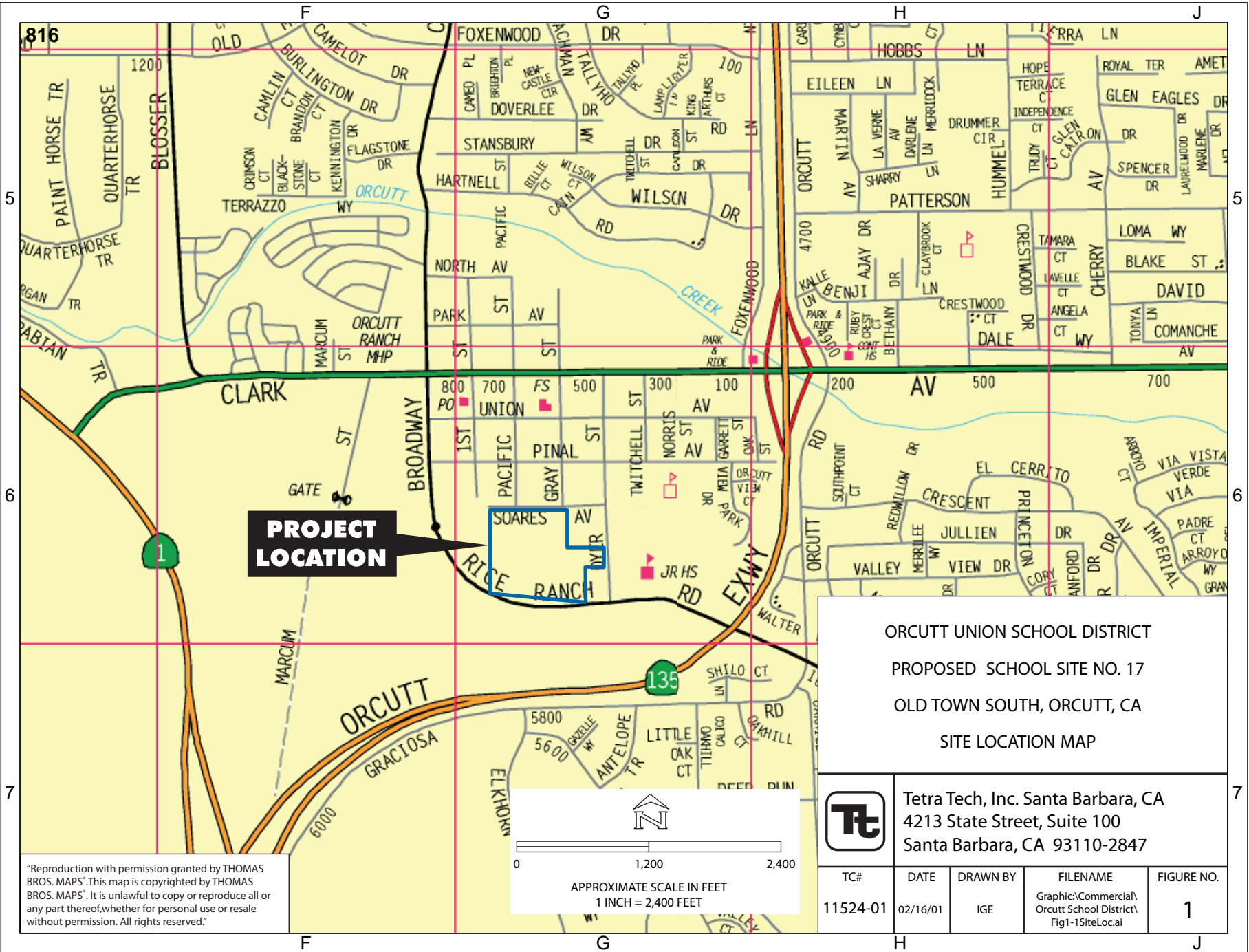
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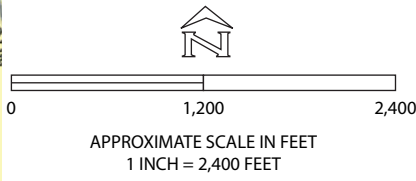
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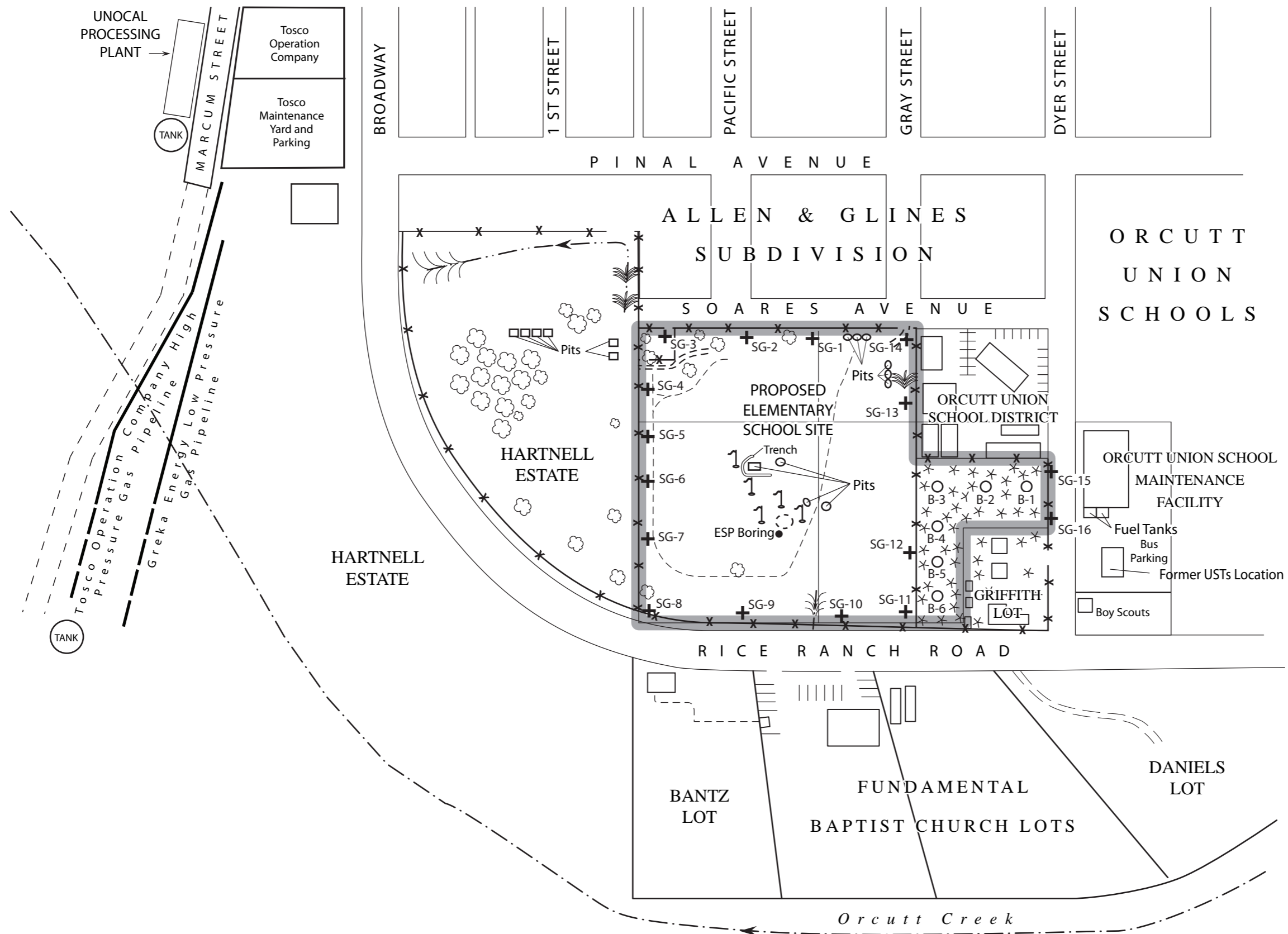
ORCUTT UNION SCHOOL DISTRICT  
 PROPOSED SCHOOL SITE NO. 17  
 OLD TOWN SOUTH, ORCUTT, CA  
 SITE LOCATION MAP

**Tt** Tetra Tech, Inc. Santa Barbara, CA  
 4213 State Street, Suite 100  
 Santa Barbara, CA 93110-2847

TC#	DATE	DRAWN BY	FILENAME	FIGURE NO.
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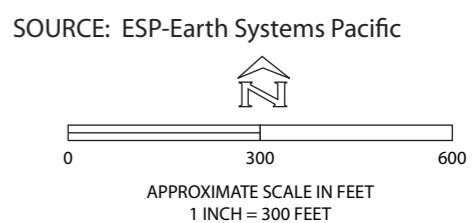
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- LEGEND**
- Building
  - Site Boundary
  - Dirt Road
  - Trail
  - Creek with flow direction
  - Drainage Channel with flow direction
  - Fence
  - Wooden Stake
  - Willows
  - Pine Tree
  - Chaparral
  - ESP Boring
  - Geotechnical Boring

Note: All locations and distances are approximate.



ORCUTT UNION SCHOOL DISTRICT  
 PROPOSED SCHOOL SITE NO. 17  
 OLD TOWN SOUTH, ORCUTT, CA  
 SITE PLAN AND SAMPLING LOCATIONS

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# **Phase I Environmental Site Assessment**



Job No. 11524-01

**Phase I Environmental Site Assessment  
Proposed Orcutt Union School  
Site No. 17  
Santa Barbara County, California**

*Prepared for:*

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February 26, 2001

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## **1.0 INTRODUCTION**

### **1.1 SUMMARY**

This report presents the findings of a Phase I Environmental Site Assessment (ESA) prepared on behalf of the Orcutt Union School District for the proposed land acquisition, Site No. 17, Old Town South in Orcutt, California (hereafter referred to as the Site). The Site is northwest of the intersection of Dyer Street and Rice Ranch Road, and south of Old Town Orcutt (Figure 1). The Site is bordered on the east by the existing Orcutt Union School District property and by a private residential property, on the north by a residential housing development, on the west by undeveloped land, and on the south by the Fundamental Baptist Church and residential properties.

This ESA was performed by Tetra Tech, Inc. (Tetra Tech) under contract with Orcutt Union School District in general accordance with the American Society for Testing and Materials (ASTM) guidelines listed in *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, Designated: E 1527-00* (ASTM 2000).

### **1.2 PURPOSE AND SCOPE**

The purpose of this assessment was to evaluate potential environmental liabilities associated with the Site. This study was conducted to identify, to the extent possible, based on available information and the level of effort described in our proposal dated October 2, 2000, whether former activities at or near the Site may have involved or resulted in the use, storage, disposal, and/or release of hazardous or potentially hazardous substances to the environment. Using professional judgement, we have developed an opinion regarding the potential for contamination of the site property.

The scope of services performed for this project included the following tasks.

- Research and review of pertinent, readily available geologic and hydrogeologic literature, and available historic aerial photographs and topographic maps of the site and surrounding area;
- A reconnaissance of the site and an interview with the current site owner;
- Reviewing historical chain-of-title reports of the site ownership;
- Evaluating onsite hazardous substance uses, storage, and/or disposal;
- Interacting with applicable municipal, regional, and state agencies to review available records and permits;
- Acquisition and review of a regulatory agency database report; and
- Preparation and submittal of this report summarizing the results of our findings and presenting our interpretations and recommendations.

### 1.3 METHODS OF INVESTIGATION

**Literature Review.** Available published and unpublished geologic, hydrogeologic, and environmental reports were reviewed. A list of these reports is presented in the References section at the end of this report.

**Aerial Photograph Survey.** Historical aerial photographs of the site from the University of California, Santa Barbara were reviewed. This review consisted of examining the photographs for evidence of previous activities, which may have contributed to onsite contamination. A list of the photographs is provided in the References section of this report.

**Site Reconnaissance.** The reconnaissance consisted of a walk-through visit of the site and surrounding areas. During the reconnaissance, hazardous substance use, storage, and disposal practices were evaluated at the Site and adjacent areas.

**Historical Chain of Title Search.** Title Runners Real Estate and Legal Services of Santa Barbara, California, performed a historical chain of title search for the Site property dating from January 1948 through February 1, 2001.

**Interviews.** Interviews were conducted by telephone or in person with the current Assistant Superintendent of Orcutt Union School District, property owners, and regulatory agency representatives for information on the Site history, land use, surrounding land use, and regulatory agency data.

**Agency Contacts.** During this assessment, the following agencies were contacted via telephone, personal interviews, and record searches for information relating to the site area:

- California Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR);
- County of Santa Barbara Fire Department, Protection Services Division (SBCPSD), Site Mitigation Unit/Leaking Underground Fuel Tank (SMU/LUFT) Groups;
- County of Santa Barbara Assessors Office (SBCAO);
- County of Santa Barbara Water Agency (SBCWA);
- County of Santa Barbara Flood Control (SBCFC);
- County of Santa Barbara Office of Agricultural Commissioner (SBCOAC);
- County of Santa Barbara Planning and Development (SBCPD);
- Tosco Company (Tosco); and
- Torch Company (Torch).

**Regulatory Agency Database/Sanborn Map Search.** Environmental Data Resources, Inc. (EDR) maintains comprehensive environmental information databases and historical information, including Sanborn Maps and City Directories, and specializes in providing such data for use in real estate and environmental documents. EDR performed a database search of specific government records within a

prescribed radius of the Site in accordance with ASTM method E 1527-00 (ASTM 2000) and reviewed their Sanborn Map collection for coverage in the Site area (Appendix A).

## **2.0 SITE DESCRIPTION**

### **2.1 LOCATION AND DESCRIPTION**

The Site is located northwest of the intersection of Dyer Street and Rice Ranch Road in Santa Barbara County, south of Old Town Orcutt (Figure 1). The Site is a portion of the land situated between Rice Ranch Road, Soares Avenue, South Broadway Street, and Dyer Street. The Site property, comprising an area of approximately 11.28 acres, is currently zoned small lot plan (SLP) (SBCPD 2001). The Site is surrounded by undeveloped land to the west, housing development to the north, Orcutt Union School District property and private residential property to the east, and the Fundamental Baptist Church and private residential properties to the south (Figure 2). At a surface elevation of approximately 350 feet above mean sea level, the Site is an area of relatively flat topography with a gentle slope toward the southwest (U.S. Geological Survey 1959, Photorevised 1967 and 1974).

The general features of the Site and surrounding areas are shown on Figure 2, and photographs of the Site taken during the reconnaissance performed on February 5, 2001, are included in Appendix B. The Site consists of four parcels of undeveloped vacant land (105-134-04, 105-330-05, 105-134-05, 105-330-01) and the undeveloped portion of a fifth parcel (105-330-00) (the Griffith lot), historically used as residential property. The four western Site parcels are fenced along the perimeter with two open access locations along Soares Avenue at the northeast and northwest corners. The eastern parcel (the Griffith lot) is fenced along the perimeter separating it from the western parcels. Chaparral, willows, pine trees and grass comprise the vegetation of the Site. The field is frequently used by local children for playing. Several small pits have been dug and dirt ramps built for bike jumps and forts (Black 2001). No surface soil discoloration or staining was observed during the site reconnaissance. Standing water in several small pits has accumulated during recent rainfall. A sandstone hardpan lies approximately 2 to 5 feet below ground surface and inhibits percolation of water. The soil was slightly moist to mucky at the surface due to poor drainage. Where the soil is moist, green grass, moss and mold grow on the hummocky surface. In areas with better drainage, the ground is slightly moist to dry and firm.

The current legal description of the Site recorded at the County of Santa Barbara is:

#### Parcel One

That portion of the northwest quarter of Section 15, Township 9 North, Range 34 West, San Bernardino Meridian, in the County of Santa Barbara, State of California, according to the official plat thereof, described as follows:

Commencing at a brass cap monument marked "R.H.J.L.S.2019" set at the intersection of the boundary line, common to said Section 15 and Rancho Todos Santos Y San Antonio with the South Boundary of the Town of Orcutt, according to map filed in the Office of the Santa Barbara County, surveyors as C.S. Map No 856; thence along said common boundary South 1°14'00" West 834.99 feet to the Northwest corner of the land described in the Deed to the County of Santa Barbara, recorded February 8, 1967 as Instrument No. 3547 in Book 2180, Page 921 of Official Records, records of said County and the true point of beginning, said true point of beginning being the beginning of a non-tangent curve, concave Northerly, having the radius of 808.00 feet, a radial line of said curve to said true point of beginning, bears South 19°51'35" West, thence along the Northerly

boundary line of said land Easterly along said curve through a central angle of 19°09'20" an arc distance of 270.14 feet; thence tangent to said curve, South 89°17'45" East 132.69 feet; thence parallel with said common boundary line North 1°14'00" East 675.45 feet to the Southerly line of Soares Avenue, as described in the deed to the County of Santa Barbara, recorded November 26, 1952 in Book 1111, Page 425 of Official records, in the Office of the County Recorder of said County; thence along said Soares Avenue, North 89°39'45" West 398.26 feet to said common boundary line; thence along said common boundary line, South 1°14'00" West 628.16 feet to the true point of beginning.

APN# 105-134-04 and 105-330-05.

Parcel Two

Parcel 1 of the Parcel Map No. 11091, in the County of Santa Barbara, State of California, as shown on Parcel Map filed in Book 6, Page 26 of Parcel Maps, in the Office of the County Recorder of said County.

APN# 105-134-05 and 105-330-06.

Parcel Three

That portion of the northwest quarter of Section 15, Township 9 North, Range 34 West, San Bernardino Meridian, in the County of Santa Barbara, State of California, according to the official plat thereof, described as follows:

Commencing at a brass cap monument marked "R.H.J.L.S.2019" set at the intersection of the Southerly boundary of the Town of Orcutt with the common boundary line, between Section 15 and Rancho Todos Santos Y San Antonio as shown on the map filed in the Office of the County Surveyor of said County as C.S. Map No 856; thence along said common boundary South 1°14'00" West 834.99 feet to the Northwest corner of the land described in the Deed to the County of Santa Barbara, recorded February 8, 1967 as Instrument No. 3547 in Book 2180, Page 921 of Official Records, records of said County being a point on the curve concave Northeasterly having a radius of 808.00 feet, a radial line of said curve to said point bears South 19°51'35" West; thence Southeasterly along said curve and Northerly boundary line of land to the County, through a central angle of 19°09'20" an arc distance of 270.14 feet; thence tangent to said curve South 89°17'45" East 132.69 feet to the true point of beginning; thence continuing along said Northerly boundary line, South 89°17'45" East 510.09 feet to the beginning of a tangent curve on said boundary line, concave Northwesterly having a radius of 15.00 feet; thence northeasterly along said curve through a central angle of 90°19'30" an arc distance of 23.65 feet to a point in the Westerly boundary line of Dryer Street, 60.00 feet wide as described in the deed to the County of Santa Barbara, recorded April 5, 1922 in Book 198, Page 368 of Deeds, records of said County; thence along said Westerly boundary line North 0°22'45" East 663.63 feet to the intersection with the Southerly boundary line Soares Avenue, as described in the deed to the County of Santa Barbara, recorded November 26, 1952 in Book 1111, Page 425 of Official Records, records of said County; thence along said Southerly line North 89°39'45" West 515.10 feet more or less to the intersection with a line that is parallel with the above-mentioned common boundary between Section 15 and the Rancho Todos Los Santos y San Antonio and which passes



through the true point of beginning; thence along said parallel line South 1°14'00" West 675.45 feet to the true point of beginning.

Except therefrom all of that portion of said land lying Easterly of the westerly line and of the Southerly prolongation of said Westerly line of the land described in the deed to Orcutt Union School District recorded August 28, 1961 as Instrument No. 30147 in Book 1867, Page 706 of Official Records of said County.

APN# 105-330-08.

## **2.2 SITE VICINITY CHARACTERISTICS**

The Allen and Glines Subdivision is situated north of the property and consists primarily of single family residential homes. The subdivision extends north of the Site from Soares Avenue to Pinal Avenue.

Bordering the west boundary of the property is an undeveloped parcel owned by Hartnell Estate Company since 1923. Plans for development of homes on the Site are under review by the Town of Orcutt (Black 2001). The lot is vegetated primarily of grass and chaparral similar to the Site. In the northern portion the ground surface is hummocky and wet. A channel drains this area of the parcel toward the southwest and Rice Ranch Road. Several pits and mounded dirt piles are located in the northeast area of the parcel. The pits were dug out and dirt piled by local children for a dirt-bike obstacle course (Black 2001). A large tract of land southwest of the Site, across Rice Ranch Road, is also owned by the Hartnell Estate and consists of approximately 358 acres of agricultural preserve land used for grazing cattle. One large petroleum storage tank is located on a hilltop in the pasture area and can be accessed by a spur road off Highway 1. Originally, two tanks were located on the hilltop, but one was removed some time after 1989 (Refer to Section 2.4.3). The tank pad and berm for the removed tank are still visible. It is unclear whether Unocal, TOSCO, or Phillips Petroleum is responsible for the remaining tank (Nichols 2001).

The TOSCO Operating Facility is approximately 0.25 mile northwest of the Site across South Broadway Street. Behind the TOSCO facility and west of Marcum Street is the Unocal processing station. Several pipelines run underground from Clark Street along Marcum Street and lead to the processing station.

South of the Site, across Rice Ranch Road, are the Loretta K. Bantz property, a single-family residence, and the Fundamental Baptist Church properties. Abutting the southeast corner of the Site is an undeveloped property owned by David and Jennifer Daniels. Plans to build a large single family residence have been approved and a notice is posted beside Rice Ranch Road at the entrance to the dirt access road. Bordering the southern boundary of these properties is the south branch of Orcutt Creek that winds through the lowland known as the "Orcutt dip." Willow and oak thickets follow the stream course that extends northwest through the Hartnell Estate agricultural land. Here, the south branch joins the Graciosa Canyon creek, and the two creeks converge to join the main channel of Orcutt Creek that flows west.

The Orcutt Union School District owns properties on both sides of Dyer Street, adjacent to the Site. The district offices are located at the southwest corner of Soares Avenue and Dyer Street (Figure 2). The junior high school, existing elementary school, and district maintenance facilities are located east of Dyer Street, between Pinal Street and Rice Ranch Road. The maintenance facility is located adjacent to the Griffith property. The western and northern pine tree planted portions of the Griffith parcel are proposed to be included in the Site. The school district maintains and stores district vehicles and school buses in the maintenance area. Two aboveground fuel tanks and pumps for diesel and gasoline are located at the entrance to the fenced maintenance yard. A small building located south of the maintenance yard is used

by the Boy Scouts of America. Fencing and ventilation duct sections are stored along the perimeter of the parking area south of the building.

### **2.3 CURRENT USES OF THE SITE**

The Site consists of five assessor's parcels. The four western parcels make up the undeveloped field and are currently owned by the Winston B. Grigg and Katherine H. Grigg Living Trust. The proposed eastern parcel is approximately 1.75 acres of the property currently owned by Donovan I. Griffith and Rhea Rehark-Griffith. The southeastern section of the Griffith property is used as residential property with a recently remodeled house, a new garage, an old garage and workshop, and several sheds. The northern and western sections of the property have numerous pine trees, which are the remains of a Christmas tree farm endeavor (Saleen 2001). These later two sections comprise the area proposed to become a portion of the Site.

### **2.4 PAST USES OF THE SITE AND ADJOINING PROPERTIES**

Past uses of the Site and surrounding properties were evaluated by reviewing available historical map coverage, historical aerial photographs, DOGGR oil well maps, building permits available at the SBCPD, pesticide usage records on file with SBCOAC, records available at SBCPSD, and a chain-of-title search from Title Runners.

#### **2.4.1 Sanborn Map Review**

While the geographic coverage of Sanborn Maps is comprehensive for most major cities, many rural areas and small towns may not be covered. As a result, Sanborn Maps were not found for the Site area in the EDR collection.

#### **2.4.2 Historical Aerial Photographs**

A review of historical aerial photographs on file at the University of California, Santa Barbara dated 1938, 1943, 1954, 1961, 1967, 1974, 1980–1, 1989, and 1997 indicated the Site area had been undeveloped vacant land since 1938. The photographs from 1943, 1961, and 1974 are included in Appendix C. A summary of the data from the aerial photographs is given below.

The aerial photograph dated 1938 shows that the four parcels comprising the western portion of the Site are undeveloped vacant land. It appears that the land has been disked but no evidence of planting is visible. On the fifth parcel, several structures interpreted to be the old farmhouse, garage, and barn are visible. No vegetation appears in the farmyard area. The south fork of the Orcutt Creek is visible south of the Site, appearing much as it does today.

The aerial photograph dated 1943 appears much the same as the 1938 photograph. The field remains vacant land. There are several structures east of Dyer Street where the Orcutt Union School is located. With the exception of the farm buildings, no other structures are east of Dyer Street or between the housing subdivision and Orcutt Creek. Several storage tanks are visible northwest of Old Town Orcutt (Old Town). There are two large storage tanks on Marcum Street west of Old Town. Two additional storage tanks are clearly visible south of Orcutt Creek, approximately 1 mile southwest of the Site. Oil field activity can be seen along the bottom of the photograph. The north and south forks of Orcutt Creek are clearly visible on either side of the Old Town area, converging west of town.

The aerial photograph dated 1954 looks much the same as the 1943 photograph. The west portion of the Site has been disked around the perimeter, but vegetation is visible in the center. The land west of the Site remains a part of the natural drainage southwest to the Orcutt Creek.

In the aerial photograph dated 1961, the Site looks much the same as it did in 1954. The school has additional buildings east of Dyer Street. The subdivision has another row of houses south of the original plan, bordering Soares Street. Orcutt development has expanded to areas surrounding Old Town. The Orcutt Creek drainage is visible in the upper half of the photograph. Access roads and oil well pads of the Orcutt Oil Field are visible in the lower right half of the photograph.

In the aerial photograph dated 1967, the Site looks much the same as it did in 1961. One structure is visible southwest of the intersection of Dyer Street and Soares Avenue (Orcutt Union School District office).

In the aerial photograph dated 1974, Rice Ranch Road has been constructed south of the site. The Site and Orcutt Union School District parcel appear unchanged. The old farmhouse and garage remain on the fifth parcel of the Site, but it appears the barn was removed. The school east of Dyer Street has been expanded. The maintenance building as well as the building used by the Boy Scouts is visible. A baseball field can be seen east of the maintenance area. One of the storage tanks on Marcum Street was removed. Orcutt development has expanded farther north.

In the Firescope III aerial photograph dated 1980–81, four western parcels appear to have been cleared. The Orcutt Union School District now has two structures on their parcel. A drainage swale is visible in the northern section of the adjacent parcel west of the Site. One house is visible south of Rice Ranch Road.

In the aerial photograph dated 1989 several paths can be seen crossing the Site. There are two structures visible north of the old farmhouse. Three buildings and a parking lot are visible on the Orcutt Union School District property. Another building appears for the first time south of Rice Ranch Road.

In the 1997 aerial photograph, the Site looks much the same as it did in 1989. A trail leads to what appears to be a small clearing in the center where an object or small structure is visible. There are numerous trees on the southeastern portion of the Site. In this photograph, the Site and vicinity appear much as they do today.

### **2.4.3 Historical Topographic Maps**

A review of historical topographic maps on file at the University of California, Santa Barbara and obtained from ERD (dated 1942, 1947, 1959, 1967, and 1974) indicated that the Site has been vacant since 1947 (Appendix D). The maps do not indicate railroad tracks were near the Site. Old Town is situated on an upland between two forks of Orcutt Creek.

On the topographic map dated 1942, Highway 1 follows the creek in Graciosa Canyon, passes two oil storage tanks west of Orcutt, and turns left on Clark Street. Two more oil storage tanks are located approximately 0.5 mile southwest of Orcutt and the Site. The Site is vacant, but a building is indicted southeast of the Site (farmhouse). Union School is east of the Site. Numerous oil wells and well pads are visible in the Orcutt Oil Field in the lower portion of the map, on both sides of the Divide Substation. Rice Ranch Road ends at Broadway Street, southeast of Orcutt.

On the topographic map dated 1947, two storage tanks and oil pits are located southwest of the intersection of Highway 1 and Clark Street, west of Orcutt. The two storage tanks southeast of the Site have access roads east from Highway 1. Additional farmyard building(s) have been added. Orcutt Union School appears unchanged. The roads and oil wells of the Orcutt Oil Field on Graciosa Ridge are clearly visible.

On the 1959 topographic maps, the Site and surrounding areas look much the same as they did on the 1947 map. The farmhouse building adjacent to the Site looks smaller than on the previous 1947 map. It appears that some of the farmyard building(s) have been removed.

On the 1967 topographic map, Union School has more buildings with a different configuration. A building is situated northeast of the Site where the Orcutt Union School District offices are currently located. One of the storage tanks south of Clark Street has been removed. A major highway (Highway 1) is now adjacent to the old Highway 1 and is routed farther west of Orcutt. An interchange connects Highway 1 with Highway 135 southwest of Orcutt. Highway 135 extends at least as far north as Patterson Road. A golf course is located south of Highway 135, approximately 1 mile south of the Site. Several additional developed areas are east of Orcutt.

The 1974 topographic map looks much the same as the 1967 map. Another development is indicated on the map north of Orcutt. Rice Ranch Road has been constructed at its current location.

#### **2.4.4 Department of Oil, Gas, and Geothermal Map Review**

DOGGR Wildcat Map No. 311 indicates that no petroleum production wells are located on the Site. Two wells (Lucas No. 1 and Los Nietos-Gulf S.S.T.) within a 1-mile radius of the Site are listed as abandoned and plugged.

The "Lucas No. 1" well was drilled by the Recruit Oil Company to a depth of 860 feet below ground surface (bgs) in April 1905. This well is located approximately 0.75 mile south-southeast of the Site and the south fork of Orcutt Creek. It was abandoned in October 1905. Due to its distance from the Site, the well is not likely to have adversely affected the Site.

The "Los Nietos-Gulf S.S.T." well was drilled to a depth of 9,437 feet bgs in 1953 by the Los Nietos Company. This well is located approximately 1 mile northeast of the Site and Old Town, and north of Orcutt Creek. The well was dry; it was abandoned in February 1953 and a Report of Well Abandonment was filed with DOGGR. Due to its distance from the Site, the well is not likely to have adversely affected the Site.

#### **2.4.5 Building Permit Review**

Records reviewed at the SBCPD office indicate that no permits were issued for the Site. However, several records pertaining to the Site vicinity were found during a review of building permits. One permit concerned building a structural addition to the old farmhouse and a new garage at 621 Dyer Street. The completion was filed on March 9, 2000. The original home was built in 1923, however there is no documentation available on the original farm buildings. On March 23, 1983, permits were issued to move the existing garage and workshop (built in 1910). The workshop was upgraded at the time of relocation under permit number 95339.

#### **2.4.6 County of Santa Barbara Protection Services Division Record Review**

Tetra Tech contacted Steve Nailor and Paul Bailey of SBCPSD to evaluate if there had been any reported hazardous waste violation at the Site. The agency records indicate there have been no waste violations at the Site.

Tetra Tech requested that the SBCPSD review their files for information on properties identified in the EDR database report in the area surrounding the Site. SBCPSD reported that no indications of any significant environmental impacts on the Site from offsite sources within 0.25 mile were identified. Incidents beyond 0.25 mile are not likely to adversely affect the Site.

The Orcutt Union School maintenance facility, located across Dyer Road from the Site had removed a leaking underground storage tank (UST) and contaminated soil under guidance of the SBCPSD. Aboveground fuel tanks were installed. Several and minor over spills (less than 0.1 gallon) during vehicle fueling were reportedly cleaned up by soil removal and replacement (Black 2001).

Two gasoline stations located on Clark Street in Old Town were reported in the EDR database. These gasoline stations are approximately 0.5 mile northeast of the Site. It is unlikely that any resulting contamination to groundwater from these gasoline stations would migrate 0.5 mile to adversely affect groundwater at the Site.

#### **2.4.7 Chain-of-Title Search Review**

Title Runners, located in Santa Barbara, California, conducted a chain-of-title search dating from August 1948 to January 31, 2001. The chain-of-title search is included in Appendix E and is summarized in Table E-1. Five assessor's parcels that comprise the proposed Site are included in the chain-of-title search. The four western parcels are currently deeded to Winston B. Grigg and Katherine H. Grigg, Trustees of the Winston B. Grigg and Katherine H. Grigg Living Trust. These records indicate that the Grigg family has owned the four parcels since May 1969. The fifth parcel located in the northwest corner of Dyer Street and Rice Ranch Road is currently deeded to Donovan I. Griffith and Rhea Rehark-Griffith. The Griffiths have owned the property since November 1968. The southeast section of the Griffith property with buildings will not be included in the Site. Both the Griggs and Griffiths obtained their properties from the Soares family who have owned these properties and several surrounding properties since at least August 1948.

#### **2.4.8 Previous Assessment**

There have been no previous assessments performed on the Site (Black 2001).

### **3.0 REGIONAL AND LOCAL GEOLOGY/HYDROGEOLOGY**

#### **3.1 REGIONAL GEOLOGY**

The Santa Maria Basin is a wedge shaped region between two structural provinces: the Southern California Coast Ranges (San Raphael Mountains) on the northeast and the Transverse Ranges (Santa Ynez Mountains) on the south. Physiographically and structurally, the San Raphael Mountains lie at the southern edge of the Coast Ranges which consist of northwest trending mountain ranges and valleys induced by folds and faults of the same orientation (Worts 1951). The Santa Ynez Mountains form the western part of the westward-trending Transverse Ranges and comprise folds and faults generally of the same orientation. The region included between the two ranges is a structural depression, the Santa Maria

syncline, and older rocks, which are exposed in the bordering ranges, are concealed at considerable depth beneath Tertiary and Quaternary, rocks and alluvium in the basin. The major structural features of the district have a general west-northwestward trend parallel to the elongation of the lowland itself and of the basin. Minor westward- and northward-trending folds and faults however, extend across the trend of the major features (Woodring and Bramlette 1950).

### **3.2 LOCAL GEOLOGY**

The Site is situated in the southern Santa Maria Basin in the Southern Central Coast Ranges Province of central California. The Casmalia and Solomon Hills, whose crests form the southern drainage divide of the area, are essentially one continuous range of hills extending westward from their junction with the San Raphael Mountains near Foxen Canyon to the Pacific Ocean. These hills are separated by a low saddle at an altitude of 520 feet, known as the Graciosa Divide (Worts 1951).

Recent dune sand deposits occur at the ground surface in the Site area and extend to approximately 50 feet bgs. The dune sands rest conformably on the Pleistocene Orcutt Formation which extends to approximately 250 feet bgs and is derived from essentially non-marine deposits of sand and clay (Dibblee 1989). The upper member of the Orcutt Formation, is mostly loosely compacted massive medium-grained clean sand, stained reddish brown by ferruginous cement and interstratified with lenses of clay. Where exposed, the member stands in nearly vertical cliffs. The lower member is chiefly loosely compacted, coarse gray to white gravel and sand. Its contact with the upper member is sharp, and in surface exposures the lower member is usually intricately rilled and fluted (Worts 1951). Records of a well drilled for the Orcutt Union School District indicate the upper member of the Orcutt Formation is approximately 120 feet thick in the Site area. The lower member was encountered at depths of 170 to 200 feet bgs. The Orcutt Formation is underlain by marine and non-marine Tertiary bedrock formations, including the Paso Robles Formation, Careaga Sandstone, Foxen Mudstone, Sisquoc Formation, and Monterey Shale, to a depth of about 7,000 feet. The Franciscan Formation is encountered below the 7,000-foot depth (Woodring and Bramlette 1950).

There is relatively little direct evidence in the region of active faulting (such as offset bedding or structures observed at the surface fault). However, broad bands of seismicity unrelated to surface faults and other evidence indicate that region is seismically active. The seismic activity is interpreted to be associated with blind thrust faults. Several active, potentially active and inactive faults exist within the basin and region (City of Santa Maria 1995). The Site is located within 2 kilometers of the known Casmalia fault. The Casmalia fault is considered an active, type B fault with a maximum moment between 6.5 and 7.0 and a slip rate from 2 to 5 millimeter/year (California Department of Conservation, Division of Mines and Geology 1997).

### **3.3 HYDROGEOLOGY**

#### **3.3.1 Hydrogeology**

##### ***Regional Aquifer***

The regional aquifer in the Santa Maria basin is contained within the alluvium, including local terrace and channels deposits, Orcutt and Paso Robles formations, and the Careaga sand. The bottom of the Santa Maria Valley aquifer is considered to be at the base of the Careaga sand. The main water body of the Santa Maria Valley aquifer area extends continuously from the head of the Sisquoc plain on the east, to the Pacific Coast on the west, and is contained within the unconsolidated deposits that fill the major syncline (Section 3.1). Beneath the eastern and larger part of the area, the main water body is unconfined;

however, under the western part of the Santa Maria plain the water is confined beneath the upper member of the alluvium (Worts 1951). In the area of confined water, there is essentially no infiltration from land surface because of the low permeability of the confining beds. On the other hand, the area of unconfined water is one of potential recharge where water is able to infiltrate from the land surface down to the water table of the main water body. The regional aquifer is a principal groundwater source for the agricultural production in the City of Santa Maria and is recharged by infiltration from Twitchell Reservoir, the Sisquoc River and the Cuyama River (Ahlroth 2000). The Orcutt formation supplies water to wells in appreciable quantities only beneath the Orcutt upland, where the lower member is one of the principal water-producing deposits. It supplies water of the perhaps the best quality in the area to the City of Santa Maria and the town of Orcutt. In the years between 1938 and 1942, water levels in these wells fell below the top of the lower member, since then they have recovered. Toward and beyond the eastern end of the upland, the lower member rises above the water table and is therefore useless as a source of supply. To the west, it becomes less productive until at the coast it consists mostly of clay, silt, and fine sand, and is considered a poor water-yielding deposit (Worts 1951).

Data were obtained and reviewed from SBCWA on the following wells: 9N/34W-9R1 (9R1), 09N/34W-14G01S, 09N/34W-14C01S, 09N/34W-15A01S (Oak Well), 09N/34W-13F02S, 09N/34W-12P03S, and 09N/34W-13F01S. The SBCWA provided hydrographic data for well 9R1, indicating water level trends in the Orcutt area over the past 44 years (Appendix F). Well 9R1 is located approximately 1 mile northwest of the Site north of Clark Avenue at the end of Palomino Drive. Groundwater elevation measurements from 9R1 can be used to approximate the high and low water levels at the Site (Ahlroth 2001). Data from the SBCWA indicates recent maximum groundwater elevation of approximately 118 feet above mean sea level (msl) (approximately 157 feet bgs) for well 9R1 in 2000. The data indicate that water levels drop more than 70 feet during periods of drought. The lowest recorded water level in the well, approximately 46 feet above msl (229 feet bgs), was recorded in 1978. The local natural water gradient and flow direction in the vicinity of the Site are to the southwest, similar to the surface topography (Brett 2001).

The EDR Radius Map report lists six municipal potable wells in Orcutt operated by the Cal Cities Water Company: 09N/34W-14G01S, 09N/34W-14C01S, 09N/34W-15A01S (Oak Well), 09N/34W-13F02S, 09N/34W-12P03S, and 09N/34W-13F01S. One well within close proximity to the site is the "Oak Well" located approximately 0.5 mile east of the site south of Clark Avenue near Oak Street. During January 2001, the static water level was approximately 283 feet bgs and the pumping level was at 295 feet bgs in the Oak Well. Groundwater flow near the Oak well is northeast to southwest (Brett 2001). Results of chemical analyses for groundwater samples from these wells that exceed the laboratory detection level are included in the EDR report. Total dissolved solids and magnesium levels were slightly higher than the Regional Water Quality Control Board (RWQCB) water quality goals (Marshack 1998). Chemical constituents that may be of concern to human health risks were not found above the drinking water standard maximum contamination levels. Drawdown from constant pumping of the municipal wells locally affects groundwater levels in other Orcutt upland wells. The Orcutt Union School District has one irrigation well east of Dyer Street on school property. The EDR-Radius Map report contains limited information for the Orcutt Union School District well (State of California well No. 10016).

### ***Perched Groundwater***

The fine grained nature of the recent and upper Pleistocene alluvium deposits beneath the Site confine the main aquifer of the Orcutt upland and create areas of perched groundwater and springs (Ahlroth 2001; Worts 1951). A thin, possibly discontinuous perched groundwater body occurs at depths up to approximately 50 feet bgs beneath the central part of the Orcutt upland in dune sand, above the main aquifer of the Orcutt formation, and supplies water in small quantities to a few domestic wells. Recharge

is wholly by infiltration of rain, and water not withdrawn is stored and eventually reaches the main water body below (Worts 1951). A hardpan layer of cemented sandstone approximately 2 to 5 feet bgs and up to 10 feet thick, inhibits vertical percolation of surface water in the Site area, creating seasonal wet soil conditions. Drainage of near surface water, perched above the hardpan, flows along the top of the hardpan toward the southwest discharging to the surface where the hardpan is exposed or near grade (Ahlroth 2001).

### **3.4 SURFACE WATER**

The principal streams draining the north flanks of the Casmalia and Solomon Hills in the Site vicinity are in Solomon Canyon (Orcutt Creeks) and Graciosa Canyon. The runoff of the streams is ephemeral and extremely low. Surface water infiltration in the Site area is inhibited by a loss-permeable hardpan soil layer approximately 2 to 5 feet bgs. Wet soil conditions occur at the Site during periods of rainfall with surface water runoff discharging to grade primarily along Rice Ranch Road.

As shown on the Federal Emergency Management Agency (FEMA) map for Santa Barbara County, California (July 1999) and the map provided by EDR, the Site area is designated Zone C and is considered to be outside both the 100-year and 500-year floodplains.

Tetra Tech reviewed the Inundation Map of the Twitchell Dam (U.S. Department of the Interior, Bureau of Reclamation 1975) obtained from the city of Santa Maria Building and Safety Department. This map indicates the Site would not be within the inundation zone for the Twitchell Reservoir if the dam were to fail.

### **3.5 METEOROLOGY**

The climate of the Santa Maria area is temperate marine with an annual precipitation of approximately 11.4 inches per year. Annual daytime temperatures range between 45 and 70 degrees Fahrenheit. During the summer, the average temperatures are moderate and precipitation is low. In contrast, average winter temperatures are colder with greater precipitation (City of Santa Maria 2001).

## **4.0 SITE RECONNAISSANCE AND INTERVIEWS**

On February 5, 2001, Tetra Tech performed a reconnaissance of the Site property. The purpose of the reconnaissance was to evaluate the Site and neighboring properties for potential hazardous substance use, storage, and disposal, including the presence of underground storage tanks, asbestos-containing materials, PCB-containing transformers or electrical equipment, and/or evidence of soil staining, stressed vegetation, ponds, pits, sumps, suspicious odors, fill and depressions, drums and barrels, or any other condition indicative of contamination. A checklist of items of concern was completed using the information obtained during the Site reconnaissance. This checklist is included in Appendix G. Photographs were taken of the Site and its adjoining properties to document current conditions. Copies of these photographs are in Appendix B.

### **4.1 STORAGE TANKS AND DRUM STORAGE**

No evidence of storage tanks or drum storage was found during the Site reconnaissance. Two 500 gallon aboveground storage tanks are located at the fenced Orcutt Union School District maintenance yard across Dyer Street from the Site. No other evidence of tanks or drum storage was observed on adjacent properties. Several gasoline stations on Clark Street have underground fuel storage tanks, a distance of



0.5 mile or greater from the Site. The Unocal Processing Station on Marcum Road, 0.25 mile northwest of the Site, has a large aboveground petroleum storage tank. It is unknown if this tank is in use.

#### **4.2 HAZARDOUS SUBSTANCES AND PETROLEUM PRODUCTS**

Tosco and Torch petroleum companies were contacted to determine if any oil transmission pipelines were located on or near the property. Both companies reported that no pipelines were located in the area of the Site (Marcellic 2001; Nichols 2001). No evidence was observed at the Site of hazardous substances or petroleum products.

#### **4.3 USED OIL**

No evidence of used oil storage or release to grade was found during the reconnaissance of the Site.

#### **4.4 PESTICIDES/HERBICIDES**

Data reviewed in historic aerial photographs of the Site indicate the Site was not used for agricultural production for at least 60 years (prior to 1938 through present) (Refer to Section 2.4.2). No records of pesticide and herbicide usage during the past 4 years are on file with the SBCOAC. The SBCOAC does not retain files for more than 4 years. According to Jeff Saleen at the SBCOAC, the Site has never been used for crop production. In the 1990s, the occupant of the Griffith parcel had attempted to grow and sell Christmas trees. Many of these trees remain on the property. Irrigation lines are still visible among the trees, which are now approximately 30 feet tall. According to Ms. Sally Griggs, one of the Site owners, there has been no mixing, spilling, or storage of pesticides or herbicides on the Site (Griggs 2001). No evidence of pesticides storage or mixing was observed during the reconnaissance.

#### **4.5 POTABLE WATER SUPPLY/WELLS**

Field observations and data from the SBCWA indicate no water supply wells are located at the Site. An irrigation well is located on the Orcutt Union School property adjacent to the Site (Black 2001). This well supplies irrigation water for school needs. Refer to Section 3.3.1 and the EDR report in Appendix A for further information on nearby wells.

#### **4.6 WASTEWATER**

No industrial wastewater is produced at the Site.

#### **4.7 STORM WATER**

It appears that most storm water and surface water partially percolates directly into the ground to the hardpan layer and then flows along the impermeable surface to the southwest. Overland flow drains from the Site to the south along a natural swale or southwest toward Rice Ranch Road. As indicated in Section 2.1, excessive seasonal rainfall can cause shallow springs to flow. The Orcutt upland generally slopes toward the southwest and subsurface water flows along the hardpan at the Site for extended periods after excessive rainfall.

#### **4.8 GROUNDWATER**

The groundwater of the main aquifer of the Santa Maria Valley in the vicinity of the Site is found at approximately 157 to 229 feet bgs, depending on the annual rainfall and periods of drought. A thin,

possibly discontinuous perched groundwater body may be present beneath the Site at depths up to approximately 50 feet bgs. Refer to Section 3.3.1 for a more detailed discussion of the hydrogeology of the Orcutt upland.

#### **4.9 WETLANDS/POOLS**

No wetlands or pools were observed on the property during the reconnaissance of the Site. Several willows grow on the Site and the adjacent western parcel due to seasonal water conditions. A drainage channel trending southwest across the adjacent western parcel drains toward Rice Ranch Road. A map provided in the EDR report (Appendix A) indicated that according to the National Wetlands Inventory (1994) the nearest wetlands are located 0.125 to 0.25 mile south of the Site. This area is designated PFOA (palustrine, forested, temporarily flooded) and is located along the south fork of the Orcutt Creek.

#### **4.10 SEWAGE DISPOSAL SYSTEM/SEPTIC SYSTEMS**

The Site does not contain structures and is not connected to the local sewer system. There are no known septic systems at the Site. Property to the north and east of the Site are connected to the municipal sewer. Properties south and west of Rice Ranch Road currently use septic systems (Silva 2001). General drainage is to the south or southwest and it is unlikely that these septic systems would affect the Site.

#### **4.11 DRAINS/SUMPS/PITS**

No drains, sumps, or vaults were observed at the Site. Several shallow pits approximately 1 to 3 feet bgs were scattered throughout the northern half of the Site and adjacent western parcel. These pits were excavated by local children for forts and a bicycle obstacle course (Black 2001).

#### **4.12 SOLID WASTE**

No evidence of solid waste disposal was observed at the Site. Several items of trash were scattered around the Site, including plastic bottles, bags, aluminum cans, and paper.

#### **4.13 PCB-CONTAINING TRANSFORMERS AND EQUIPMENT**

No power poles or transformers were located at the Site. However, power poles with transformers were observed adjacent to the Site, along the south side of Rice Ranch Road. Rice Ranch Road was constructed between 1967 and 1974. The poles were installed after that time and it is not likely that these transformers have contributed PCB contamination to the Site. Pacific Gas and Electric (PG&E) owns and is responsible for the maintenance of the transformers. On request, PG&E will evaluate the transformer dielectric fluids for PCBs. If the transformer does not contain PCBs at a concentration above 50 parts per million, PG&E will charge approximately \$2,000 to \$3,000 per transformer to perform the evaluation.

#### **4.14 STAINED SOILS/STAINS/STRESSED VEGETATION**

No evidence of stained soil was observed at the surface during reconnaissance of the Site.

#### **4.15 ODORS/POOLS OF LIQUIDS**

No odors or pools of liquids were observed during the Site reconnaissance.

#### **4.16 ASBESTOS-CONTAINING MATERIALS**

There are no structures on the Site. No visual evidence for any suspected asbestos-containing materials was observed at the Site.

#### **4.17 LEAD-BASED PAINT**

There are no structures on the Site. No visual evidence for any suspected lead-based paint materials was observed at the Site.

#### **4.18 RADON**

Radon is a naturally occurring, odorless, colorless gas produced by certain geologic materials. It is known to be a human carcinogen and can pose a cancer risk greater than one in one million in humans at concentrations equal to or greater than 4 picoCuries per liter (pCi/L). The EDR environmental database search indicated that the Site is in a Radon Zone Level 1 for Santa Barbara County. Zone Level 1 areas have a predicted average indoor screening level greater than 4 pCi/L. Because of this radon zoning classification, there is a potential that enclosed areas such as structures may contain radon at concentrations that exceed the one in one million cancer risk to humans. Eleven sites were tested in Orcutt for radon activity. One hundred percent of the sites tested were found to be <4 pCi/L. The average activity was 0.318 pCi/L for first floor living areas (EDR 2001). Basement areas and second floor living areas were not reported. In open areas of the Site, it is unlikely that radon would pose an environmental risk.

#### **4.19 ELECTROMAGNETIC RADIATION**

Electromagnetic radiation is not considered a significant environmental problem at this Site, since no sources of excessive electromagnetic radiation were observed or identified during the Site reconnaissance. High-power transmission lines were not observed anywhere in the vicinity of the Site.

#### **4.20 COMPLIANCE ISSUES**

Based on observations made during the Site reconnaissance, operations at the Site are generally performed in accordance with applicable environmental compliance regulations. These include periodic disking of vegetation on vacant land for fire abatement (Griggs 2001).

### **5.0 ENVIRONMENTAL RECORDS REVIEW**

As part of this assessment, Tetra Tech retained the services of EDR, a Connecticut-based company that maintains comprehensive environmental information databases and specializes in providing such data for use in real estate and environmental documents, such as this ESA. EDR performed a search of 16 environmental databases, which conformed to the standards of *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM 2000). For a complete description of each of the 16 environmental databases, please see Appendix A.

Among the 16 environmental databases searched were National Priorities List (NPL) sites; Resource Conservation and Recovery Information System - Treatment, Storage, and Disposal (RCRIS-TS) facilities; Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) sites; and California Leaking Underground Storage Tank List (LUST) sites. Each of the 16 databases was searched at a radius appropriate for ASTM E1527-00. Sites identified by the database

searches are listed and plotted in the complete environmental database report found in Appendix A. The “site number” can be used to cross-reference these data with the site plotted in Figure A-1.

There are three California Hazardous Material Incident Report System (CHMIRS) sites within 1 mile of the Site. These are sites with known releases or spills of hazardous materials. The closest reported incident is at 201 South Broadway, approximately 0.125 mile northwest of the Site. A dry fuel gas was released into the air in January 1991. Gas dissipates quickly in the atmosphere, therefore there would not currently be any residual gas from this incident to affect the Site. The second reported release occurred at Clark Street and Orcutt Road (Highway 135) a distance of 0.5 mile northeast of the Site. A spill of 20 gallons of flammable liquid was released to the ground in August 1991. The third incident involved another release of 7 gallons of flammable fluid to the ground at Rice Ranch Road and Princeton, approximately 0.5 mile east of the Site, in February 1991. It is unlikely that the small amounts of these hazardous materials released to ground at a distance of 0.5 mile from the Site have adversely affected the Site.

Two significant sites, Texaco and Unocal service stations located within 0.5 to 1 mile northeast of the Site, are reported in the environmental database search. Both of these sites are listed in the CORTESE database, indicating that soil and/or groundwater contamination has occurred. The CORTESE database identifies public drinking water wells with detectable levels of contamination, hazardous substance sites selected for remedial action, sites with known toxic material identified through abandoned site assessment, sites with underground storage tanks having reported releases and all solid waste disposal facilities from which there is known migration. The source for the database is the California Environmental Protection Agency/Office of Emergency Information. The Unocal service station is also listed in the State Leaking Underground Storage Tank (LUST) Information System database as having soil contamination only from a UST release. Because the Texaco and Unocal service stations are located over 0.5 mile from the Site, it is not likely that the Site has contaminated from fuel releases at these facilities.

Orcutt Union School was identified in the environmental database search as a HAZNET site producing hazardous waste that is disposed of at the transfer station. It is not likely that the Orcutt Union School waste generation has impacted the subject Site (refer to Section 2.4.6). No other indications of any significant environmental impacts at the Site or from nearby properties were identified in the environmental database search.

Several industries in Orcutt have implemented a Risk Management Plan (RMP) in conjunction with SBCPSD due to the proximity of residential properties and the Orcutt Union School. These records are made available to the communities as their right to know (Bailey 2001).

## **6.0 CONCLUSIONS**

Based on the results of the work performed for this assessment, Tetra Tech makes the following conclusions regarding potential environmental liabilities at the Site.

### **6.1 PAST USES OF THE SITE AND ADJOINING PROPERTIES**

#### **6.1.1 Sanborn Map Review**

No Sanborn Maps were available for the Site area.

## **6.1.2 Historical Map and Aerial Photograph Review**

Data reviewed in historical topographic maps and aerial photographs indicate the Site was vacant, undeveloped land from 1938 to present. The Site has been vacant of structures during this entire period. In the aerial photographs from 1938 to present, the Site is vacant land bordered by Orcutt Union School on the east, vacant land on the west, a residential subdivision to the north, and the adjacent old farm buildings to the southeast. Until around 1960, the property south of the Site was vacant land. More recently, there is a church and house located across Rice Ranch Road. Based on review of the aerial photographs, it is not likely that environmental contamination has occurred from activity on the Site.

## **6.1.3 Historical Topographic Maps**

Topographic maps reviewed indicate that the Site has been vacant land since at least 1947. No oil wells, water wells, wetlands, or water bodies have been indicated on any of the maps.

## **6.1.4 DOGGR Maps and Records**

A review of the DOGGR map for the area indicates that no petroleum production wells are located on or near the Site. The two petroleum production wells nearest to the Site are located approximately 1 mile away, and are listed as plugged and abandoned. It is unlikely that these oil wells would have adversely affected the Site.

## **6.1.5 Title Search Review**

The chain-of-title records for the Site indicate the Griggs have owned the four western parcels since May 1969. The Griffiths have owned the eastern parcel since November 1968. Prior to these owners, the Soares family had owned all the property since at least 1948 (Appendix E, Table E-1).

## **6.1.6 Building Permit Review**

Records reviewed at the SBCPD office indicate that no permits were issued for the Site. On the southeastern portion of the Griffith parcel that is not included in the Site, a permit was issued for 621 Dyer Street to remodel the farmhouse and move the garage and workshop to their current locations.

## **6.1.7 Santa Barbara County Agricultural Commissioner's Office**

The Site was used vacant undeveloped land for at least 60 years (1938 through present). No records of pesticide and herbicide usage during the past 4 years for the Site were available from the SBCOAC. According to Jeff Saleen at the SBCOAC, the western parcels have always been vacant land. Christmas trees were grown some time during the 1990s and most of them remain on the property. There has been no mixing or spilling of pesticides or herbicides on the Site (Griggs 2001). No evidence of pesticides storage or mixing was observed during the reconnaissance.

## **6.1.8 County of Santa Barbara Department of Protection Services Record Review**

The SBCPSD records indicate there have been no waste violations at the Site. SBCPSD also reported that no indications of any significant environmental impacts on the Site from offsite sources within close proximity of the Site were identified. Tetra Tech requested that the SBCPSD review their files for information on a properties identified in the EDR database report in the area surrounding the Site. After reviewing the information, it has been determined that due to the nature and proximity of the releases, the

incidents would not likely affect the Site. Several industries in Orcutt have implemented a Risk Management Plan (RMP) in conjunction with SBCPSD due to the proximity of residential properties and the Orcutt Union School. These records are made available to the communities as their right to know.

### **6.1.9 Previous Investigations**

There have been no previous investigation performed on the Site (Black 2001; Griggs 2001).

## **6.2 REGIONAL AND LOCAL GEOLOGY/HYDROGEOLOGY**

Recent dune sands are exposed at the ground surface in the Site area to approximately 50 feet bgs. They are underlain by the Pleistocene Orcutt formation, which is derived from essentially non-marine deposits of sand and clay. The upper member is approximately 120 feet thick in the Site area and is mostly loosely compacted massive medium-grained clean sand, stained reddish brown by ferruginous cement and interstratified with lenses of clay. The lower member is chiefly loosely compacted, coarse gray to white gravel and sand (Worts 1951). The lower member is encountered at depths of approximately 170 to 200 feet bgs.

The regional aquifer in the Santa Maria basin is contained within the alluvium, including local terrace and channels deposits, Orcutt and Paso Robles formations, and the Careaga sand. The bottom of the regional aquifer is considered to be at the base of the Careaga sand. The Orcutt formation supplies water to wells in appreciable quantities only beneath the Orcutt upland, where the lower member is one of the principal water-producing deposits. It supplies water of the perhaps the best quality in the area to the City of Santa Maria and the town of Orcutt. In the years between 1938 and 1942, water levels in these wells fell below the top of the lower member and did not produce; since then, they have recovered. Toward and beyond the eastern end of the upland, the lower member rises above the water table and is therefore useless as a source of supply. To the west, it becomes less productive until at the coast it comprises mostly clay, silt, and fine sand, when it is considered a poor water-yielding deposit (Worts 1951).

The fine-grained nature of the recent and upper Pleistocene alluvium deposits beneath the Site confine the main aquifer of the Orcutt upland and create areas of perched groundwater and springs (Ahlroth 2001; Worts 1951). A thin, possibly discontinuous perched groundwater body occurs at depths up to 50 feet bgs beneath the central part of the Orcutt upland, in dune sand above the main aquifer of the Orcutt formation, and supplies water in small quantities to a few domestic wells. The historic water levels in the main aquifer have fluctuated more than 70 feet in the last 70 years from approximately 46 feet above msl (229 feet bgs) to 118 feet above msl (157 feet bgs). The local water gradient and flow direction in the vicinity of the Site are to the southwest, similar to the surface topography (Brett 2001).

Based on information provided to Tetra Tech by the Santa Barbara County Water Agency and EDR, there are no water wells located on the Site. The closest water well is located at Orcutt Union School and the water is used for irrigation only (Section 4.6).

## **6.3 SURFACE WATER AND FLOODING**

A hardpan layer of cemented sandstone approximately 2 to 5 feet bgs and up to 10 feet thick, inhibits vertical percolation of surface water at the Site. Drainage of near surface water, perched above the hardpan, flows along the contact toward the southwest. Surface soil holding moisture may appear hummocky and remain wet following periods of rainfall. Natural discharge of excessive water accumulation may result in shallow springs (Ahlroth 2001). Excessive surface water drains off the Site by overland flow to the south-southwest and to Rice Ranch Road.

A review of local flood control records maintained by the City of Santa Maria and maps provided by EDR indicates that the Site is designated zone C, and is outside of the 500- and 100-year flood zones. The Site does not lie within the inundation zone for catastrophic failure of the Twitchell Reservoir. It is not likely that the Site will be inundated by flooding induced by overflowing from watercourses due to excessive precipitation.

## **6.4 SITE RECONNAISSANCE AND INTERVIEWS**

### **6.4.1 Storage Tanks and Drum Storage**

No evidence of storage tanks or drum storage was found on Site during the reconnaissance. Two 500 gallon aboveground fuel storage tanks are located in a fenced area at the Orcutt Union School District maintenance yard across Dyer Street from the Site. No other evidence of tanks or drum storage was observed on adjacent properties

### **6.4.2 Hazardous Substances and Petroleum Products**

Tosco and Torch petroleum companies were contacted to determine if any oil transmission pipelines were located on or near the property. Both companies reported that no pipelines were located in the area of the Site (Marcellic 2001; Nichols 2001). No evidence was observed at the Site of hazardous substances or petroleum products.

The Orcutt Union School aboveground fuel storage tanks across Dyer Street from the Site are discussed in Section 6.4.1.

### **6.4.3 Used Oil**

No evidence of used oil storage or release to grade was found during the reconnaissance of the Site.

### **6.4.4 Pesticides/Herbicides**

Pesticides and herbicides are not known to have been used at the Site, which has been vacant land since at least 1938. No records of pesticide and herbicide usage or violations of record during the past 4 years are on file with the SBCOAC. Pesticides were never mixed, stored, or used on the four western parcels of the Site (Griggs 2001). There was a barn on the eastern fifth parcel of the Site between 1938 and 1954, but it is not likely that pesticides were stored or mixed there, as no agricultural activity took place on the property. No evidence of pesticide storage or mixing was observed during the reconnaissance.

### **6.4.5 Potable Water Supply/Wells**

Field observations made during the Site reconnaissance and data maintained at the SBCWA indicate there are no water supply wells located on the Site. The water supply well on the adjacent Orcutt Union School property is used for irrigation. Potable water in the area is obtained from the municipal water supply.

### **6.4.6 Wastewater**

No industrial wastewater is produced at the Site.

**6.4.7 Wetlands/ Pools**

No wetlands or pools are located on the Site.

**6.4.8 Sewage Disposal System/Septic Systems**

The Site does not contain structures and is not connected to the local sewer system. There are no known septic systems at the Site. Properties to the north and east of the Site are connected to the municipal sewer. Two adjacent properties to the south, considered downgradient from the Site, are known to have septic systems (Silva 2001).

**6.4.9 Drains/Sumps/Pits**

No drains, sumps, or vaults were observed at the Site. Several pits seen during the Site reconnaissance are attributed to local children playing in the vacant field (Black 2001).

**6.4.10 Solid Waste**

No evidence of solid waste disposal was observed at the Site. Minor household litter was found scattered on the Site.

**6.4.11 PCB-Containing Transformers and Equipment**

No power poles or transformers were located at the Site. However, power poles with transformers were observed adjacent to the Site, south of Rice Ranch Road. PG&E owns and is responsible for the maintenance of the transformers. Pole-mounted transformers on the adjacent property are not considered a potential PCB contamination source for the Site due to distance from Site and location across Rice Ranch Road. If PCB spills had been reported, the transformers would have been replaced by PG&E with non-PCB transformers. Rice Ranch Road was constructed between 1967 and 1974. The poles were installed after that time and it is not likely that these transformers have contributed PCB contamination to the Site. On request, PG&E will evaluate the transformer dielectric fluids for PCBs.

**6.4.12 Stained Soils/Stains/Stressed**

No evidence of stained soil was observed at the surface during reconnaissance of the Site.

**6.4.13 Odors/Pools of Liquids**

No odors or pools of liquids were observed during the Site reconnaissance.

**6.4.14 Asbestos-Containing Materials**

No visual evidence for any suspected asbestos-containing materials was observed at the Site.

**6.4.15 Lead-Based Paint**

No visual evidence for any suspected lead-based paint materials was observed at the Site.



#### **6.4.16 Radon**

The EDR environmental database search indicated that Santa Barbara County is in a Radon Zone Level 1 area. Zone Level 1 areas have a predicted average indoor screening level greater than 4 pCi/L. It is known to be a human carcinogen and can pose a cancer risk greater than one in one million in humans at concentrations equal to or greater than 4 picoCuries per liter (pCi/L). Eleven sites were tested in Orcutt for radon activity. One hundred percent of the sites tested were found to be <4 pCi/L. The average activity was 0.318 pCi/L for first floor living areas (EDR 2001). Basement areas and second floor living areas were not reported. In open areas of the Site, it is unlikely that radon would pose an environmental risk.

#### **6.4.17 Electromagnetic Radiation**

Electromagnetic radiation is not considered a significant environmental problem at this Site, since no sources of excessive electromagnetic radiation were observed or identified during the Site reconnaissance.

#### **6.4.18 Compliance Issues**

Based on observations made during the Site reconnaissance and through other investigations, operations performed at the Site appear in accordance with applicable environmental compliance regulations. These operations include periodic disking of vegetation on vacant land for fire abatement (Griggs 2001).

### **6.5 ENVIRONMENTAL RECORDS REVIEW**

EDR performed an search of 16 environmental databases per ASTM phase I environmental assessment standards for properties within a 1-mile radius of the Site. The database search indicated several locations where hazardous substances may have been released to the environment within the prescribed search radius. The SBCPSD was contacted for additional information on this location to evaluate the potential impact on the Site. Based on the data reviewed, it is not likely that the Site has been contaminated from hazardous materials released from the properties identified in the EDR database search.

## **7.0 RECOMMENDATIONS**

Based on the results of the work performed for this assessment, Tetra Tech has not found any indication of the environmental hazards examined in accordance with California Assembly Bill 2644. We recommend that a further investigation of the Site is not required. However, Tetra Tech does make the following recommendation:

- Although radon gas levels measured in the Orcutt area were found to be < 4 pCi/L, a radon survey should be conducted for potential radon gas accumulation in any structures constructed on the Site. Radon-resistant construction techniques should be considered when designing the structures for the Site.

## **8.0 DISCLAIMER**

This report was compiled based partially on information supplied to Tetra Tech from outside sources and other information which is in the public domain. The conclusions and recommendations herein are based solely on the information Tetra Tech obtained in compiling the report. Documentation for the statements made in the report is on file at Tetra Tech's offices in Santa Barbara, California. Tetra Tech makes no warranty as to the accuracy of statements made by others which may be contained in the report, nor are any other warranties or guarantees, expressed or implied, included or intended by the report, except that it has been prepared in accordance with the current generally accepted practices and standards consistent with the level of care and skill exercised under similar circumstances by other professional consultants or firms performing the same or similar services. Since the facts forming the basis for the report are subject to professional interpretation, differing conclusions could be reached. Tetra Tech does not assume responsibility for the discovery and elimination of hazards that could possibly cause accidents, injuries, or damage. Compliance with submitted recommendations or suggestions does not assure elimination of hazards or the fulfillment of client's obligation under local, state, or federal laws or any modifications or changes to such laws.

None of the work performed hereunder shall constitute or be represented as a legal opinion of any kind or nature, but shall be a representation of findings of fact from records examined.

Respectfully submitted,

**TETRA TECH, INC.**

James R. Steele, R.G., C.E.G., C.Hg., R.E.A.  
Principal Geologist

Randy W. Griffith, P.E.  
Project Manager

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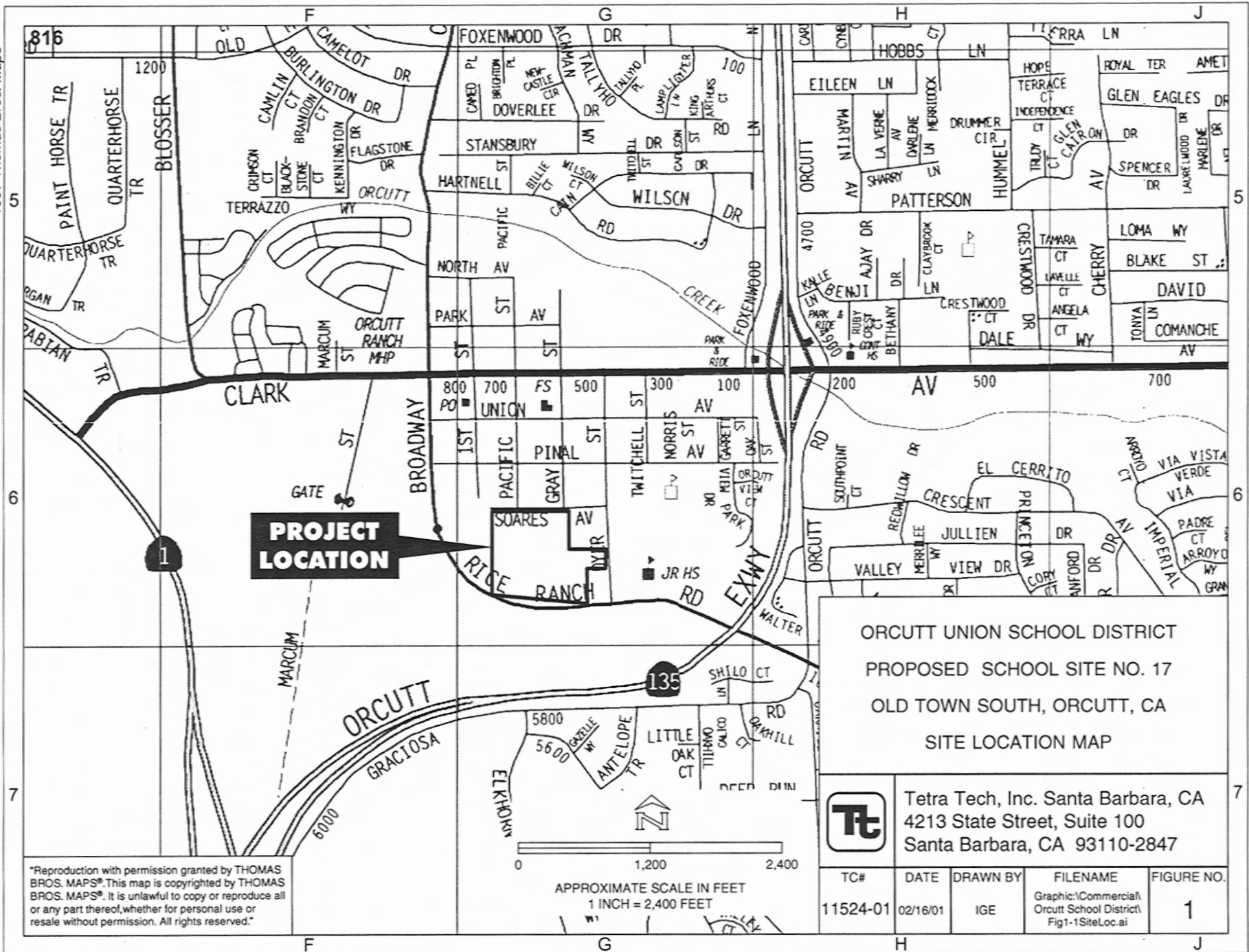
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## **FIGURES**



**PROJECT  
LOCATION**

ORCUTT UNION SCHOOL DISTRICT  
 PROPOSED SCHOOL SITE NO. 17  
 OLD TOWN SOUTH, ORCUTT, CA  
 SITE LOCATION MAP

**Tt** Tetra Tech, Inc. Santa Barbara, CA  
 4213 State Street, Suite 100  
 Santa Barbara, CA 93110-2847

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0 1,200 2,400  
 APPROXIMATE SCALE IN FEET  
 1 INCH = 2,400 FEET

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# **Natural Gas Pipeline Risk Analysis Study**



September 11, 2001  
Report No. 1201-037.000

Mr. Gary Black, Assistant Superintendent  
Orcutt Union School District  
501 Dyer Street  
Orcutt, California 93457

**Subject: Natural Gas Pipeline Risk Analysis Study**  
Orcutt Union School District  
Proposed School Site #17  
Orcutt, California

Dear Mr. Black:

ENSR Corporation (ENSR) is pleased to provide the results of our Natural Gas Pipeline Risk Analysis Study for proposed elementary school site #17, located in Orcutt, California. This study was completed in accordance with the scope of services outlined in our proposal (No. 1201-A83) dated June 26, 2001 and authorized by the Orcutt Union School District (OUSD) on July 3, 2001.

The risk analysis provides information, as required under California Code of Regulations, Title 5. Education, Section 14010(h), to determine whether a safety hazard is posed by natural gas pipelines that are located within 1,500 feet of the proposed school site. The risk analysis was conducted under the supervision of a California Registered Geologist (RG) and Certified Engineering Geologist (CEG).

This assessment includes information obtained from Southern California Gas Company (SCGC) and Greka Energy (Greka) regarding construction specifications, operating parameters, and inspection and maintenance procedures for the subject pipelines; an assessment of potential risks associated with possible rupture or failure of the pipelines; an identification of SCGC's and Greka's risk management procedures; and conclusions and recommendations.





Mr. Gary Black  
September 11, 2001  
Page 2

If you have any questions or comments concerning this report, please contact one of the undersigned at (916) 362-7100.

Sincerely,  
**ENSR Corporation**

A handwritten signature in cursive script that reads "Jackie House".

Jackie House, RG, CEG  
Sr. Program Manager

JH:AJK:JJ:em

A handwritten signature in cursive script that reads "Alan J. Klein".

Alan J. Klein, REA II  
Sr. Environmental Scientist

# **Natural Gas Pipeline Risk Analysis Study**

## **Orcutt Union School District Proposed School Site #17 Orcutt, California**

ENSR Project No: 1201-037.000

Prepared For:  
Orcutt Union School District  
501 Dyer Street  
Orcutt, California 93457

Prepared By:  
**ENSR Corporation**  
10324 Placer Lane, Suite 200  
Sacramento, California 95827

**September 11, 2001**

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## APPENDICES

APPENDIX A ..... Information Provided by Southern California Gas Company

APPENDIX B ..... Information Provided by Greka Energy

APPENDIX C ..... Screening-Level Calculation Plots

APPENDIX D ..... Screening-Level Calculation Methodology

## 1.0 INTRODUCTION

This report presents the results of the natural gas pipeline risk analysis study (RA) performed by ENSR Corporation (ENSR) for the proposed elementary school site #17 (Subject Property) located in Orcutt, California (**Figure 1**). The RA was authorized by the Orcutt Union School District (OUSD) on July 3, 2001, and was performed in accordance with the scope of services outlined in our proposal dated June 26, 2001.

The proposed school site consists of an approximately 11-acre parcel of undeveloped land (**Figure 2**). The site is relatively flat with no significant natural slopes (Earth Systems Pacific, February 13, 2001). Land use in the vicinity of the site primarily consists of residential development and vacant land.

A 12-inch diameter underground natural gas pipeline is located along the eastern side of Marcum Street, approximately ¼-mile west of the proposed school site (**Figure 2**). This pipeline is owned and operated by Southern California Gas Company (SCGC). A 6½-inch diameter underground natural gas pipeline that is owned and operated by Greka Energy (Greka) is located along the western side of Marcum Street and extends east of Marcum Street continuing toward the south (**Figure 2**).

### 1.1 Purpose and Scope

The purpose of the RA is to identify whether the subject natural gas pipelines could pose an unacceptable safety hazard to the proposed school site. California Code of Regulations (CCR), Title 5, Education, Section 14010(h), specifies that a school site shall not be located within 1,500 feet of a pipeline that can pose a safety hazard as determined by a risk analysis study.

In conducting the RA, ENSR obtained information on construction specifications, operating parameters, and inspection and maintenance procedures for the subject pipelines from SCGC and Greka. Potential risks associated with possible rupture or failure of the pipelines were evaluated based on: 1) an identification of events that could lead to pipeline failure; 2) an assessment of the probability or frequency of these events occurring; and 3) an estimation of the consequences that could result from a pipeline failure. Industry literature and statistics provided a basis for the event identification and qualitative probability analyses. Screening-level calculations were used as a basis for a qualitative consequence analysis and to estimate the individual risks at varying distances from the subject pipelines. Existing risk management measures employed by SCGC and Greka were identified and a qualitative assessment of the adequacy of these measures in mitigating potential risks associated with pipeline failure at the Subject Property was performed.

## 1.2 Report Organization

The remainder of this report is organized into the sections as follows:

- Setting;
- Risk Analysis;
- Risk Management;
- Conclusions and Recommendations;
- Limitations; and
- References.

Supporting documentation is included in attached appendices.

## 2.0 SETTING

This section presents information on construction specifications and operating parameters for the subject pipelines, along with a description of SCGC's and Greka's maintenance, operation, and safety procedures.

### 2.1 School Facility Plans

The OUSD proposes to construct an elementary school at the Subject Property that will include classroom buildings, an administration/library area, and a multi-purpose building (**Figure 2**). Four kindergarten classrooms and play areas are planned for the southwest portion of the site. Turf play areas and courts are planned for the northwest portion of the site. A parking lot, drive through unloading zone, and a bus lane will be provided adjacent to West Rice Ranch Road in the southern portion of the site.

### 2.2 Pipeline Construction Specifications and Operating Parameters

According to Mr. Robert Grosfield with SCGC, the 12-inch diameter natural gas pipeline was installed in 1953 and is identified as line number SL36-1007. The pipeline is constructed of welded steel with a wall thickness of 0.25-inches, and has cathodic protection. The Maximum Allowable Operating Pressure (MAOP) for the pipeline is 505 pounds per square inch gage (psig), and the line operates at a hoop stress of greater than 20 percent of the Specified Minimum Yield Strength (SMYS). A pipeline that operates at a hoop stress of 20 percent or more of the SMYS is a transmission line by definition. SCGC has indicated that manual isolation valves are located 0.25-mile to the south and 2.5-miles to the north of the Subject Property. According to SCGC records, there have been no pipeline leaks or incidents in the vicinity of the Subject Property since the time of installation of pipeline SL36-1007. SCGC has indicated that the subject pipeline currently has a Class 3 location designation. A Class 3 location is: 1) any class location unit (an area that extends 220 yards on either side of the centerline of any continuous one mile length of pipeline) that has 46 or more buildings intended for human occupancy; or 2) an area where the pipeline lies within 100 yards of either a building or a small, well-defined outside area (such as a playground, recreation area, outdoor theater, or other place of public assembly) that is occupied by 20 or more persons on at least 5 days a week for 10 weeks in any 12 month period (the days and weeks need not be consecutive) (Department of Transportation [DOT] CFR 49 Part 192.5). According to Mr. Grosfield, the subject pipeline is in compliance with 49 CFR Part 192, with regard to inspections and testing. A facsimile from Mr. Grosfield that presents information on the subject pipeline is presented in **Appendix A**.

Mr. Ray Marroquin with Greka provided information on the 6<sup>5</sup>/<sub>8</sub>-inch diameter natural gas pipeline (**Appendix B**). This pipeline is a primary transmission line that was installed in 1991



and is identified as the Orcutt Hill to Suey Junction line. The pipeline is constructed of steel with a wall thickness of 0.28-inches, and has cathodic protection. The MAOP for the pipeline is 277 psig, and the line operates at a hoop stress of 13 percent of the SMYS; the SMYS is 2,130 psig. Greka has indicated that shutoff valves are located at Orcutt Hill, I-135 (411 valve), Foster Road, and Suey Junction. The nearest shutoff valves to the Subject Property are approximately 1.6 miles to the north and 0.3 miles to the south. According to Greka records, there have been no pipeline leaks or incidents in the vicinity of the Subject Property since the time of installation of the Orcutt Hill to Suey Junction line. The last hydrostatic testing of the subject pipeline was in January 1991, at a pressure of 421 psig. According to Greka, the portion of the pipeline that is located in proximity to the Subject Property has a Class 3 location designation.

ENSR reviewed drawings provided by SCGC, which show the location of the subject pipelines. Copies of the drawings are presented in **Appendix A**. The drawings indicate that the minimum distance between the 12-inch diameter pipeline and the proposed school site boundary is approximately 1,230 feet, and the minimum distance between the 6 $\frac{5}{8}$ -inch diameter pipeline and the proposed school site boundary is approximately 1,280 feet.

### **2.3 SCGC and Greka Maintenance, Operation, and Safety Procedures**

SCGC's and Greka's maintenance, operation, and safety procedures for natural gas pipelines follow the Public Utilities Commission of the State of California General Order No. 112-E (GO 112-E), made effective September 11, 1995. The rules of GO 112-E incorporate Federal Pipeline Safety Regulations set forth by the Department of Transportation (DOT) in Title 49 of the Code of Federal Regulations (49 CFR), Parts 191 - 192.

SCGC's and Greka's maintenance, operation, and safety procedures for natural gas pipelines include the following:

- Procedural manuals for operation, maintenance, and emergencies, including an emergency contingency plan, are maintained;
- Pressure tests are performed for all new installations; lower operating pressures are utilized in highly populated areas; and specified spacing for main-line valves is adhered to;
- Annual, semi-annual, and/or quarterly pipelines inspections are performed, including annual valve maintenance;
- Corrosion protection measures, i.e. cathodic protection, pipeline coating, and annual reads on corrosion potentials, are implemented on all pipelines;
- Pipelines are installed with a minimum 30- to 36-inch cover and are constructed using modern weld design techniques; and

- Any excavation activities near pipelines may only be conducted 48 hours after Underground Services Alert (USA) has been notified.

As previously noted, based on available SCGC and Greka records, there have been no pipeline leaks or incidents in the vicinity of the Subject Property since the time of installation of the pipelines.

### 3.0 RISK ANALYSIS

This section presents ENSR's risk analysis for the subject pipelines. Since the pipelines do not pose a health or safety hazard unless their structural integrity is compromised, resulting in a release of gas to the environment, the first step in this risk analysis is to identify events that could lead to pipeline rupture or failure. In the second step, a qualitative assessment of the probability or frequency of such events occurring is made. The consequences that could result from pipeline rupture or failure are then evaluated through a qualitative consequence analysis, which is based on screening-level calculations, and the individual risk (expressed as probability of being exposed to a fatal hazard over a one-year period) at varying distances from the subject pipelines is estimated.

#### 3.1 Event Identification

Four types of events are generally recognized as the main causes of pipeline rupture and/or failure:

- Third Party Dig-ins;
- Corrosion and Deterioration;
- Weld or Material Defects; and
- Ground Movement.

Third party dig-ins can result from construction activities that are not associated with pipeline construction and maintenance. Third party dig-ins are generally associated with development or reconstruction projects (i.e., subsurface digging with a backhoe or exploratory soil borings).

Pipeline corrosion and deterioration can occur both internally and externally. There are a number of possible causes of corrosion and deterioration. The presence of carbon dioxide and water in natural gas is generally the main reason for internal corrosion of metal pipelines. External corrosion or deterioration is generally the result of direct contact of the pipeline material with soils, water, and/or air.

Weld or material defects can weaken pipeline structures and result in leaks and/or ruptures. Improper material selection, pipeline design and construction, or quality control can lead to potential weld and material defects that can compromise the pipeline integrity.

Ground movement can compromise the structural integrity of a pipeline, resulting in leaks or ruptures. Underground pipelines are most sensitive to ground movement associated with fault rupture, liquefaction, and landslides.

## **3.2 Probability/Frequency Analysis**

Statistics compiled by the U.S. Department of Transportation, Office of Pipeline Safety (OPS) for the period of 1986 through 1999 show an average of  $2.73 \times 10^{-4}$  pipeline incidents (including ruptures and leaks) per mile per year for natural gas transmission lines. ENSR's risk analysis for the proposed school site is based on this statistically-derived pipeline failure probability rate.

The probability and/or frequency of a pipeline rupture or failure occurring at the proposed school site is related to the probability of occurrence of the four types of events described in **Section 3.1**. A qualitative assessment of the potential for each of these events to occur is presented below. The qualitative assessment ranks the likelihood of an event occurring as very low, low, moderate, high or very high.

### **3.2.1 Third Party Dig-ins**

The potential for third party dig-ins to occur is typically related to the amount of construction being performed in the immediate vicinity of a pipeline structure. In the vicinity of the Subject Property, areas surrounding the pipelines are, for the most part, undeveloped. Any future construction activities in the area would be performed in accordance with building permits issued by Santa Barbara County and/or the City of Orcutt. Work would be conducted by licensed contractors and, as required by law, USA would be contacted prior to any excavation activities. The potential for third party dig-ins to occur is considered low.

### **3.2.2 Corrosion and Deterioration**

The potential for pipeline corrosion and deterioration to occur is related to pipeline material type, the age of the pipeline, and corrosive preventative measures (i.e., cathodic protection and/or protective coatings). The 12-inch diameter pipeline was installed in 1953, is constructed of high-grade steel, and has cathodic protection. The 6 $\frac{5}{8}$ -inch diameter pipeline was installed in 1991, is constructed of steel, and has cathodic protection. Routine maintenance and inspection of the subject pipelines by SCGC and Greka have not identified any concerns with respect to corrosion or deterioration. The potential for a compromise in the structural integrity of the subject pipelines to occur due to corrosion or deterioration is considered low to moderate.

### **3.2.3 Weld or Material Defects**

The potential for weld or material defects to occur is related to the use of insufficiently qualified operators (welders) and/or defectively manufactured materials. SCGC and Greka have indicated that design and construction of all gas distribution facilities is regulated by the CPUC General Order 112-E and 49 CFR Part 192. Routine maintenance and inspection of the subject pipelines by SCGC and Greka have not identified any concerns with respect to weld or material

defects. The potential for a compromise in the structural integrity of the subject pipelines to occur due to weld or material defects is considered low to moderate.

### 3.2.4 Ground Movement

The potential for ground movement to occur in the area of the subject pipelines is related to the potential for surface fault rupture, seismic shaking, liquefaction, and/or landsliding.

The proposed school site is not located within a currently-designated Alquist-Priolo Earthquake Fault Zone (Hart and Bryant, 1997). These zones are defined by the State of California, Department of Conservation, Division of Mines and Geology (DMG) to identify areas at risk from surface fault rupture. According to the *Geologic/Seismic Hazards Report* prepared for the Orcutt Elementary School Site (Earth Systems Consultants, February 13, 2001), there are no mapped faults crossing site; the closest known active fault to the site is the Los Alamos fault, located approximately 10 miles to the southeast. The potential for surface fault rupture to occur at the proposed school site is considered to be very low.

According to the *Geologic/Seismic Hazards Report* (Earth Systems Consultants, February 13, 2001), the Subject Property is located in a seismically active region, and the site has the potential to experience moderate to severe ground shaking from earthquakes on local and regional faults. A probabilistic seismic analysis was conducted for the site by Earth Systems Consultants. Results of this analysis indicate a peak horizontal ground acceleration of 0.34g for the upper bound earthquake (10 percent probability of being exceeded within a 100-year period). The regional probabilistic seismic map prepared by DMG for the state (Petersen, et.al., 1996) shows that the proposed school site lies within an area of peak ground acceleration of 0.20g to 0.30g. Overall, the potential for seismic shaking to occur at the site is considered to be moderate.

The *Geologic/Seismic Hazards Report* (Earth Systems Consultants, February 13, 2001) indicates that the potential for liquefaction to occur at the site is very low due to the presence of dense soils and the absence of shallow groundwater. Since the proposed school site is located in a relatively flat area, the potential for landsliding to occur is non-existent.

The overall potential for a compromise in the structural integrity of the subject pipelines to occur due to ground movement is considered low. The pipelines are located in an area of generally high seismicity. However, the potential for surface fault rupture is very low and there is little or no potential for liquefaction or landsliding to occur.

### 3.3 Consequence Analysis

A qualitative evaluation of the consequences that could result from rupture or failure of the subject pipelines is presented in this section. In conducting the consequence analysis, four types of hazards were considered: 1) toxic vapor cloud, 2) flammable vapor cloud, 3) torch fire, and 4) unconfined vapor cloud explosion.

Since the subject pipelines do not contain a toxic component (e.g. hydrogen sulfide), risk of exposure to a toxic vapor cloud is not considered a significant risk at the proposed school site.

A release of natural gas from the subject pipelines could create a flammable vapor cloud. If the gas is ignited this could result in a torch fire. A torch fire is considered the "worst-case" hazard for the proposed school site.

In the event of ignition of a flammable vapor cloud, an unconfined vapor cloud explosion could potentially occur. This would create an overpressure zone that could result in injuries or damage to structures. However, the hazard footprint for a potential overpressure zone is not considered the "worst-case" hazard at the proposed school site.

ENSR used screening-level calculations to estimate the individual risk (expressed as the probability of being exposed to a fatal hazard over a one-year period) for the "worst-case" hazard associated with the subject pipelines, a torch fire resulting from ignition of a flammable gas release. The screening-level calculations incorporate pipeline failure probability rates derived from OPS statistics ( $2.73 \times 10^{-4}$  incidents per mile per year for transmission lines). As described in **Section 3.2**, the likelihood of an event occurring that could result in pipeline failure at the proposed school site ranges from low to moderate. Therefore, use of the OPS statistically-derived pipeline failure probability rate provides a conservative estimate of potential risks at the site. The results of the screening-level calculations are presented on plots that are included in **Appendix C**. **Appendix D** presents a description of the methodology used in the screening-level calculations.

An acceptable level of individual risk has not been formally adopted by the California Department of Education School Facilities Planning Division (SFPD). However, SFPD has indicated that individual risk levels below  $1 \times 10^{-6}$  (one-in-a-million) would likely be considered acceptable and individual risk levels greater than  $1 \times 10^{-5}$  (one-in-one hundred thousand) would not likely be considered acceptable without implementation of risk-reduction mitigation measures. Levels between  $1 \times 10^{-5}$  and  $1 \times 10^{-6}$  would be considered marginal and would be evaluated on a case-by-case basis with consideration given to the potential need for mitigation measures.

ENSR's screening-level calculations for the 12-inch diameter pipeline indicate that at and beyond a distance of 505 feet from the pipeline, the estimated individual risk is less than  $1 \times 10^{-6}$  (**Appendix C**). As noted earlier, the minimum distance between the 12-inch diameter pipeline and the proposed school site boundary is approximately 1,230 feet. Therefore, the 12-inch diameter pipeline does not appear to pose an unacceptable risk at the proposed school site.

ENSR's screening-level calculations for the 6 $\frac{5}{8}$ -inch diameter pipeline indicate that at and beyond a distance of 220 feet from the pipeline, the estimated individual risk is less than  $1 \times 10^{-6}$  (**Appendix C**). As noted earlier, the minimum distance between the 6 $\frac{5}{8}$ -inch diameter pipeline and the proposed school site boundary is approximately 1,280 feet. Therefore, the 6 $\frac{5}{8}$ -inch diameter pipeline does not appear to pose an unacceptable risk at the proposed school site.

#### 4.0 RISK MANAGEMENT

Risk management measures are intended to: 1) reduce the probability of occurrence of an event that could result in a pipeline failure, and 2) mitigate the consequences that could result if pipeline failure were to occur due to such an event. SCGC and Greka have a number of risk management measures in place to accomplish these goals. The matrix table presented below highlights measures intended to reduce the probability of occurrence of the key events associated with pipeline failure.

Risk Management Measures	Main Causes of Pipeline Failure			
	Third Party Dig-ins	Corrosion and Deterioration	Ground Movement	Weld or Material Defects
Design, construction, operation, and maintenance in accordance with CPUC and DOT.		X		X
Cathodic protection monitoring, annual leak surveys, pipeline patrolling and inspection, pressure tests.		X		X
Line marking, participation in USA, minimum 30- to 36-inch cover.	X			
Development and maintenance of emergency planning documents, training programs to address emergencies.	X	X	X	X



## 5.0 CONCLUSIONS AND RECOMMENDATIONS

The risk analysis for the 12-inch diameter pipeline indicates that at and beyond a distance of 505 feet from the pipeline, the estimated individual risk is less than  $1 \times 10^{-6}$ . The risk analysis for the 6 $\frac{5}{8}$ -inch diameter pipeline shows that at and beyond a distance of 220 feet, the estimated individual risk is less than  $1 \times 10^{-6}$ . Since the minimum distance between the pipelines and the Subject Property is 1,230 to 1,280 feet, the pipelines do not appear to pose an unacceptable risk at the site.

Risk management measures currently in place by SCGC and Greka appear adequate to minimize the potential for occurrence of an event that could result in failure of either pipeline. To provide an added degree of risk management, ENSR recommends that any evacuation plans, health and safety plans, or emergency response training plans that are developed for the proposed elementary school identify the presence of the subject pipelines and take into consideration procedures that could be implemented to reduce risks associated with pipeline failure. Site-specific risk management measures could include:

- Identifying evacuation routes that direct the public away from the pipelines and the western portion of the Subject Property;
- Maintaining an emergency contact list with phone numbers; and
- Designating fire drill meeting locations remote from the pipeline area.

## 6.0 LIMITATIONS

The scope of work for this RA is intended to provide a qualitative risk analysis related to the presence of a 12-inch diameter natural gas pipeline and a 6<sup>5</sup>/<sub>8</sub>-inch diameter natural gas pipeline located approximately ¼-mile west of the Subject Property. This RA was not intended to be comprehensive, identify all potential concerns, or mitigate the potential risk for a pipeline incident.

Our findings and recommendations are based on information provided by the Orcutt Union School District, SCGC, and Greka, information contained in various regulatory agency reports relating to risk assessments for natural gas pipelines, and ENSR's screening-level calculations.

This document may be used only by Orcutt Union School District and the California Department of Education, and only for the purpose stated, within a reasonable time from its issuance. Land use, site and building conditions may change over time. Additional assessment work may be required with the passage of time.

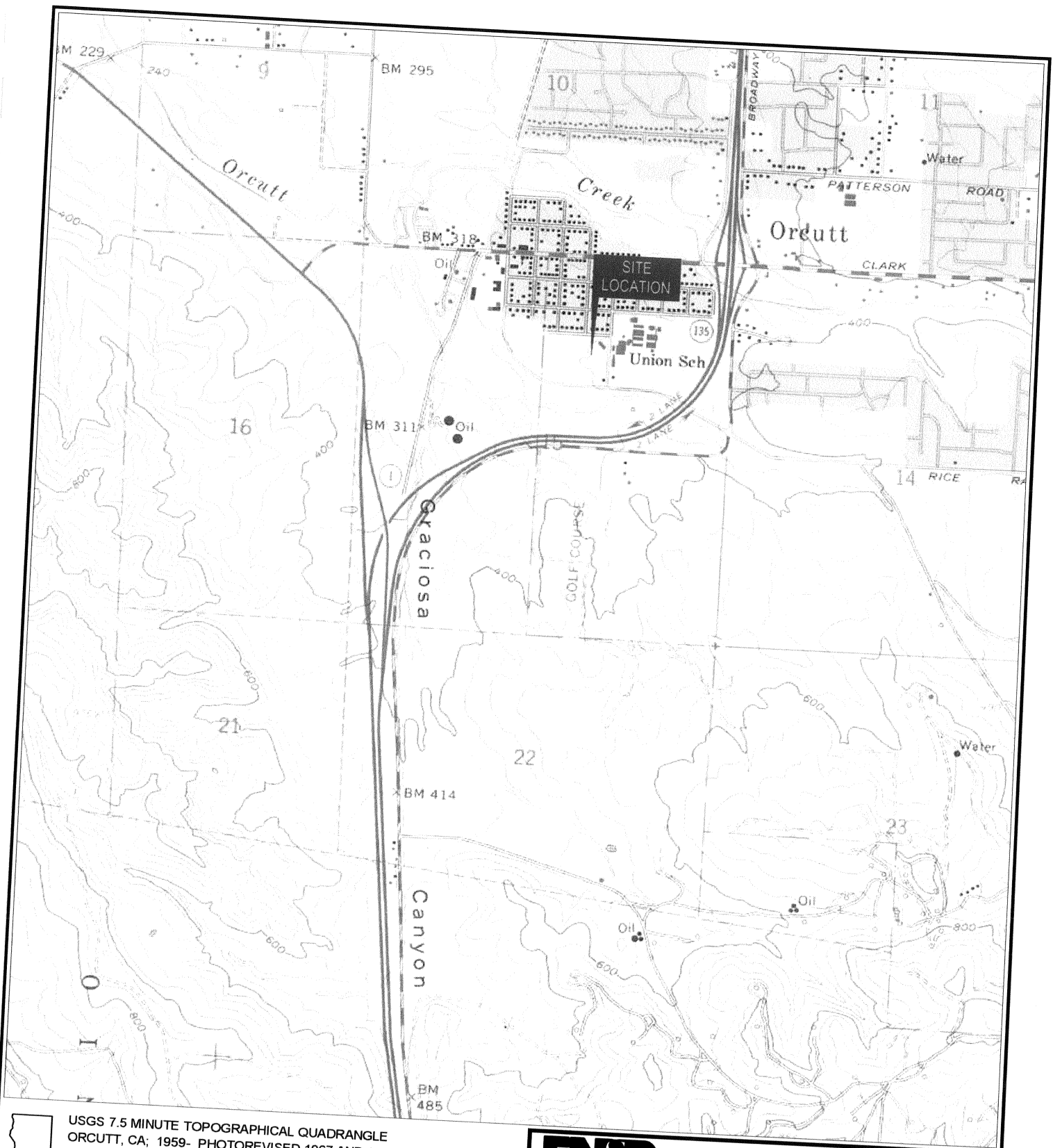
Any party other than Orcutt Union School District and the California Department of Education who wishes to use this document shall notify ENSR of such intended use. Based on the intended use of the report, ENSR may require that additional work be performed and that an updated document be issued. Non-compliance with any of these requirements by the Client or anyone else will release ENSR from any liability resulting from the use of this document by any unauthorized party.

ENSR has performed its services in a manner consistent with the standards of care and skill ordinarily exercised by members of the profession practicing under similar conditions in the geographic vicinity and at the time the services were performed. No warranty or guarantee, expressed or implied, is part of the services offered by this risk analysis.

## 7.0 REFERENCES

- California Public Utilities Commission, General Order 112-E
- Code of Federal Regulations, Title 49, Parts 191, 192.
- Dahlgren, Tom, Greka Energy, Santa Maria, California, telephone communication - Telephone No. 805-347-8700.
- Earth Systems Pacific, Geologic/Seismic Hazards Report, Orcutt Elementary School Site, Rice Ranch Road, Orcutt, California, February 13, 2001.
- Federal Department of Transportation, Office of Pipeline Safety, <http://ops.dot.gov/stats>
- Grosfield, Robert, Southern California Gas Company, California, facsimile communication.
- Hart, Earl W. and Bryant, Williams A., Fault Rupture Hazard Zones in California, California Division of Mines and Geology Special Publication 42, 1997.
- Marroquin, Ray, Greka Energy, Santa Maria, California, facsimile communication.
- Petersen, Mark D., et. al., Probabilistic Seismic Hazard Assessment for the State of California, California Division of Mines and Geology, Open-File Report 96-08, 1996.
- Witczak, Jan, The Gas Company, Goleta, California, written correspondence.

FIGURES



USGS 7.5 MINUTE TOPOGRAPHICAL QUADRANGLE  
 ORCUTT, CA; 1959- PHOTOREVISED 1967 AND 1974

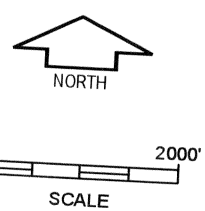
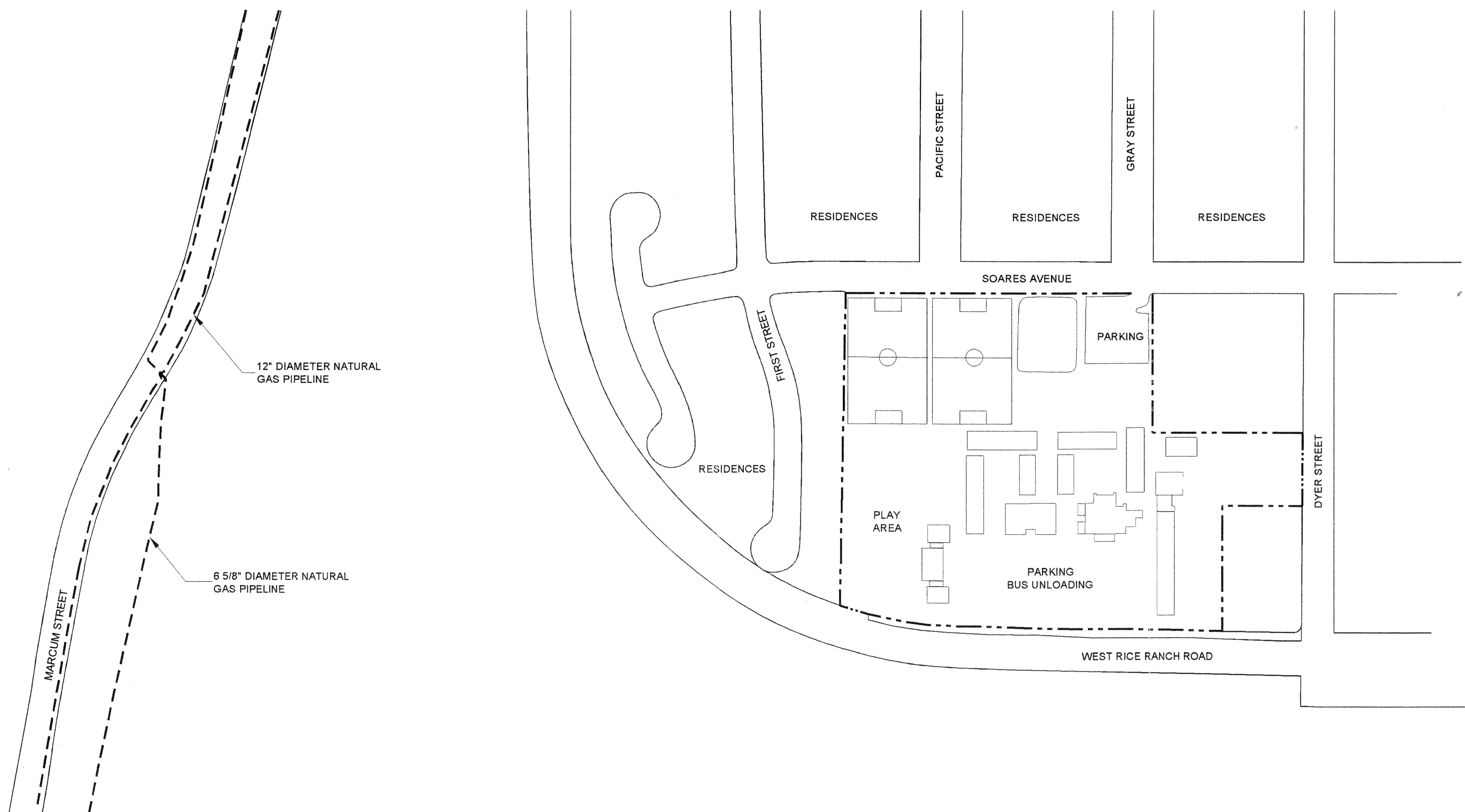


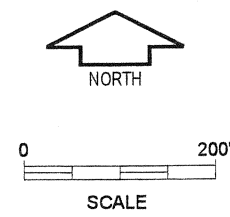
FIGURE 1  
**SITE LOCATION MAP**  
 Orcutt Union School District  
 Proposed School Site #17  
 Orcutt, California

Drawn By: A. Churchill	Date: 9/6/01	PROJECT NO. 01201-037-000	REV.
File Name: Cad:\ENSR\12011037\fig 1.dwg			



**LEGEND:**

- NATURAL GAS PIPELINE
- - - - - SUBJECT PROPERTY BOUNDARY



**FIGURE 2**  
**SITE PLAN**  
 Orcutt Union School District  
 Proposed School Site #17  
 Orcutt, California

## **APPENDIX E**

### **Flooding and Water Quality**

- **Preliminary Drainage Basin Alternatives**

## **Preliminary Drainage Basin Alternatives**



# MEMORANDUM



Date: August 1, 2007  
 To: Pete Miller  
 From: Debra Tumler  
 Subject: Orcutt Union School District – Surplus Property Preliminary Drainage Basin Alternatives

CIVIL ENGINEERING  
 CONSTRUCTION MANAGEMENT  
 LANDSCAPE ARCHITECTURE  
 MECHANICAL ENGINEERING  
 PLANNING  
 PUBLIC WORKS ADMINISTRATION  
 SURVEYING / GIS SOLUTIONS  
 WATER RESOURCES  
 WALLACE SWANSON INTERNATIONAL

Preliminary hydrologic and basin routing analyses were requested for the undeveloped school property west of their administration offices. The property is located in the community of Orcutt, Santa Barbara County, California. The standard drainage conditions for plan approval were used to determine the necessary design criteria. The site is between Rice Ranch Rd. and Soares Avenue.

The area the school district is interested in developing is approximately 11.5 acres. The total area tributary to the southwest corner of the property is 25.7 acres. The types of development that exist are school buildings and impervious play areas, as well as existing landscaped playing fields.

The total runoff for a 25 year storm event has been calculated using the Santa Barbara Urban Hydrograph method, and is 23.9 cfs for the addition of a dense multi-family/senior housing style project on the 11.5 acres. There is approximately 33.8 cfs of developed 100 year flow from the entire watershed area in a fully developed condition.

A summary of the 2 basin alternative designs for a 25 Year storm are as follows:

BASIN ID	TOP LENGTH, ft	TOP WIDTH, ft	DEPTH, ft	H:V SIDE SLOPE	MAX. STORAGE, (ac-ft)	MAX. ELEVATION	MAX. PEAK OUTFLOW, cfs	ORIFICE PLATE DIMENSIONS
1	216	90	3.4	4:1	0.55	339.62	10.18	5" x 3.87'
2	90	70	9	2:1	0.47	339.45	10.27	6" x 1.75'

Each basin alternative will have to construct a 30" RCP bleeder pipe to convey the 25 Year peak flow to the outlet located down Rice Ranch Road. The basins themselves will meter smaller flows, not to exceed existing historic bypass flows plus 0.07 times the total developed area – 11.5 acres, or 10.2 cfs. This flow will be regulated through an orifice plate sized for either basin alternative.

WALLACE GROUP  
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 612 CLARION CT  
 SAN LUIS OBISPO  
 CALIFORNIA 93401  
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 F 805 544-4294  
 www.wallacegroup.us

## **Orcutt Union School District**

Project Date: 7/13/2007 12:00:00 AM

Project Engineer: Debra Tumler

Project Comments:

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**Unit Hydrograph Report  
Subarea 1\_41**

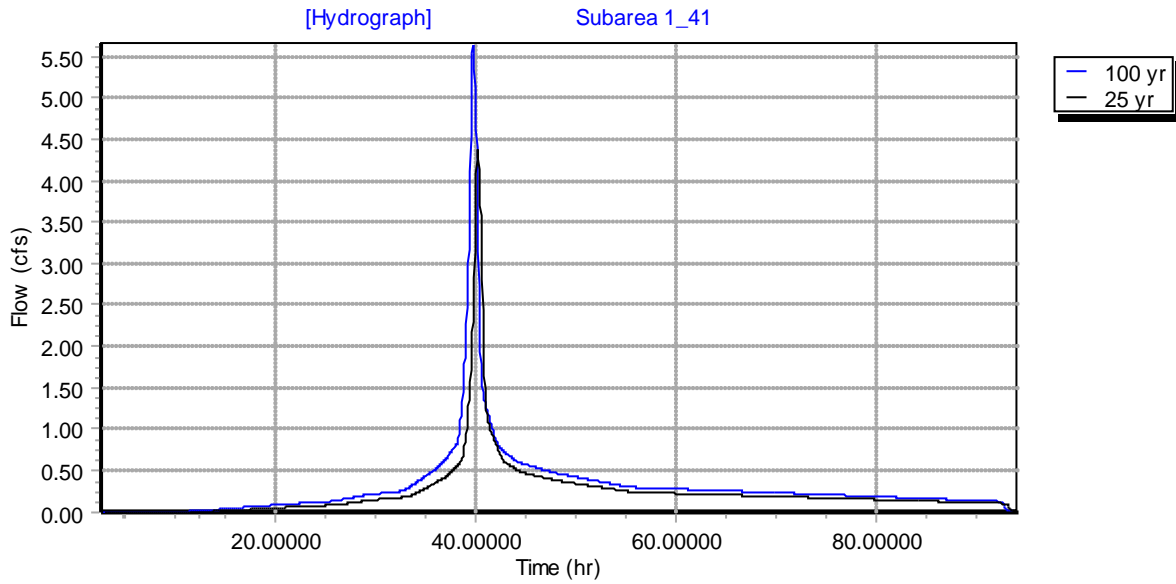
**Infiltration - SCS CN**

Description	CN	Area (Acres)	Connected (%)	Unconnected (%)
Existing Administration Bldgs	92	2.210	0.00	0.00

**Runoff Summary**

Return Event (yr)	Peak Flow (cfs)	Peak Time (hr)	Hydrograph Volume (ac-ft)
100	5.50	9.95000	0.610
25	4.25	9.95000	0.468

[Hydrograph] Subarea 1\_41



**Unit Hydrograph Report  
Subarea 3\_96\_96**

**Infiltration - SCS CN**

Description	CN	Area (Acres)	Connected (%)	Unconnected (%)
Impervious Areas - Paved parking lots, roofs, driveways, Streets and roads	98	3.020	0.00	0.00
Open space (Lawns, parks etc.) - Good condition; grass cover > 75%	61	8.890	0.00	0.00

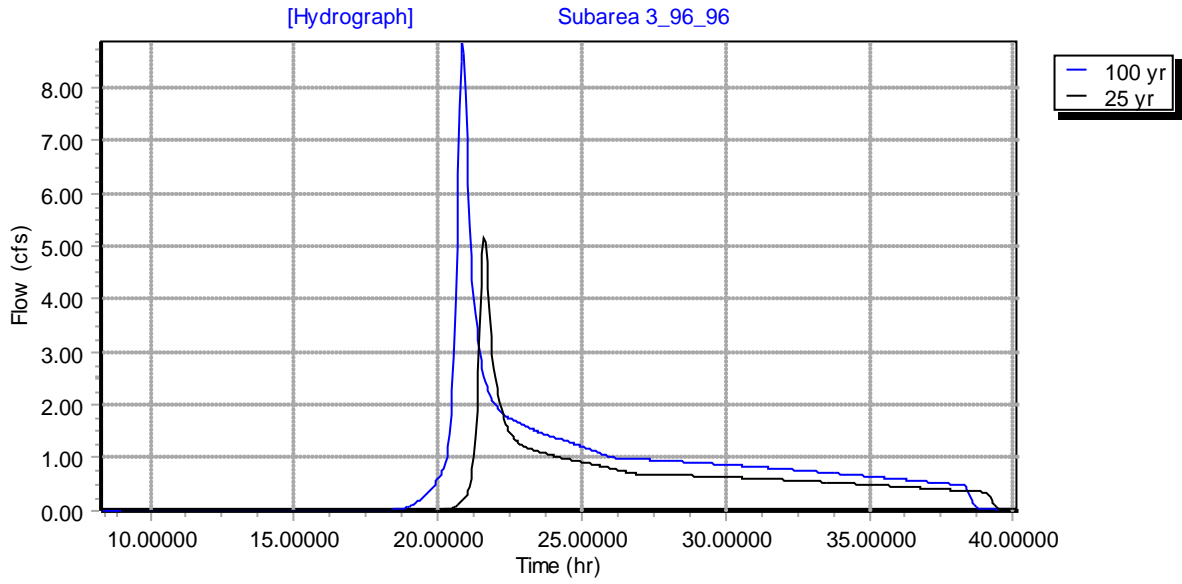
**Runoff Summary**

Return Event (yr)	Peak Flow (cfs)	Peak Time (hr)	Hydrograph Volume (ac-ft)
100	8.78	10.10000	1.479
25	5.11	10.10000	0.960

**Unit Hydrograph Report**  
**Subarea 3\_96\_96**

[Hydrograph]

Subarea 3\_96\_96



**Unit Hydrograph Report  
Subarea 2 Dev'd**

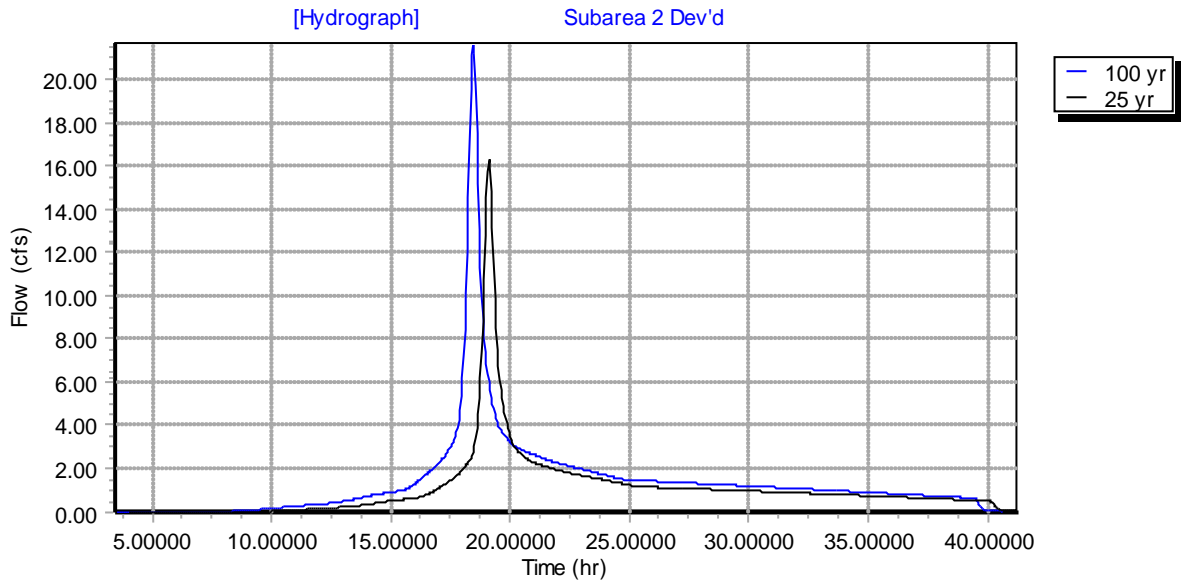
**Infiltration - SCS CN**

Description	CN	Area (Acres)	Connected (%)	Unconnected (%)
Urban Senior Housing	98	8.670	0.00	0.00
Landscaped Areas	61	2.890	0.00	0.00

**Runoff Summary**

Return Event (yr)	Peak Flow (cfs)	Peak Time (hr)	Hydrograph Volume (ac-ft)
100	21.50	10.05000	2.878
25	16.11	10.05000	2.161

**[Hydrograph] Subarea 2 Dev'd**





**Watershed Data Report**  
**Proposed In-Flow Conditions**

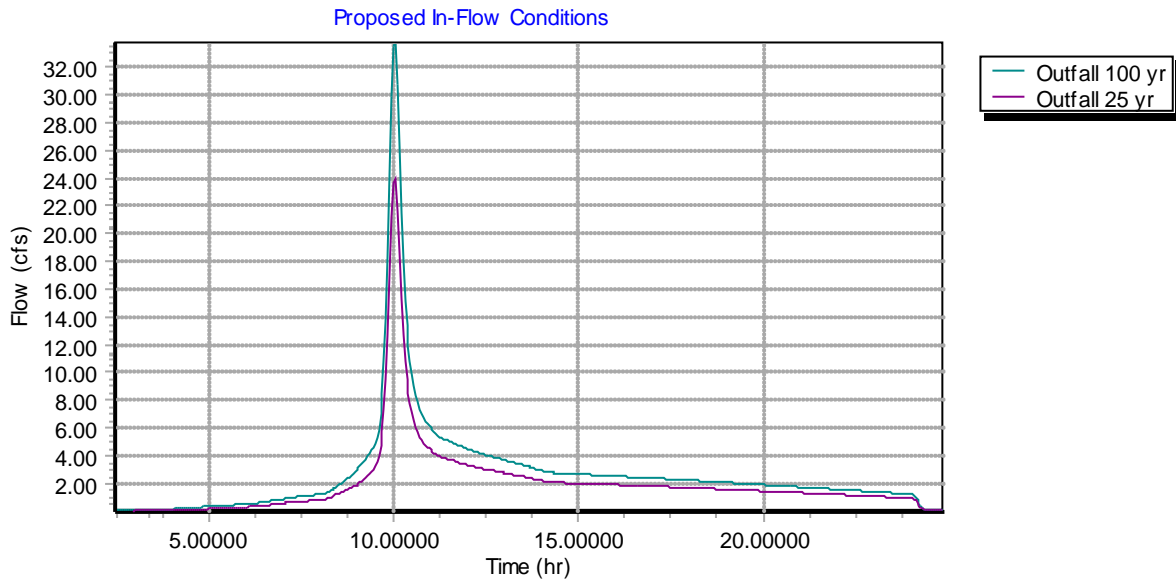
**Watershed Data**

Watershed: Proposed  
In-Flow  
Conditions  
Runoff Method: Unit  
Hydrograph  
UH Method: SCS Unit  
Hydrograph  
Loss Method: CN Area

**Catchment Data**

Catchment	Area (Acres)	Tc (hr)	CN
Subarea 1_41	2.210	0.10000	92
Subarea 3_96_96	11.910	0.30000	70. 382031905961 4
Subarea 2 Dev'd	11.560	0.25000	88.75

[Hydrograph] Proposed In-Flow Conditions



**Watershed Output Report  
Proposed In-Flow Conditions**

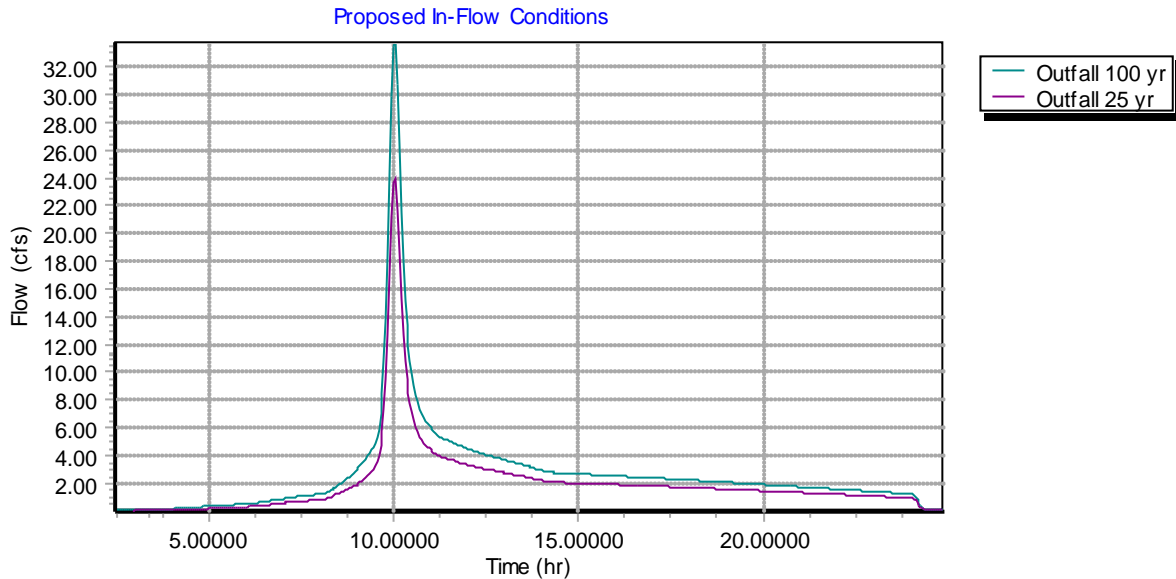
**100 yr Storm Catchment Data**

Return Event (yr)	Node Label	Peak Flow (cfs)	Peak Time (hr)	Hydrograph Volume (ac-ft)
100	Subarea 1_41	5.50	9.95000	0.610
100	Subarea 3_96_96	8.78	10.10000	1.479
100	Subarea 2 Dev'd	21.50	10.05000	2.878
100	Outfall	33.84	10.05000	4.967

**25 yr Storm Catchment Data**

Return Event (yr)	Node Label	Peak Flow (cfs)	Peak Time (hr)	Hydrograph Volume (ac-ft)
25	Subarea 1_41	4.25	9.95000	0.468
25	Subarea 3_96_96	5.11	10.10000	0.960
25	Subarea 2 Dev'd	16.11	10.05000	2.161
25	Outfall	23.92	10.05000	3.589

[Hydrograph] Proposed In-Flow Conditions



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Design of Basin 1		

Pond Volume Report  
Basin 1

**Pond Data**

Pond: Basin 1  
 Volume Type: Elevation vs. Area  
 Void Space: 100 %

**Volume Data**

Elevation	Area	Volume
(ft)	(Acres)	(ac-ft)
337.600	0.22750	0.000
338.600	0.27220	0.250
339.600	0.31990	0.545
340.600	0.37050	0.890
342.000	0.44630	1.461

**Pond Volume Equations**

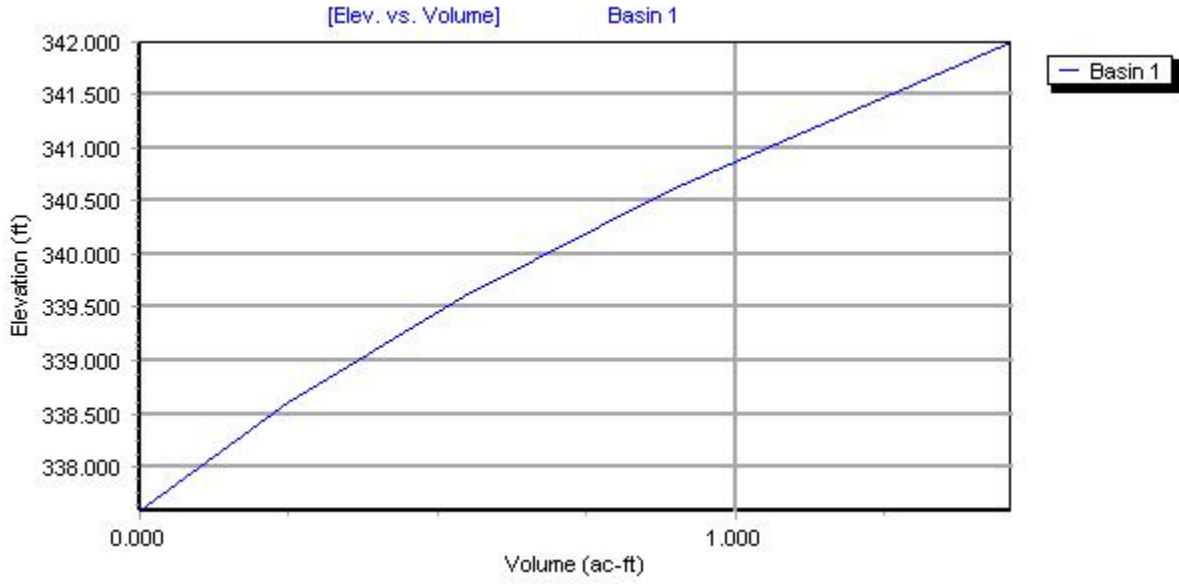
\*Incremental volume computed by the Conic Method for Reservoir Volumes.

$$\text{Volume} = (1/3) * (\text{EL2} - \text{EL1}) * (\text{Area1} + \text{Area2} + \text{sq.rt.}(\text{Area1} * \text{Area2}))$$

where: EL1, EL2 = Lower and upper elevations of the increment  
 Area1, Area2 = Areas computed for EL1, EL2, respectively  
 Volume = Incremental volume between EL1 and EL2

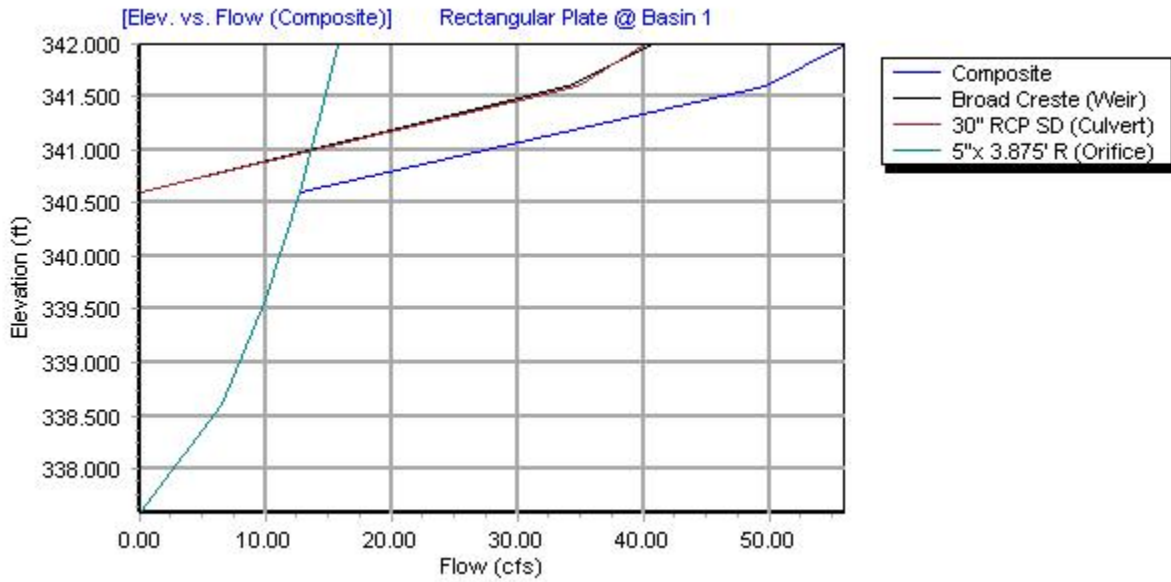
Pond Volume Report  
Basin 1

[Elev. vs. Volume] Basin 1



Outlet Composite Rating Curve  
Rectangular Plate @ Basin 1

[Elev. vs. Flow (Composite)] Rectangular Plate @ Basin 1



## Pond Site Report Preliminary Design of Basin 1

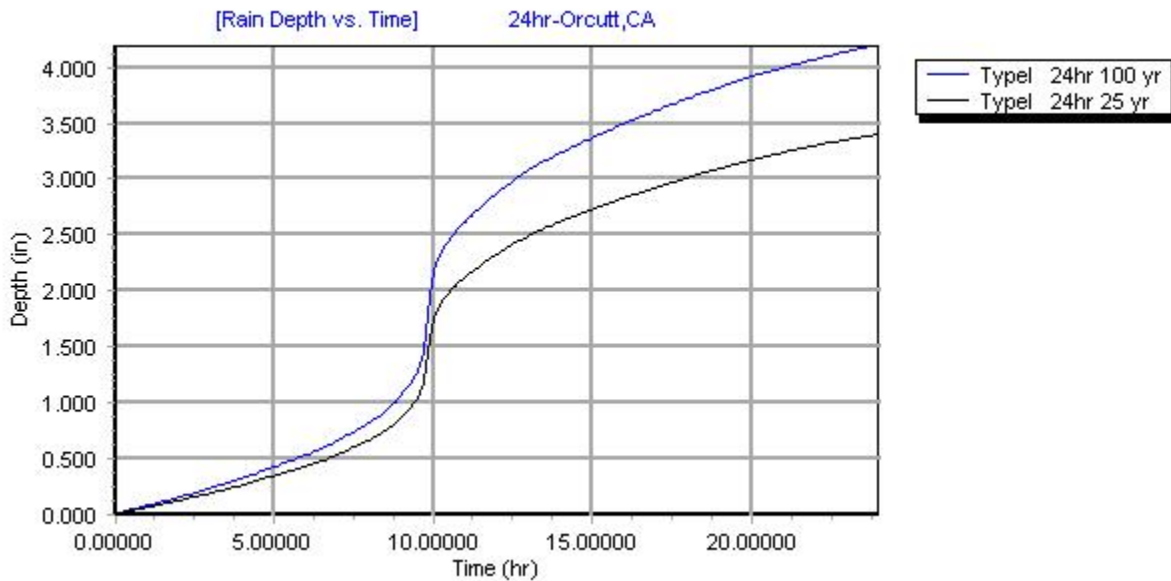
### PondSite Data

PondSite: Preliminary Design of Basin 1  
 Watershed: Proposed In-Flow Conditions  
 Pond: Basin 1  
 Outlet: Rectangular Plate @ Basin 1

### Pond Site Output

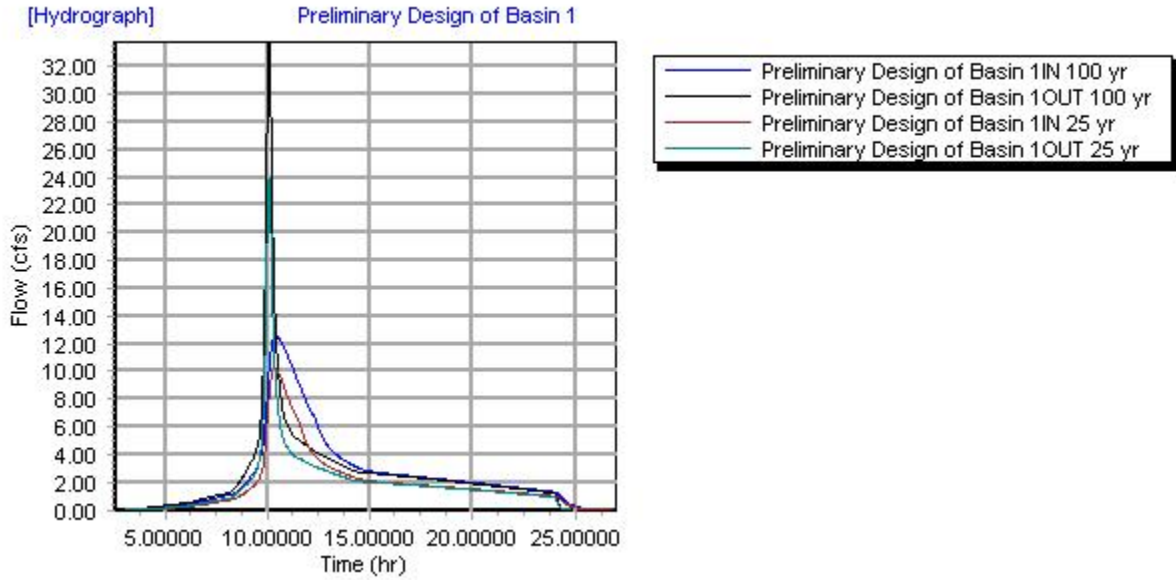
Return Event (yr)	Peak Outflow (cfs)	Peak Time (hr)	Outflow Volume (ac-ft)	Max Elevation (ft)	Max Storage (ac-ft)
100	12.49	10.40000	4.967	340.493	0.851
25	10.18	10.30000	3.589	339.617	0.551

### [Rain Depth vs. Time] 24hr-Orcutt,CA

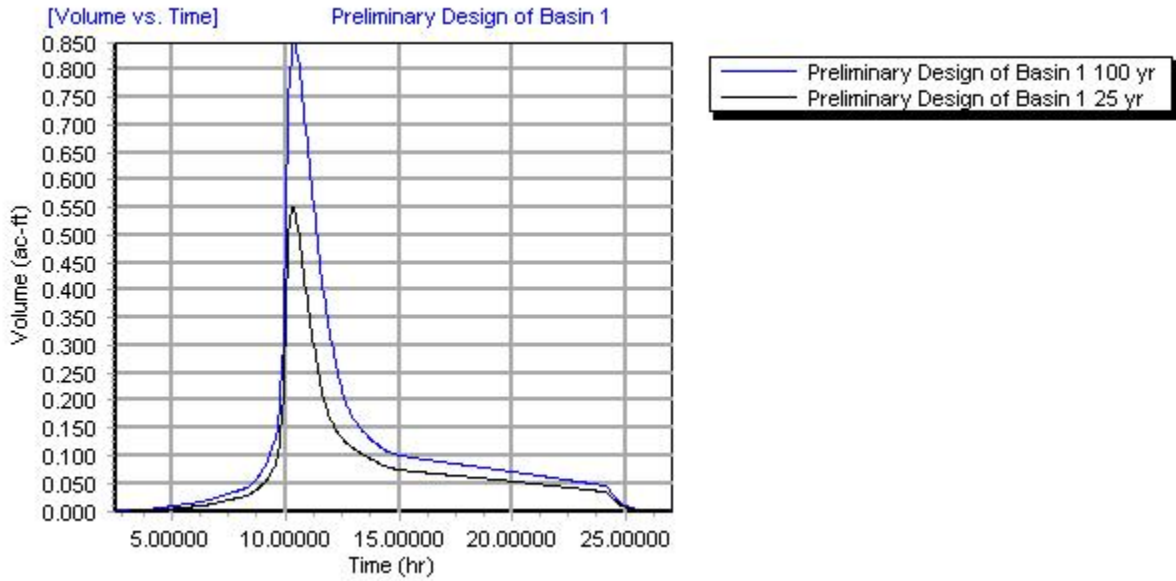


Pond Site Report  
Preliminary Design of Basin 1

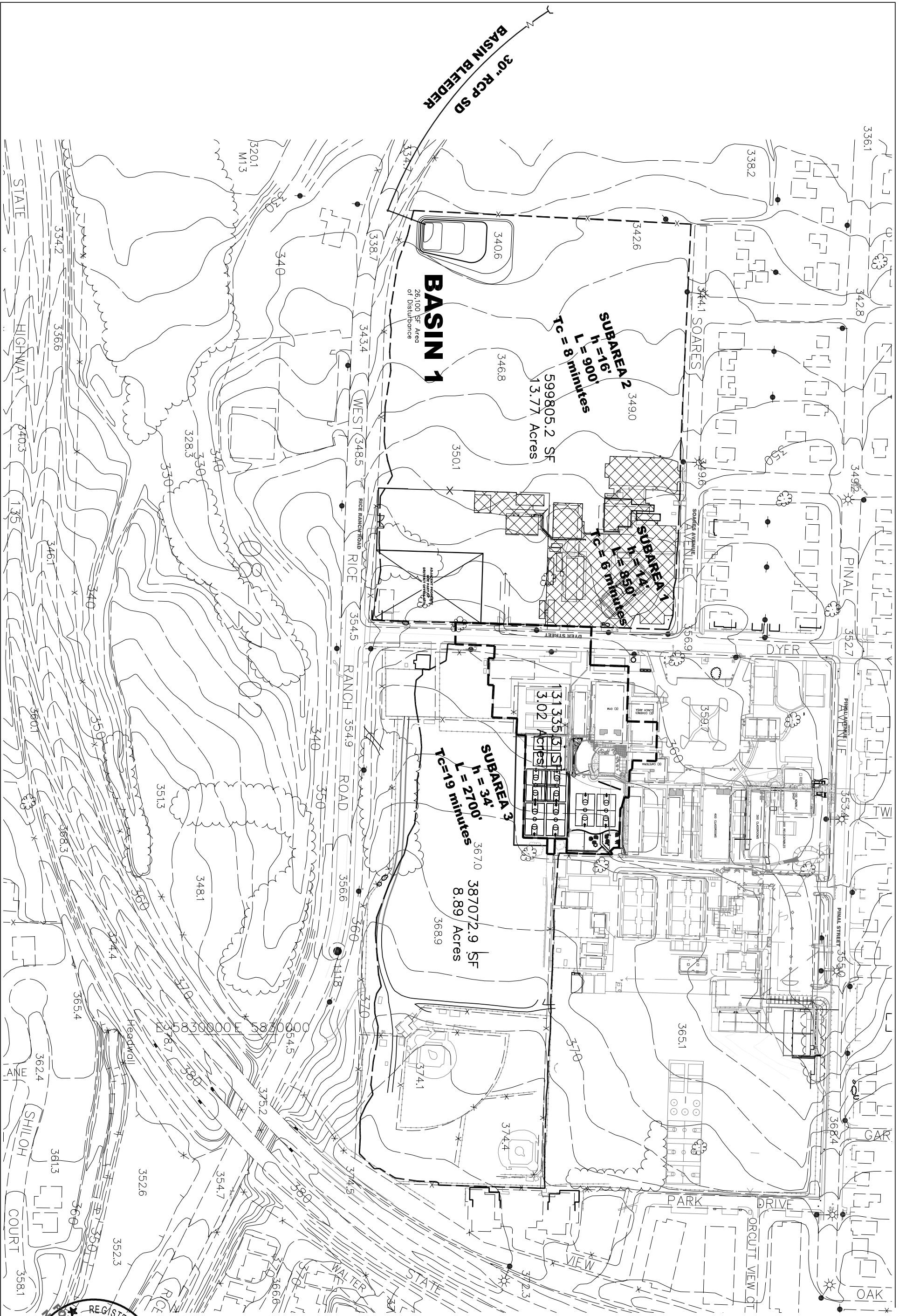
[Hydrograph] Preliminary Design of Basin 1



[Volume vs. Time] Preliminary Design of Basin 1







JOB No. : XXX  
 DRAWING : .dwg  
 DRAWN BY: DRT  
 DATE : 8/3/07  
 SCALE : 1" = 200'

**ORCUTT UNIFIED SCHOOL DISTRICT**  
**Preliminary Drainage Review**  
**APN's 105-134-004 + -005 & 105-330-005 + -006**  
**Surplus Property/Senior Housing Project**

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**Pond Volume Report  
Basin 2**

**Pond Data**

Pond: Basin 2  
 Volume Type: Elevation vs. Area  
 Void Space: 100 %

**Volume Data**

Elevation (ft)	Area (Acres)	Volume (ac-ft)
333.000	0.04210	0.000
334.000	0.05060	0.046
335.000	0.05980	0.101
336.000	0.06970	0.166
337.000	0.08030	0.241
338.000	0.09170	0.327
339.000	0.10390	0.425
340.000	0.11670	0.535
341.000	0.13030	0.658
342.000	0.14460	0.796

**Pond Volume Equations**

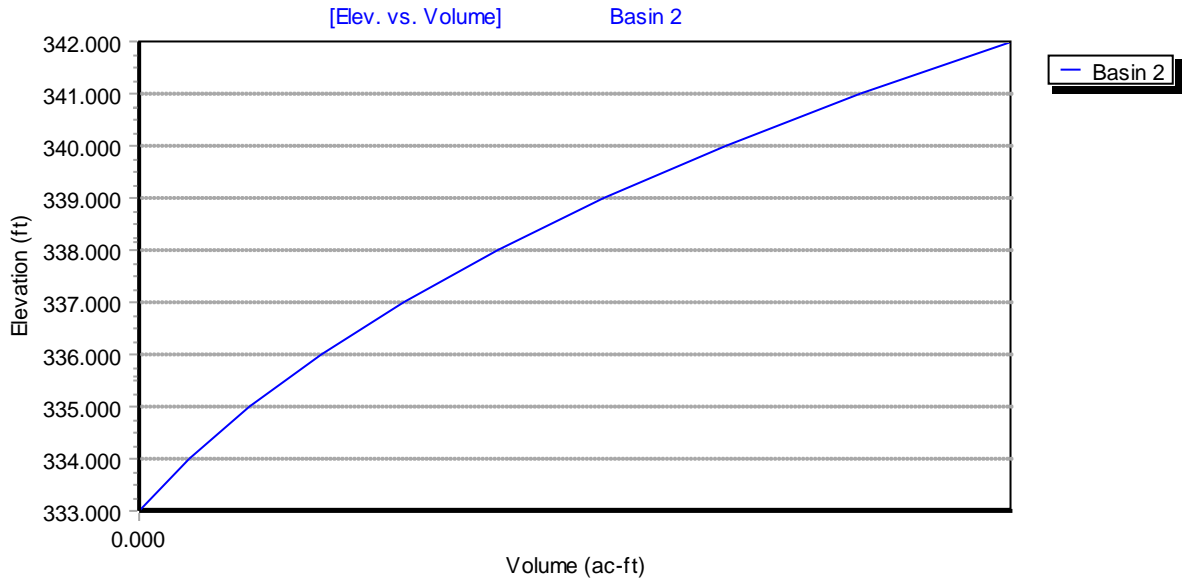
\*Incremental volume computed by the Conic Method for Reservoir Volumes.

$$\text{Volume} = (1/3) * (\text{EL2} - \text{EL1}) * (\text{Area1} + \text{Area2} + \text{sq.rt.}(\text{Area1} * \text{Area2}))$$

where: EL1, EL2 = Lower and upper elevations of the increment  
 Area1, Area2 = Areas computed for EL1, EL2, respectively  
 Volume = Incremental volume between EL1 and EL2

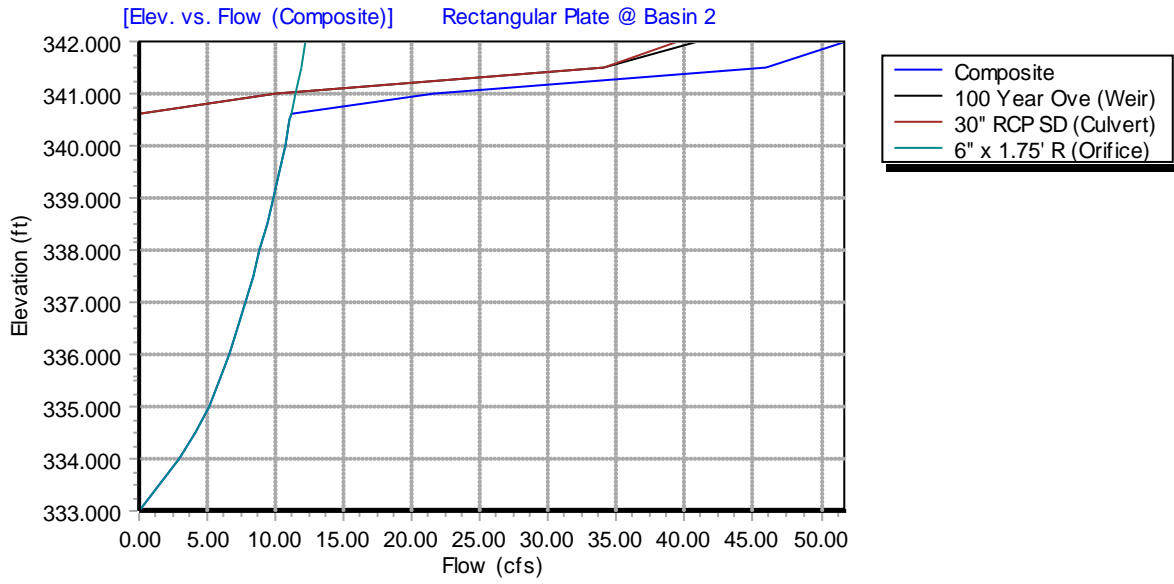
**Pond Volume Report**  
**Basin 2**

[Elev. vs. Volume] Basin 2



**Outlet Composite Rating Curve  
Rectangular Plate @ Basin 2**

[Elev. vs. Flow (Composite)] Rectangular Plate @ Basin 2



**Pond Site Report**  
**Prelim Design of Basin 2**

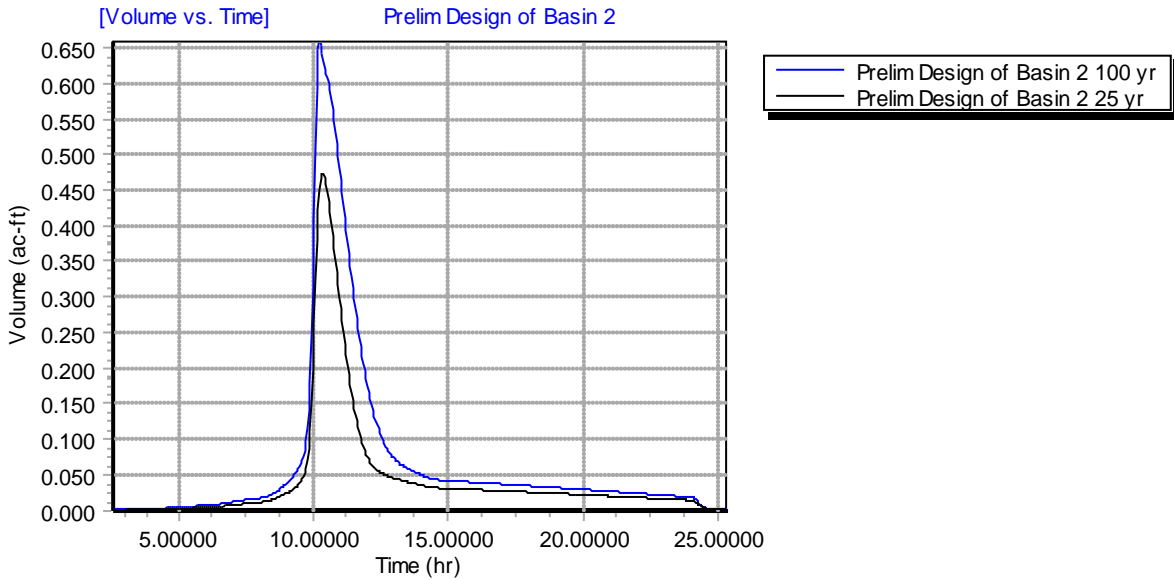
**PondSite Data**

PondSite: Prelim Design of Basin 2  
 Watershed: Proposed In-Flow Conditions  
 Pond: Basin 2  
 Outlet: Rectangular Plate @ Basin 2

**Pond Site Output**

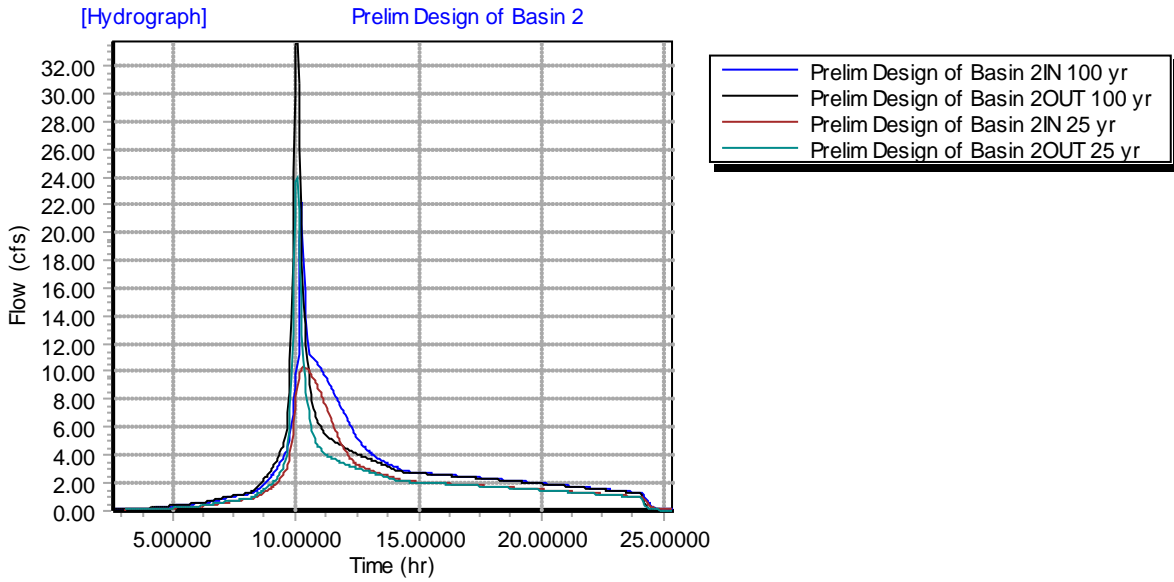
Return Event (yr)	Peak Outflow (cfs)	Peak Time (hr)	Outflow Volume (ac-ft)	Max Elevation (ft)	Max Storage (ac-ft)
100	22.26	10.20000	4.967	341.013	0.660
25	10.27	10.30000	3.589	339.449	0.473

**[Volume vs. Time] Prelim Design of Basin 2**

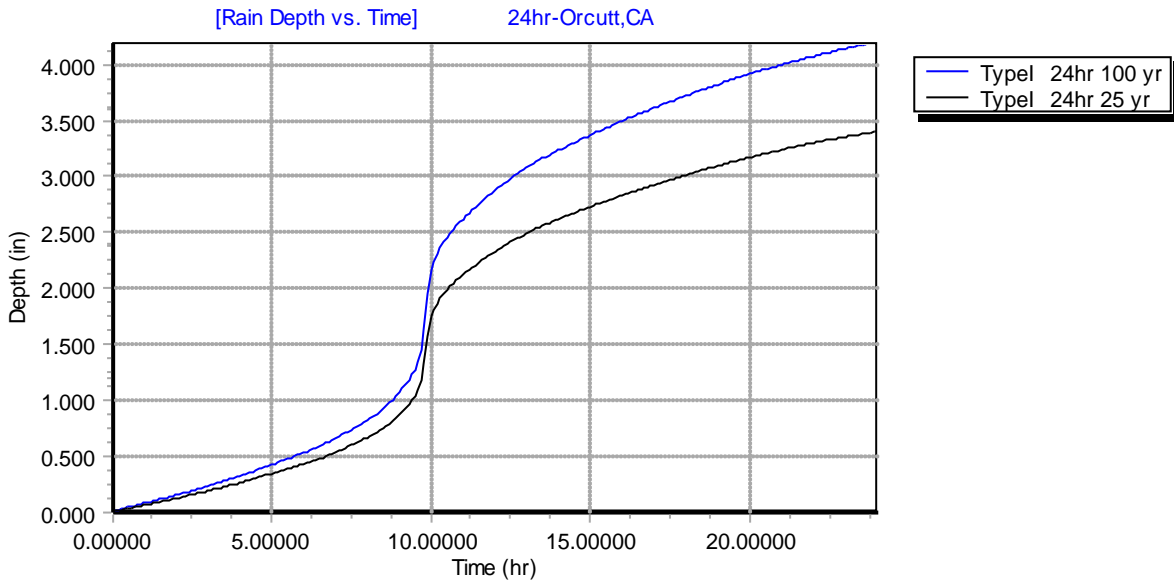


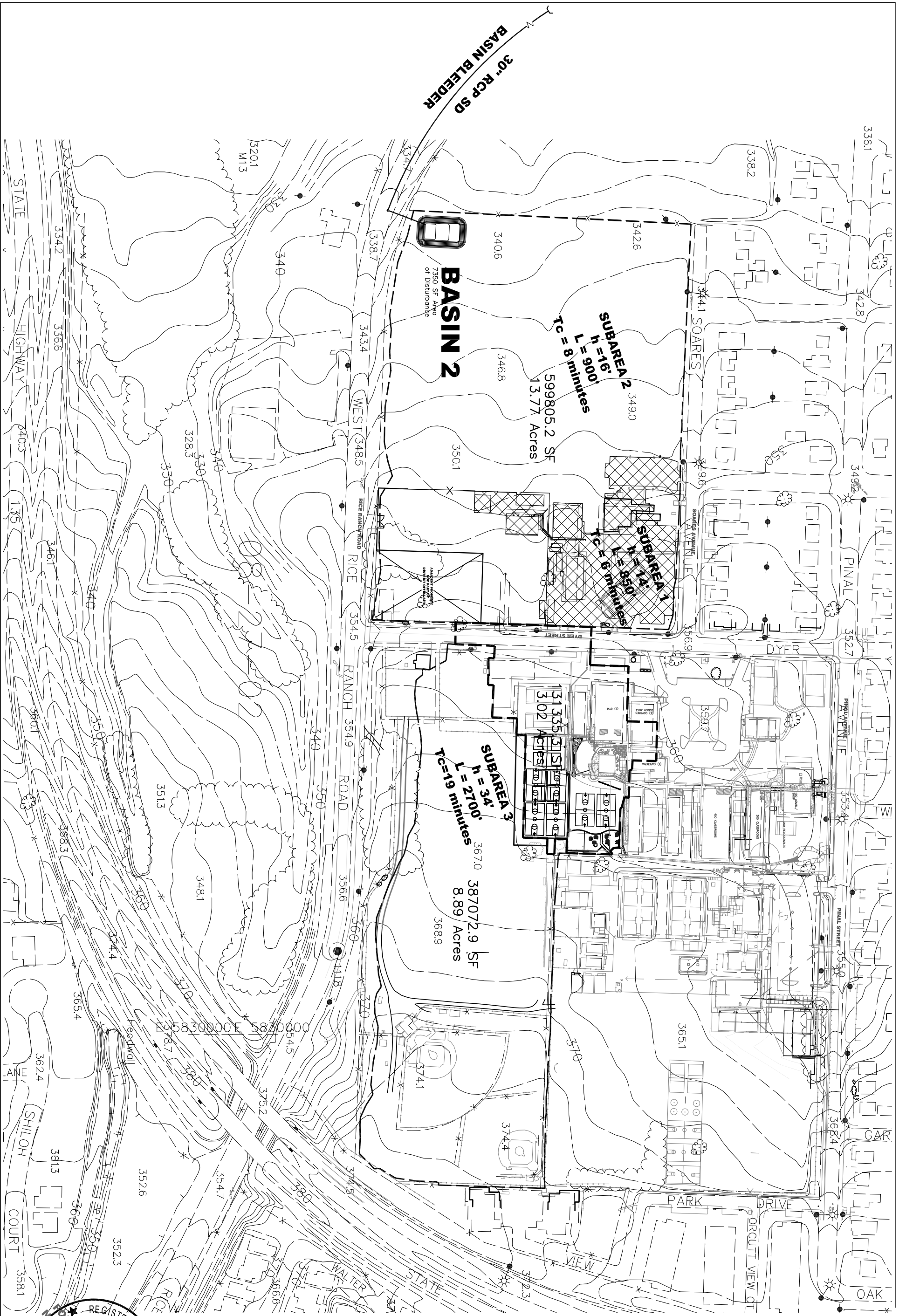
**Pond Site Report**  
**Prelim Design of Basin 2**

[Hydrograph] Prelim Design of Basin 2



[Rain Depth vs. Time] 24hr-Orcutt,CA

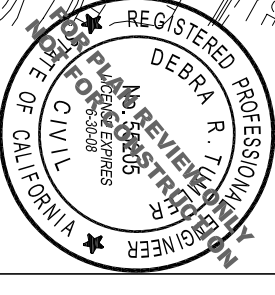


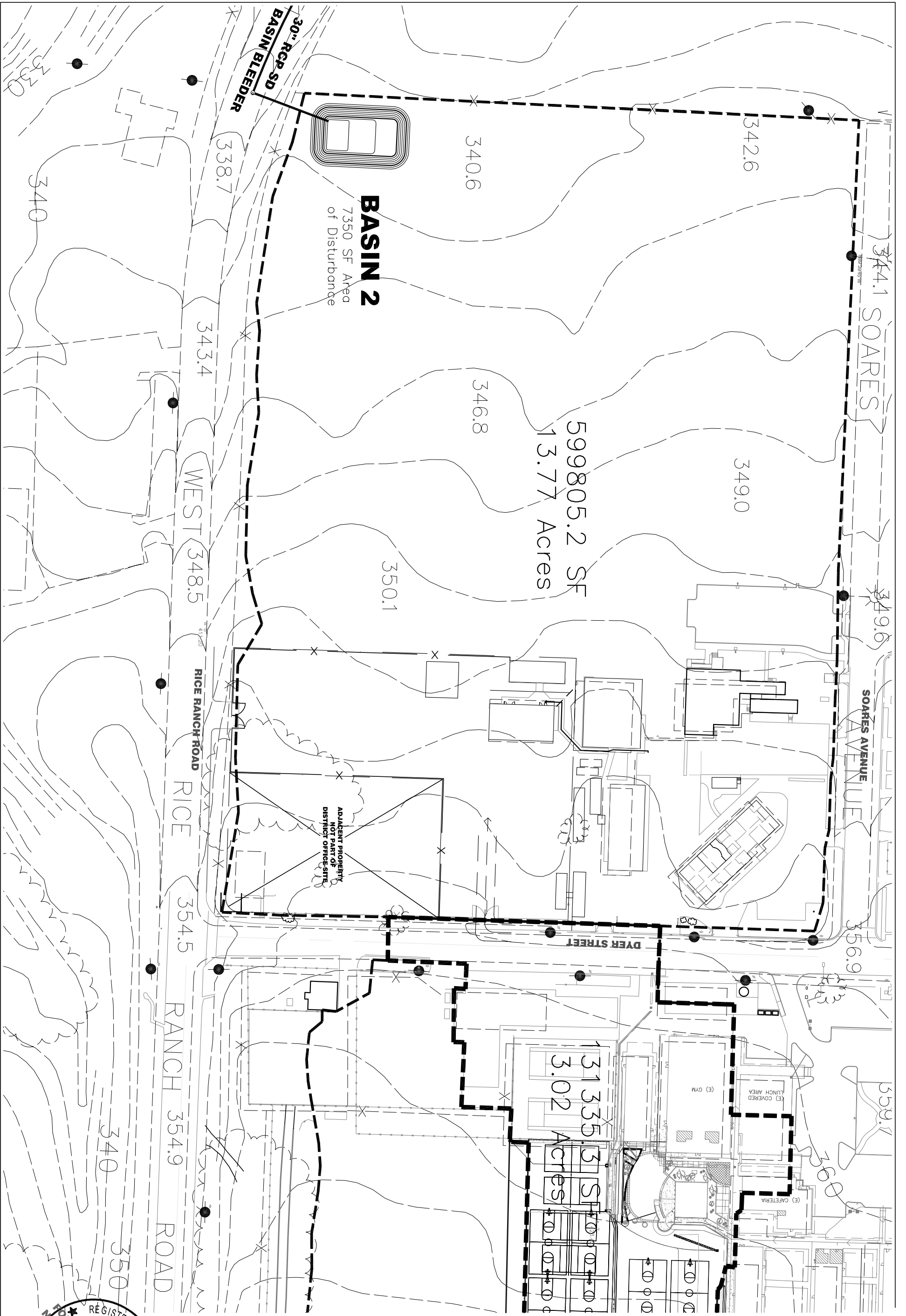


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 www.wallacegroup.us

**ORCUTT UNIFIED SCHOOL DISTRICT**  
**Preliminary Drainage Review**  
**APN's 105-134-004 + -005 & 105-330-005 + -006**  
 Surplus Property/Senior Housing Project

JOB No. : XXX  
 DRAWING : .dwg  
 DRAWN BY: DRT  
 DATE : 8/3/07  
 SCALE : 1" = 200'





**BASIN 2**  
7350 SF Area  
of Disturbance

599805.2 SF  
13.77 Acres

ADJACENT PROPERTY  
NOT PART OF  
DISTRICT OFFICE SITE

131335.3 SF  
3.02 Acres



JOB No. : XXX  
DRAWING : .dwg  
DRAWN BY: DRT  
DATE : 8/3/07  
SCALE : 1" = 100'

**ORCUTT UNIFIED SCHOOL DISTRICT**  
**Preliminary Drainage Review**  
**APN's 105-134-004 + -005 & 105-330-005 + -006**  
Surplus Property/Senior Housing Project

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## **APPENDIX F**

### **Transportation/Circulation**

- **Traffic and Circulation Study**

# **Traffic and Circulation Study**

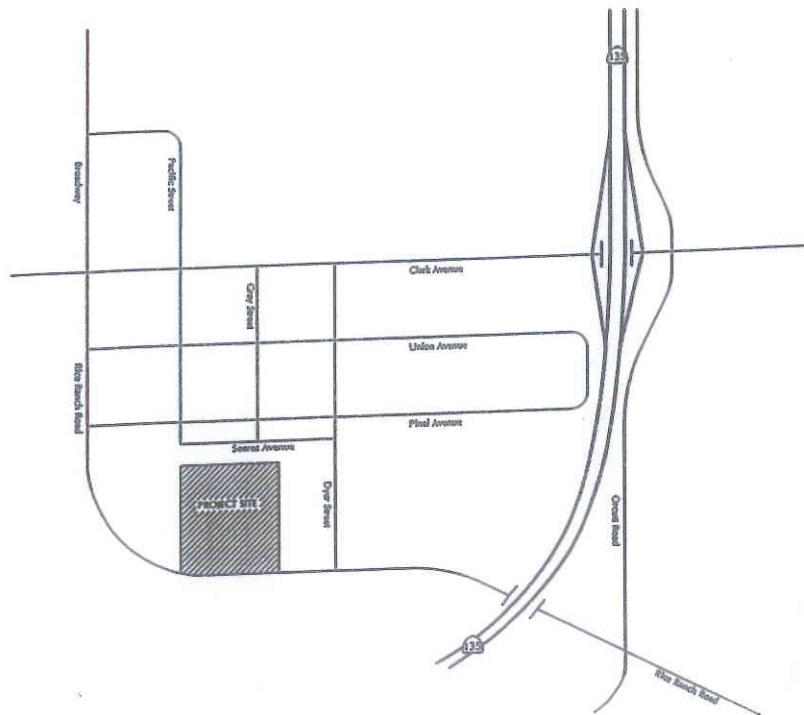
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**ORCUTT UNION SCHOOL DISTRICT  
KEY SITE 17 REZONE PROJECT  
COUNTY OF SANTA BARBARA, CALIFORNIA**

---

**TRAFFIC AND CIRCULATION STUDY**

---



---

July 2, 2010

ATE #10037

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Prepared For:  
Envicom Corporation  
28328 Agoura Road  
Agoura Hills, California 91301

---



**ASSOCIATED TRANSPORTATION ENGINEERS**

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## **ASSOCIATED TRANSPORTATION ENGINEERS**

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Richard L. Pool, P.E.  
Scott A. Schell, AICP

July 2, 2010

Lisa Ballin  
Envicom Corporation  
28328 Agoura Road  
Agoura Hills, California 91301

***TRAFFIC AND CIRCULATION STUDY  
FOR THE KEY SITE 17 SENIOR HOUSING PROJECT, COUNTY OF SANTA BARBARA***

Associated Transportation Engineers (ATE) has prepared the following traffic and circulation study for the Orcutt Union School District Key Site 17 Rezone Project. The study reviews potential traffic and circulation impacts associated with the project and identifies mitigation measures where appropriate.

We appreciate the opportunity to assist you with this project.

Associated Transportation Engineers

Scott A. Schell, AICP, PTP  
Principal Transportation Planner

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## INTRODUCTION

The following study analyzes the potential traffic and circulation impacts associated with the Orcutt Union School District (OUSD) Key Site 17 Rezone Project (the "Project"), located in the Orcutt area of Santa Barbara County. The report evaluates existing and future traffic operations within the study area adjacent to the project site. A review of site access and parking demands is also contained within the report.

## PROJECT DESCRIPTION

Figure 1 illustrates the location of the Project within the Orcutt area. The site occupies the central portion of Key Site 17. The partially constructed single-family residential development to the west of the site (on APN 105-330-004) and the OUSD offices and a bus storage/maintenance yard to the east of the site (on APN 105-330-016) occupy the remainder of the Key Site 17. The site is currently undeveloped, with the exception of a 0.28-acre paved parking area that is currently used by the adjacent Oasis Senior Center. The site is located just south of Old Town Orcutt and is bounded by Soares Avenue to the north; a partially constructed single-family residential development to the west (referred to as the Stonegate development); Rice Ranch Road to the south; and the Oasis Senior Center and OUSD offices and a bus storage/maintenance yard to the east. Site access is available from Soares Avenue to the north and Rice Ranch Road to the south.

The Project is proposing to rezone a portion of Key Site 17 to allow for a senior housing development. There is no development plan for the site. The traffic analysis assume the development of 257 senior housing units, the reasonable maximum development that could occur on the site under the proposed General Plan and Zoning designations and standards.

## EXISTING CONDITIONS

### Street Network

The project site is served by a network of arterial and collector streets, as illustrated in Figure 2. The following text provides a brief discussion of the major components of the study-area street network.

State Route 135 (SR 135), located east of the Project, is a north-south arterial that extends as a four-lane freeway from Route 1 south of Orcutt to the Foster Road intersection; and as four- to six-lane arterial from Foster Road to U.S. Highway 101 near the north end of the City of Santa Maria. This state highway serves as the primary north-south route through the Orcutt-Santa Maria area. The roadway is named the "Orcutt Expressway" in the Orcutt area and "Broadway" in the City of Santa Maria. Regional access to the project site is provided via a full-access diamond interchange at SR 135/Clark Avenue.





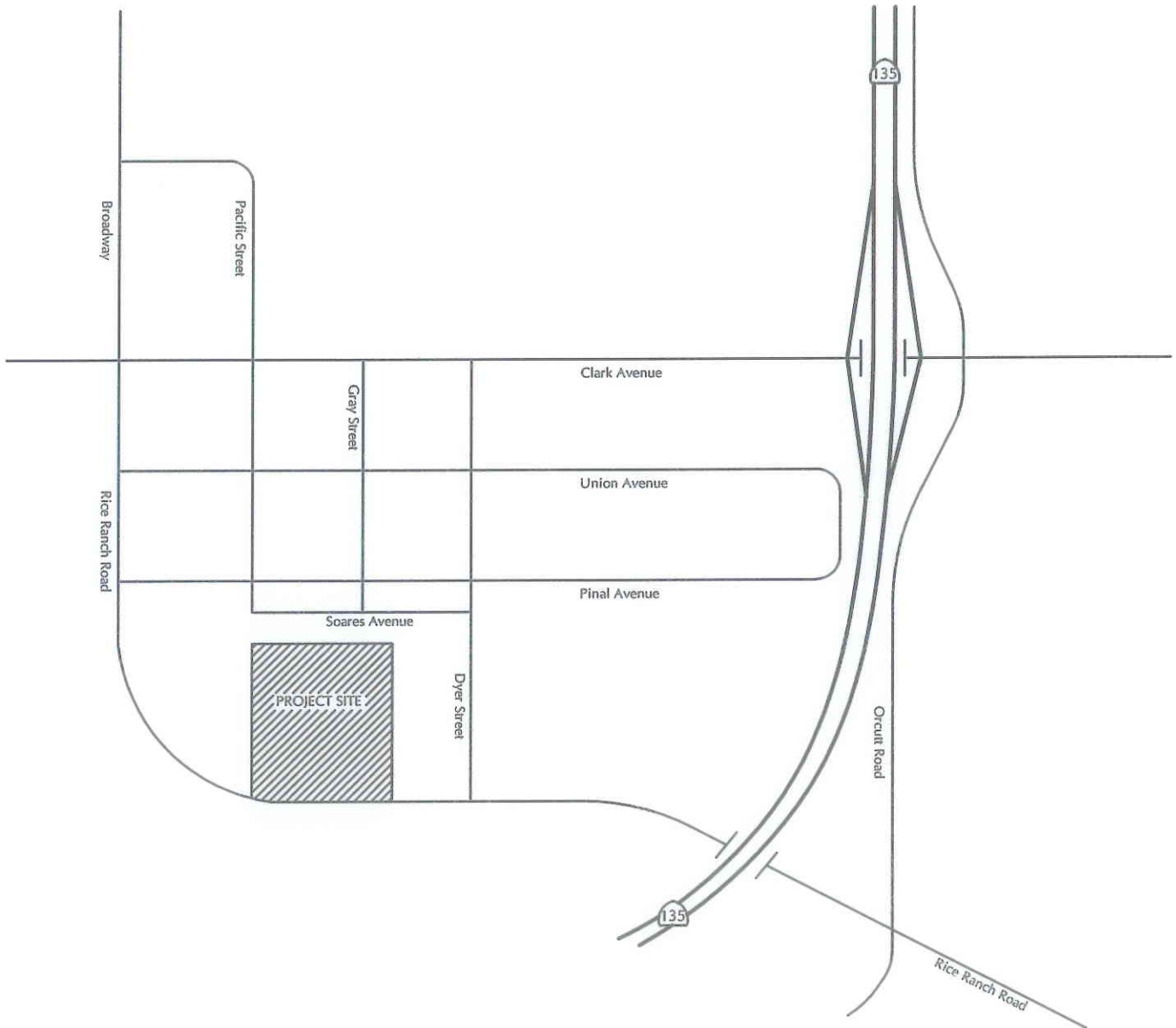
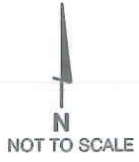
FIGURE 1

PROJECT LOCATION



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### EXISTING STREET NETWORK

FIGURE 2

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Clark Avenue, located north of the Project, is an east-west arterial road that extends from U.S. 101 on the east to SR 1 on the west in Orcutt. The roadway is a four-lane arterial east of SR 135 and narrows to a two-lane arterial west of SR 135. The segment within the Old Town Orcutt area contains two travel lanes (one in each direction) with on-street angled parking.

Rice Ranch Road, located along the Project's southern frontage, is a two-lane roadway that extends east of Orcutt Road as East Rice Ranch Road and west of Orcutt Road as West Rice Ranch Road. West Rice Ranch Road turns northerly just west of the project site, where it continues as Broadway Street into the Old Town Orcutt area.

Broadway Street is a two-lane roadway that extends from just south of Clark Avenue to Foster Road on the north. The northern segment of this roadway is named California Boulevard.

Orcutt Road is a two-lane frontage road that parallels the east side of SR 135 from Rice Ranch Road on the south to Goodwin Road on the north.

### **Intersection Operations**

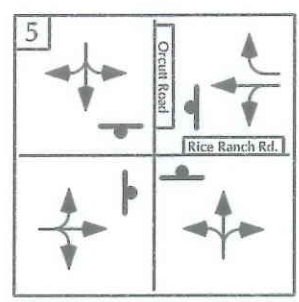
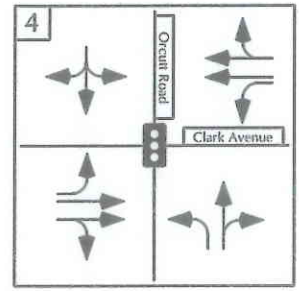
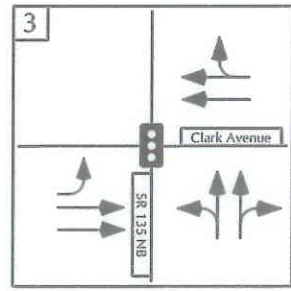
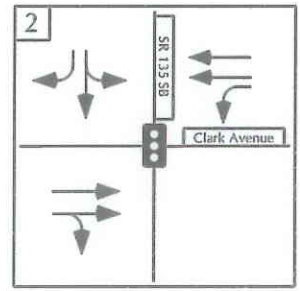
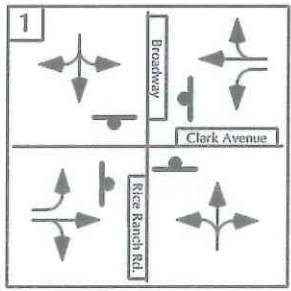
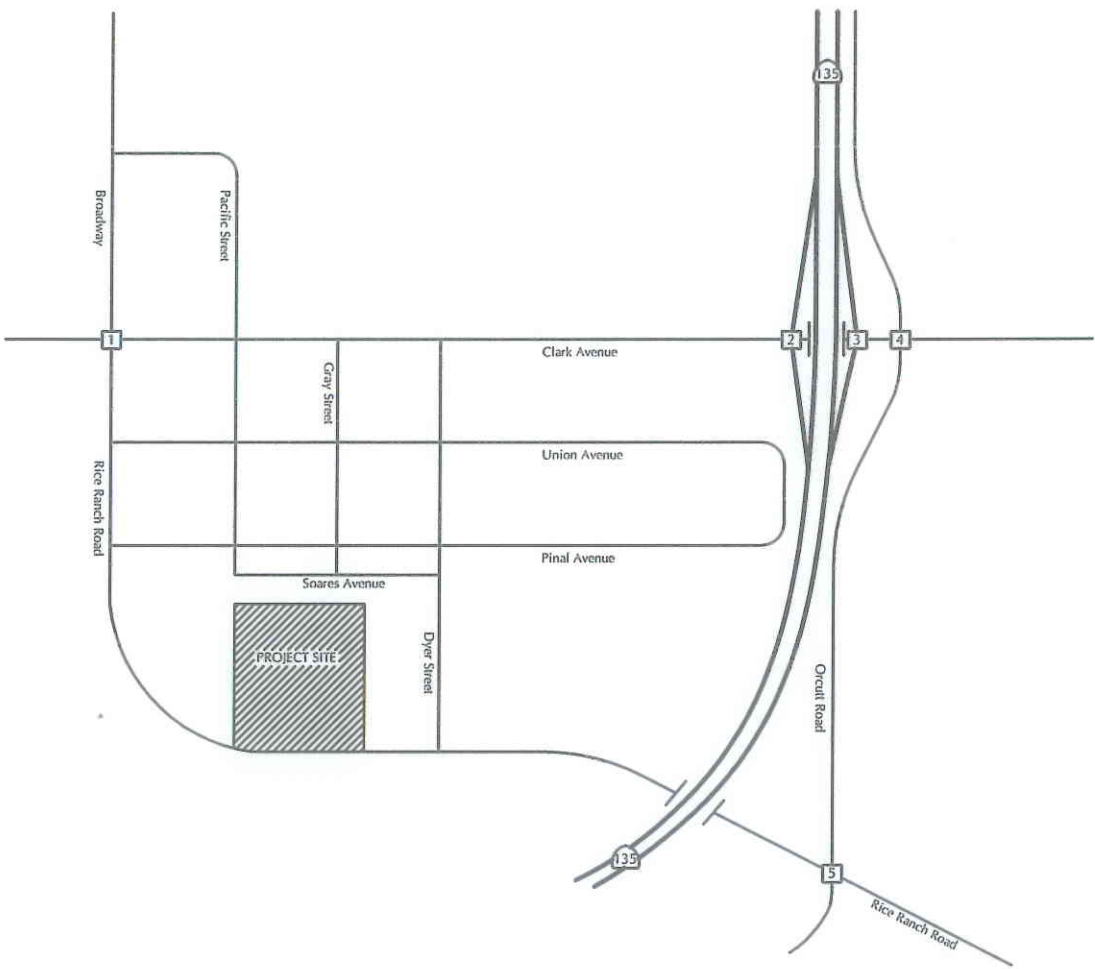
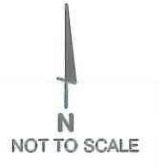
Because traffic flow on urban arterials is most constrained at intersections, detailed traffic flow analyses focus on the operating conditions of critical intersections during peak travel periods. "Levels of Service" (LOS) A through F are used to rate intersection operations, with LOS A indicating very good operation and LOS F indicating poor operation (more complete definitions are contained in the Technical Appendix for reference). The County of Santa Barbara considers LOS C acceptable for intersections operations.

Figure 3 presents the study-area intersections and illustrates the existing lane geometries and traffic controls. Existing P.M. peak hour traffic volumes for the study-area intersections were obtained from traffic counts conducted in May 2010 for this study and from count data contained in the Old Town Orcutt Traffic, Circulation, and Parking Study<sup>1</sup> (traffic count data is contained in the Technical Appendix for reference). Figure 4 presents the Existing P.M. peak hour traffic volumes for the study-area intersections.

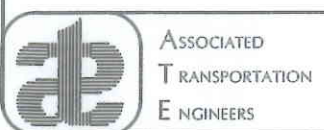
Levels of service for the signalized intersections were calculated using the intersection capacity utilization (ICU) methodology, which is the level of service method adopted by the County. This "critical movement analysis" models the traffic flows and attributes of signalized intersections (saturation flow rates, heavy vehicles, signal timing, etc.). Pursuant to the ICU method, levels of service were calculated and reported based on the ICU ratio. The ICU ratio, which is expressed as a percentage, is the proportion of an intersection's capacity used to accommodate the traffic demands. For example, if an intersection is operating at 80% of capacity (ICU = 0.80), then 20% of the capacity is not being used.

---

<sup>1</sup> Old Town Orcutt Traffic, Circulation, and Parking Study, Penfield & Smith, February, 2008.



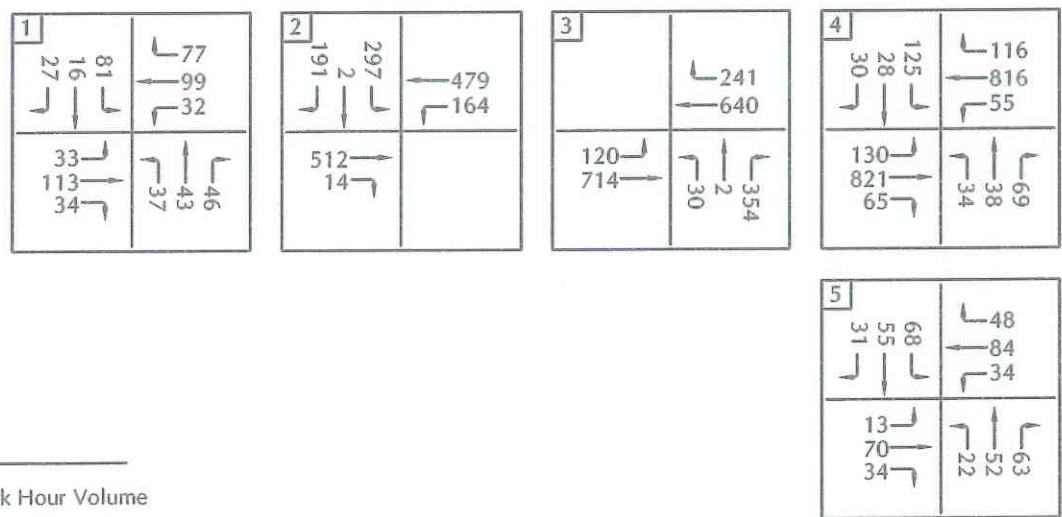
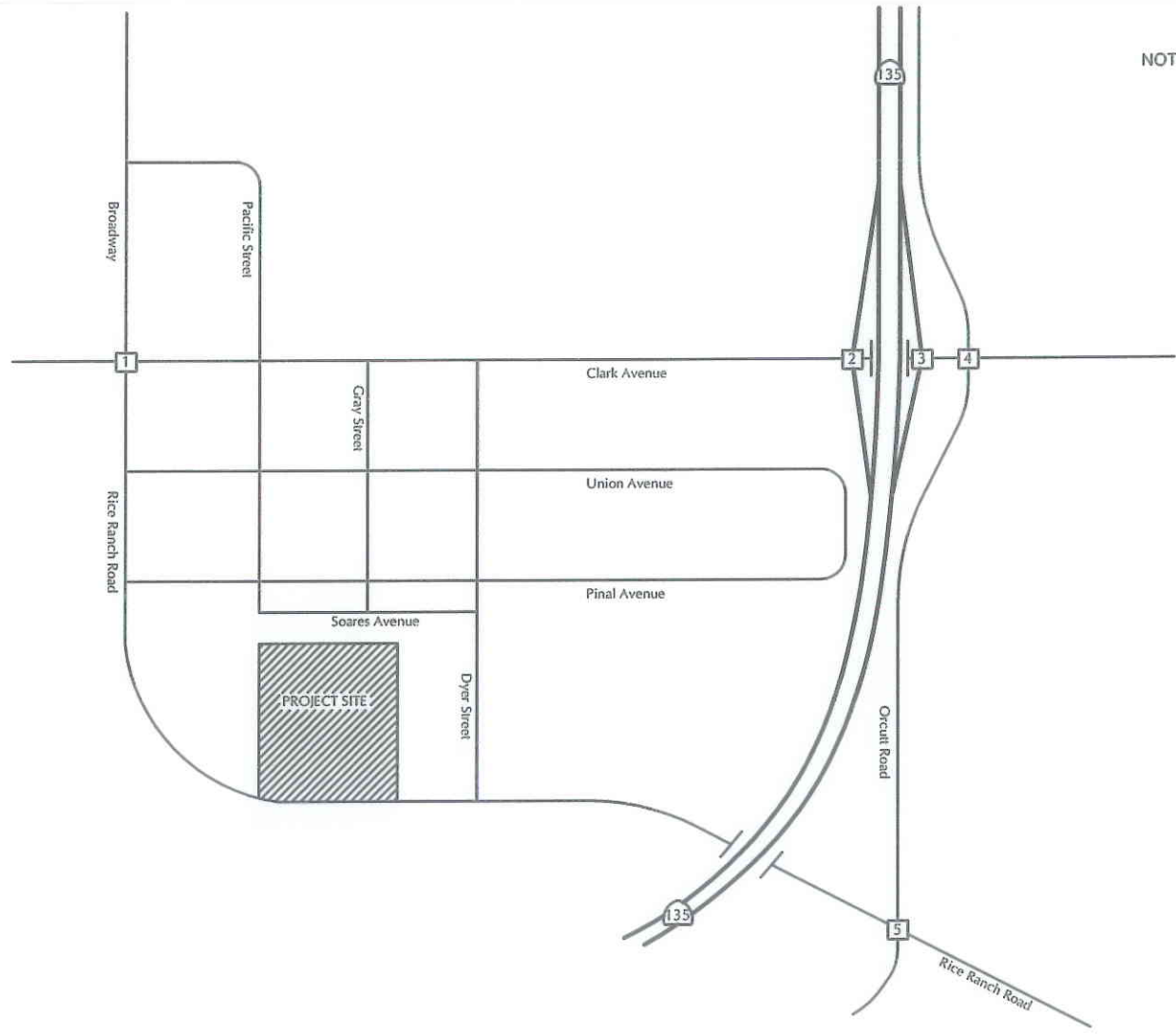
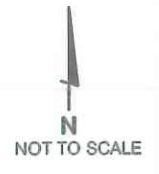
- LEGEND**
- Lane Geometry
  - Stopped Approach
  - Signalized Intersection



STUDY-AREA INTERSECTIONS

FIGURE 3

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LEGEND  
 LXX - P.M. Peak Hour Volume



EXISTING P.M. PEAK HOUR TRAFFIC VOLUMES

FIGURE 4

MMF - #10037



Levels of service for stop-sign controlled intersections were calculated using the methodology outlined in the Highway Capacity Manual (HCM).<sup>2</sup> Each constrained movement at unsignalized intersections (movements required to stop or yield) has a level of service rating and there is an overall level of service rating for the intersection. Pursuant to the HCM methods, levels of service were calculated and reported based on the average seconds of delay per vehicle for the constrained movements. The unsignalized levels of service assume the lane geometries at the intersections as well as the HCM recommended inputs values for other attributes of the intersection (e.g. % heavy vehicles, flared approaches, etc.). Table 1 lists the existing traffic control and levels of service for the study-area intersections.

**Table 1  
Existing Intersection Operations**

Intersection	Control	P.M. Peak Hour	
		ICU or Delay	LOS
Clark Avenue/Broadway Street(a)	Stop-Sign	9.3 Sec.	LOS A
Clark Avenue/SR 135 SB Ramps(b)	Signal	0.55	LOS A
Clark Avenue/SR 135 NB Ramp(b)	Signal	0.67	LOS B
Clark Avenue/Orcutt Road(b)	Signal	0.61	LOS B
Rice Ranch Road/Orcutt Road(a)	Stop-Sign	8.9 Sec.	LOS A

(a) Stop controlled intersection. LOS based on average delay per vehicle in seconds.

(b) Signalized intersection. LOS based on ICU.

As shown in Table 1, the study-area intersections currently operate at LOS A and LOS B, which meet the County's LOS C standard.

## IMPACT THRESHOLDS

The County of Santa Barbara impact thresholds were used to determine impacts related to the Project. The County's thresholds are outlined in the following text.

- A. If the addition of project traffic to an intersection increases the (V/C) ratio by the values listed in the following table, then it is considered a significant project-specific impact.

---

<sup>2</sup> Highway Capacity Manual, Transportation Research Board, National Research Council, 2000.

Significant Changes in Levels of Service	
Intersection Level of Service (Including Project)	Increase in V/C or Trips Greater Than
LOS A	0.20
LOS B	0.15
LOS C	0.10
LOS D	15 Trips
LOS E	10 Trips
LOS F	5 Trips

- B. The project's access to a major road or arterial road would require access that would create an unsafe situation, a new traffic signal or major revisions to an existing traffic signal.
- C. The project adds traffic to a roadway that has design features (e.g., narrow width, road-side ditches, sharp curves, poor sight distance, inadequate pavement structure) that would become a potential safety problem with the addition of project traffic.
- D. Project traffic would utilize a substantial portion of an intersection's capacity where the intersection is currently operating at acceptable LOS (A-C) but with cumulative traffic would degrade to or approach LOS D (V/C 0.80) or lower. Substantial is defined as a minimum change of 0.03 for an intersection which would operate from 0.80 to 0.85, a change of 0.02 for an intersection which would operate from 0.86 to 0.90 and a change of 0.01 for an intersection which would operate greater than 0.90.

## PROJECT-SPECIFIC ANALYSIS

### Trip Generation

Since the type and mix of senior housing has not been defined, trip generation estimates were developed for several scenarios using the various senior housing rates published in the Institute of Transportation Engineers (ITE) Trip Generation report.<sup>3</sup> Table 2 shows the trip generation estimates for each of the senior housing categories contained in the ITE report.

---

<sup>3</sup> Trip Generation, Institute of Transportation Engineers, 8<sup>th</sup> Edition, 2008.

**Table 2  
Project Trip Generation**

ITE Land Use Category	Size	ADT		P.M. Peak	
		Rate	Trips	Rate	Trips
Continuing Care Retirement Community	257 Units	2.81	722	0.29	75
Assisted Living	257 Units	2.74	704	0.29	75
Congregate Care Facility	257 Units	2.15	553	0.19	44
Senior Adult Housing (Attached)	257 Units	3.48	894	0.16	41
Senior Adult Housing (Detached)	257 Units	3.71	953	0.27	69

As shown, the trip estimates that are based on ITE rates for Continuing Care Retirement Community generate the highest traffic levels during the P.M. peak hour period (the critical time period for analysis). ATE and County staff agreed to using those estimates for assessing potential impacts for the Project. Development of the site with a 257-unit Continuing Care Retirement Community would generate 772 ADT, with 75 trips occurring during the P.M. peak hour.

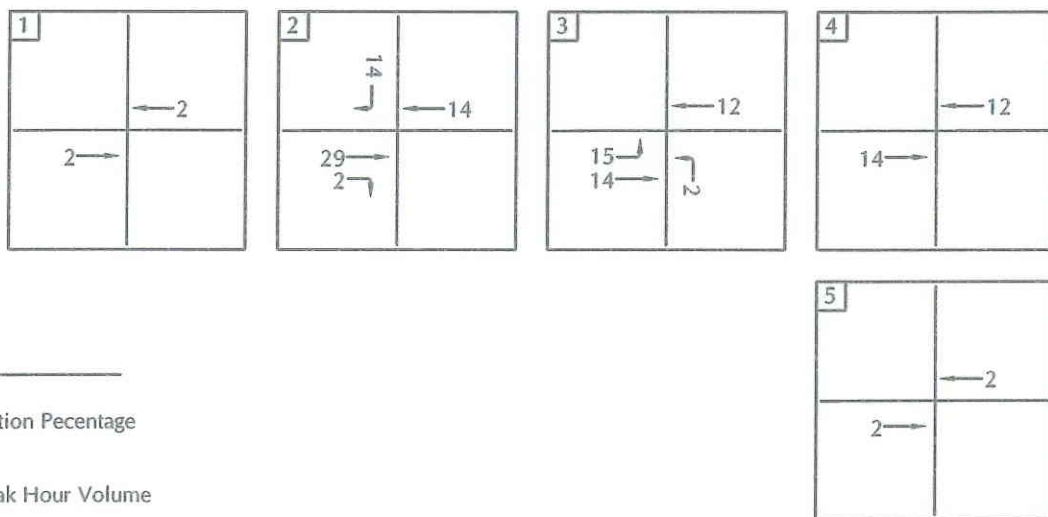
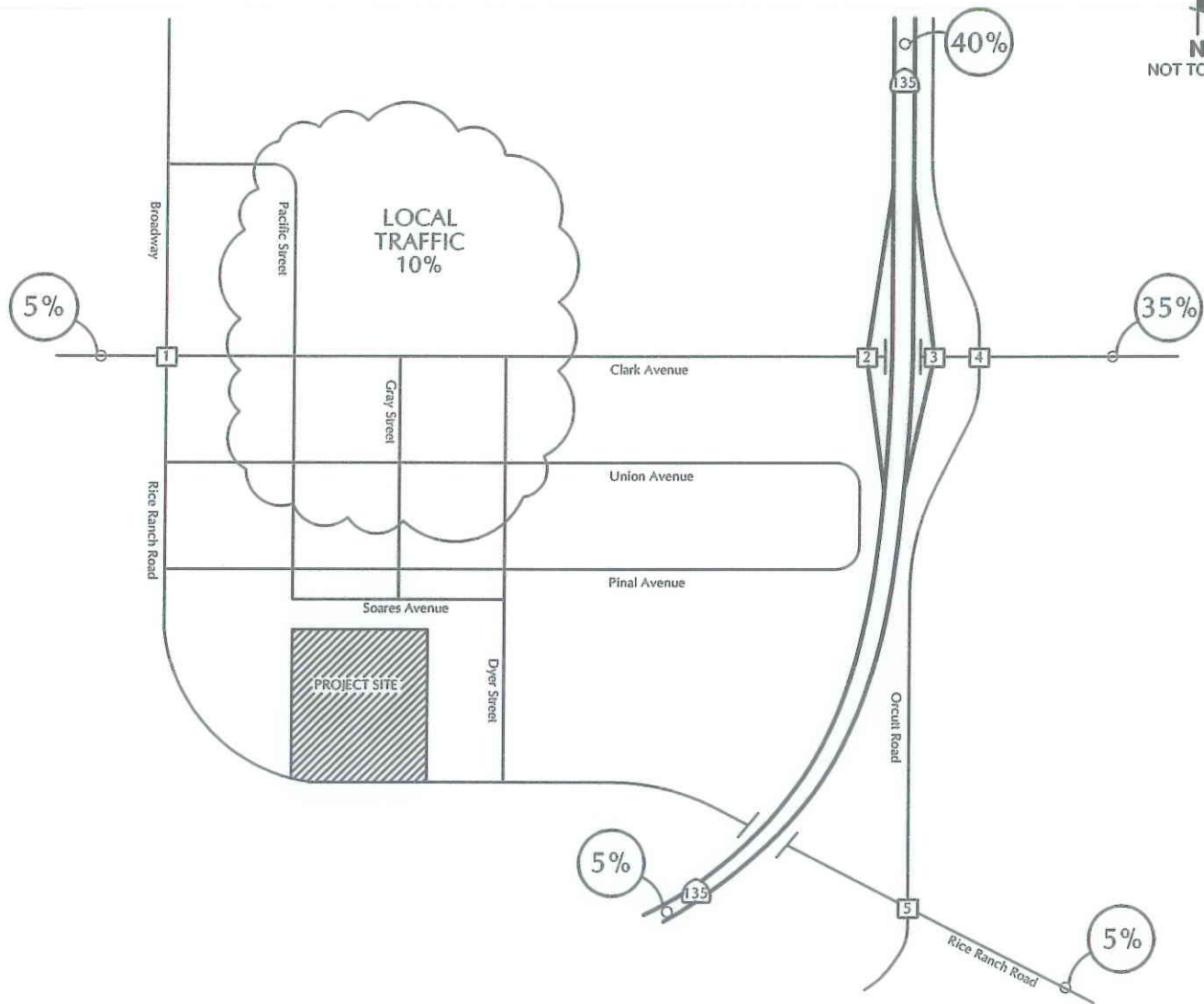
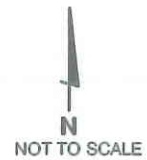
**Trip Distribution**

Project trip distribution percentages were developed based on existing traffic patterns and consideration of the population, employment and retail centers in the area. Table 3 and Figure 5 show the project trip distribution percentages. Figure 5 also shows the assignment of project traffic at the study-area intersections. Pursuant to the access planned for Key Site 17 in the Orcutt Community Plan, the assignment of Project traffic assumes access via connections to Soares Avenue as well as one connection to Rice Ranch Road at the southeast corner of the site.

**Table 3  
Project Trip Distribution**

Origin/Destination	Direction	Distribution %
SR 135	North	40%
	South	5%
Clark Avenue	East	35%
	West	5%
Rice Ranch Road	East	5%
Local Old Town Area w/o SR 135	-	10%
<b>Total</b>		<b>100%</b>





**LEGEND**

- % - Distribution Percentage
- ↙XX - P.M. Peak Hour Volume



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**PROJECT TRIP DISTRIBUTION AND ASSIGNMENT**

**FIGURE 5**

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## Intersection Impacts

Levels of service were calculated for the study-area intersections assuming the Existing + Project volumes shown on Figure 6. Table 4 compares the Existing and Existing + Project intersection levels of service and identifies the significance of traffic added by the Project.

**Table 4**  
**Existing + Project Intersection Operations**

Intersection	P.M. Peak Hour ICU or Delay / LOS		Impact?
	Existing	Existing + Project	
Clark Avenue/Broadway Street(a)	9.3 Sec./LOS A	9.3 Sec./LOS A	NO
Clark Avenue/SR 135 SB Ramps(b)	0.55/LOS A	0.56/LOS A	NO
Clark Avenue/SR 135 NB Ramp(b)	0.67/LOS B	0.68/LOS B	NO
Clark Avenue/Orcutt Road(b)	0.61/LOS B	0.61/LOS B	NO
Rice Ranch Road/Orcutt Road(a)	8.9 Sec./LOS A	8.9 Sec./LOS A	NO

(a) Stop controlled intersection. LOS based on average delay per vehicle in seconds.

(b) Signalized intersection. LOS based on ICU.

The data presented in Table 4 indicate that the study-area intersections are forecast to operate at LOS A and LOS B with Existing + Project traffic volumes (no change from Existing Conditions). The Project would not generate significant impacts to the study-area intersections based on County impact thresholds.

## SITE ACCESS

Since there is not a development plan for the site, potential access connections were reviewed. At a minimum, two access connections will be required to meet fire department requirements. Access for the Project is available from Soares Avenue to the north and Rice Ranch Road to the south. The concept plan in the Orcutt Community Plan (see Figure 7) shows two access connections to Soares Avenue (one opposite of Pacific Street and one opposite of Gray Street) and one connection to Rice Ranch Road at the southeast corner of the site. Development Standard KS17-5 in the Orcutt Community Plan states, "Any access to Rice Ranch Road from this site shall be limited to one point from APN 105-330-006 and shall be coordinated to the greatest degree feasible with access to Site 13." Given the speeds along Rice Ranch Road and the horizontal curve to the west of the site, the connection to Rice Ranch Road should be provided at the southeast corner of the site (on APN 105-330-006). ATE field verified that sufficient sight distance is available at this connection.





**SITE #17**

FIGURE 7

KEY SITE 17 CONCEPT PLAN

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The second access would be from Soares Avenue. One or two connections could be provided. The Soares Avenue connection should be aligned opposite Pacific Street and/or opposite Gray Street to provide conventional four-way intersections in order to maximize safety. Providing two connections to Soares Avenue would increase the dispersion of project traffic on the neighborhood streets in the project vicinity (1st Street, Pacific Street, Gray Street, Dyer Street). Providing only one connection opposite Pacific Street would increase loading on Pacific Street or providing one connection opposite Gray Street would increase the loading on that road. However, not all of the traffic would use the street where the access connection is provided, since some of the traffic would use the other neighborhood streets when traveling to/from the site (1st Street, Pacific Street, Gray Street, Dyer Street).

Most of the project’s traffic would use Soares Avenue, since the majority of project traffic (80-90%) would be oriented to/from the regional street network to the north, east and west. Depending upon the type of senior housing developed, the project could add up to 850 ADT at the Soares Avenue access. These volumes would disperse through the neighborhood street system (1st Street, Pacific Street, Gray Street, Dyer Street). Given the relatively low volumes on the neighborhood streets, providing one or two connections to Soares Avenue would not generate significant impacts since the neighborhood streets would carry volumes within their capacities.

**PARKING**

Since the type and mix of senior housing has not been defined, the following zoning ordinance requirements and parking demand forecasts are presented for informational purposes only. Further review of parking requirements should be conducted as part of the development plan approval process.

**Zoning Ordinance Parking Requirements**

Table 5 shows the County’s zoning ordinance parking requirements that may be applicable to a senior housing project developed at the site. The appropriate requirements would depend on the type of housing (e.g., independent living, assisted living, skilled nursing, continuing care, congregate care, etc.). The actual parking requirement was not calculated for the Project since the type of housing, number of guest rooms, and number of employees has not been defined.

**Table 5  
Zoning Ordinance Parking Requirements**

Land Use Category	Parking Requirement
Retirement & Special Care Homes(a)	1 Space/Guest Room & 1 Space/2 Employees
Medical Services - Extended Care	1 Space/3 Beds & 1 Space/3 Employees

(a) Does not apply to special care homes serving 6 or fewer clients that are permitted as a one-family dwelling.

Source: Santa Barbara County Land Use & Development Code, Sections 35.36.050 & 35.36.060, County of Santa Barbara, May 2008.

## Peak Parking Demands

Peak parking demand estimates were developed using senior housing rates contained in the Institute of Transportation Engineers Parking Generation report.<sup>4</sup> Table 6 shows the peak parking demand forecasts for the various senior housing types studied by the Institute of Transportation Engineers.

**Table 6**  
**Peak Parking Demand Forecasts**

ITE Land Use Category	Size	Peak Parking Demands	
		Rate	Spaces
Continuing Care Retirement Community	257 Units	0.83	213
Assisted Living	257 Units	0.36	93
Congregate Care Facility	257 Units	0.41	106
Senior Adult Housing (Attached)	257 Units	0.50	129

As shown, the Continuing Care Retirement Community senior housing type would generate the highest parking demand (213 spaces). The Assisted Living senior housing type would generate the lowest parking demand (93 spaces).

## TRANSIT

Santa Maria Area Transit (SMAT), operated by the City of Santa Maria, provides public transit service within the Santa Maria-Orcutt area. SMAT Route 1A, 1B, and 61 would serve the Project site. The stop for these routes is located at the Orcutt Road/Rice Ranch Road intersection just east of the Project site. Route 1A & 1B provides service during the daytime periods, with buses running each hour from approximate 6:00 A.M. to 6:30 P.M. on weekdays and from 8:30 A.M. to 4:30 P.M. on Saturdays. Route 61 provides service during weekday evenings, with buses running every 45 minutes between 7:45 A.M. and 10:30 P.M. Curb-to-curb service is available for persons with disabilities.

Development of senior housing with up to 257 units would generate additional demands for transit. Given the small size of the proposed development, the additional transit demands would not generate the need for new routes or transit service in the area. It is noted that retirement communities, assisted living facilities, etc., often operate private shuttle bus services for residents to travel to local places of interest, shop, make doctor visits, etc. Thus, some of the transit demands would be satisfied by such services if provided by the future senior development.

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<sup>4</sup> Parking Generation, Institute of Transportation Engineers, 3<sup>rd</sup> Edition, 2004.



## CUMULATIVE ANALYSIS

### Traffic Forecasts

Cumulative traffic volumes were forecast for the study-area intersections using data provided in the Old Town Orcutt Traffic, Circulation and Parking Study. The cumulative forecasts contained in that study were generated by the Orcutt Traffic Model. The cumulative model assumes the City of Santa Maria and Orcutt 10-year land use scenarios as well as street network improvements planned within the 10-year horizon period. The planned improvement that will have a significant affect on traffic flows in the study area is the Union Valley Parking Extension Project, which includes the construction of a new interchange at U.S. Highway 101 and the extension of the Union Valley Parkway as a four-lane arterial between U.S. Highway 101 and Blosser Road. The Union Valley Parking Extension Project will relieve traffic loads on other east-west arterials, such as Clark Avenue. Figure 8 illustrates the Cumulative traffic forecasts. Project traffic was then layered onto the Cumulative forecasts in order to assess Cumulative + Project conditions. Figure 9 illustrates the Cumulative + Project traffic forecasts.

### Intersection Impacts

Table 7 compares the Cumulative and Cumulative + Project levels of service for the study-area intersections and identifies impacts based on County thresholds.

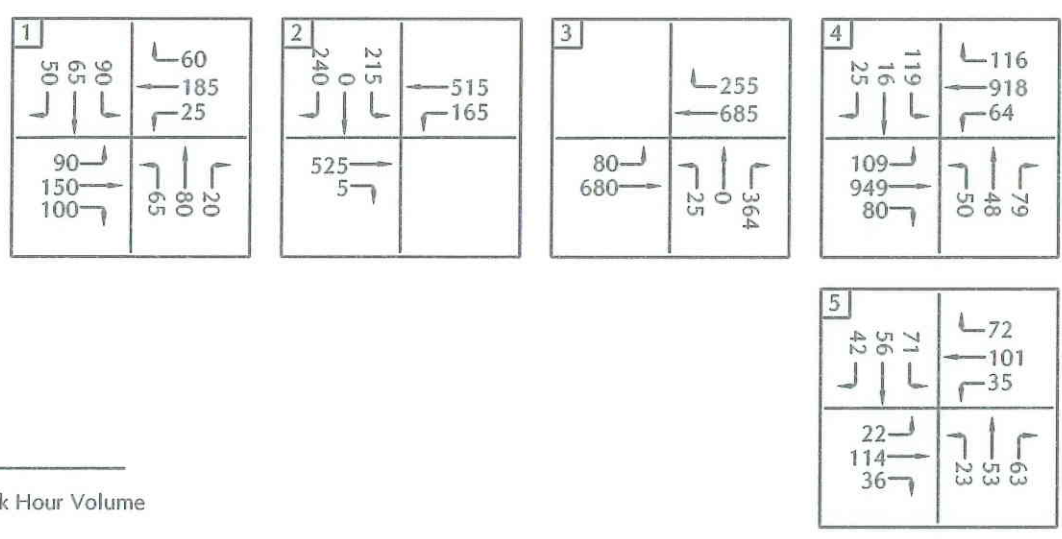
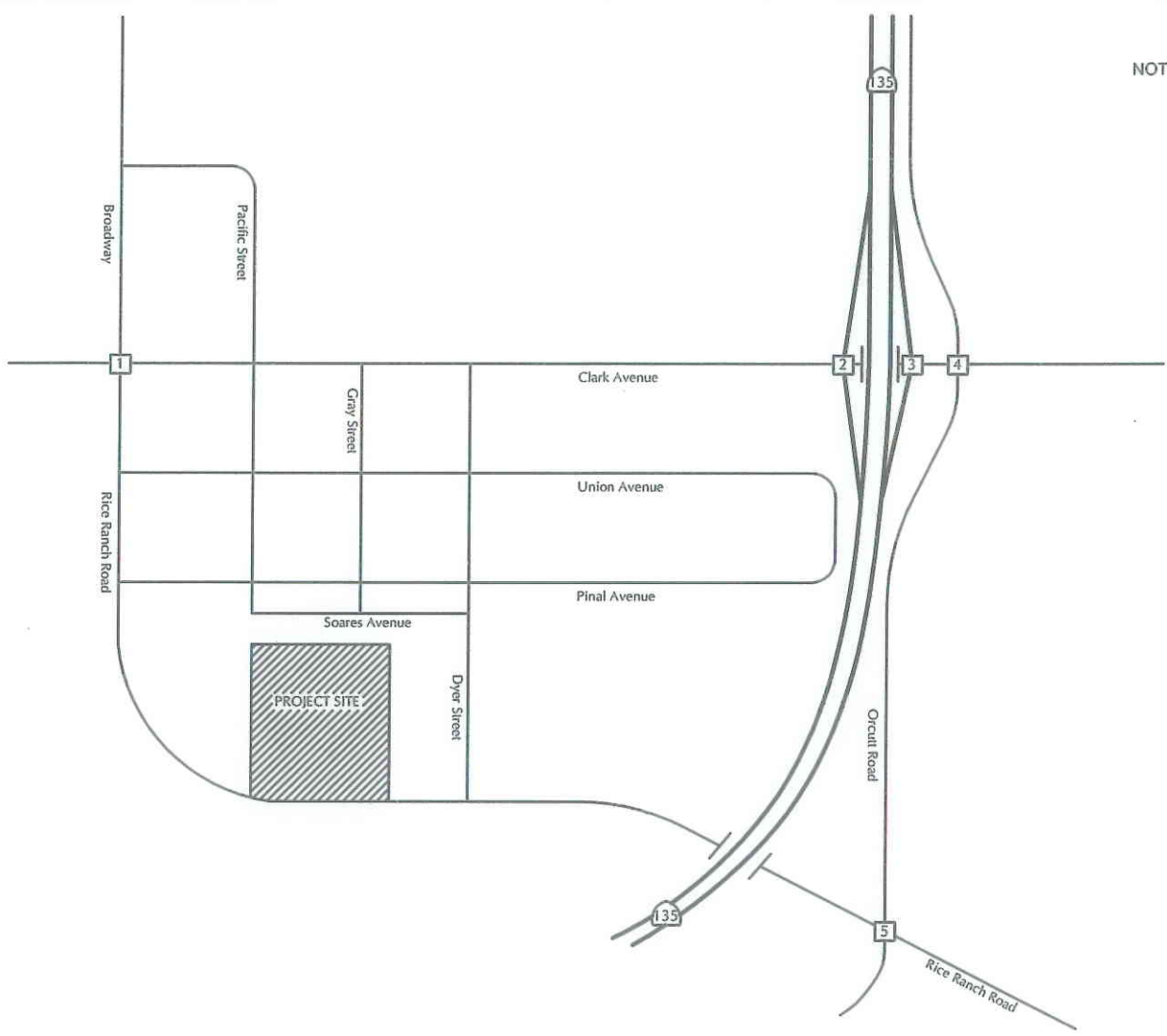
**Table 7  
Cumulative and Cumulative + Project Intersection Operations**

Intersection	P.M. Peak Hour ICU or Delay / LOS		Impact?
	Cumulative	Cumulative + Project	
Clark Avenue/Broadway Street(a)	12.1 Sec./LOS B	12.2 Sec./LOS B	NO
Clark Avenue/SR 135 SB Ramps(b)	0.50/LOS A	0.51/LOS A	NO
Clark Avenue/SR 135 NB Ramp(b)	0.67/LOS B	0.69/LOS B	NO
Clark Avenue/Orcutt Road(b)	0.62/LOS B	0.63/LOS B	NO
Rice Ranch Road/Orcutt Road(a)	9.5 Sec./LOS A	9.5 Sec./LOS A	NO

(a) Stop controlled intersection. LOS based on average delay per vehicle in seconds.

(b) Signalized intersection. LOS based on ICU.

As shown in Table 7, the study-area intersections are forecast to operate at LOS A and LOS B with Cumulative and Cumulative + Project traffic, which meet the County's LOS C standard. The Project would not contribute significant cumulative impacts at the study-area intersections based on County thresholds.



LEGEND  
 LXX - P.M. Peak Hour Volume

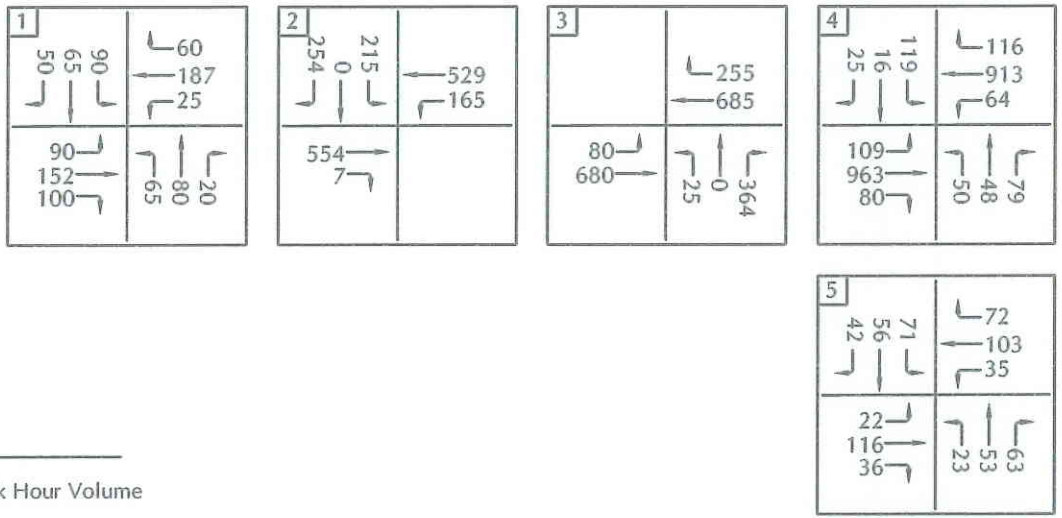
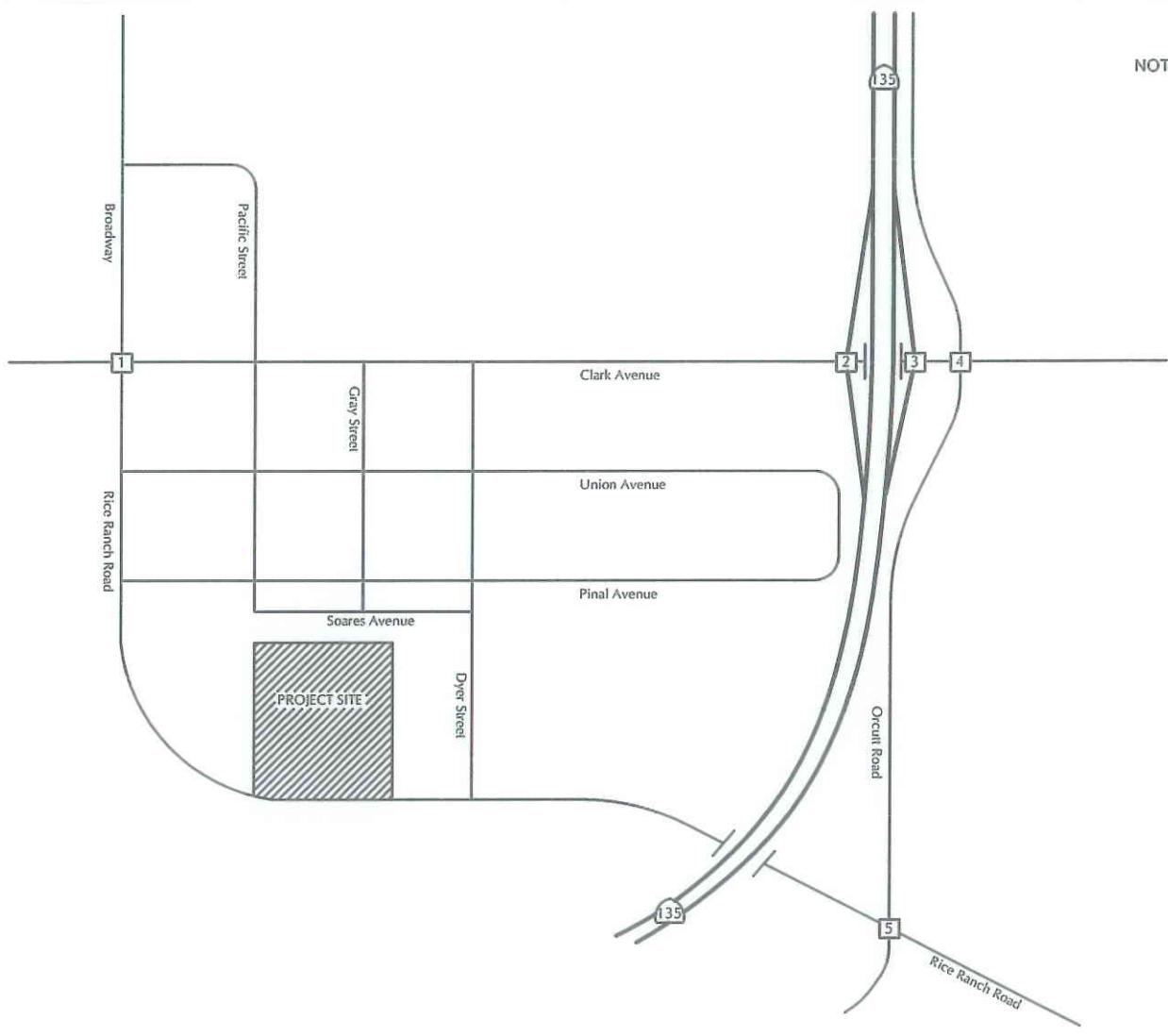


ASSOCIATED  
 TRANSPORTATION  
 ENGINEERS

CUMULATIVE P.M. PEAK HOUR TRAFFIC VOLUMES

FIGURE 8

MMF - #10037



LEGEND  
 LXX - P.M. Peak Hour Volume

CUMULATIVE + PROJECT P.M. PEAK HOUR TRAFFIC VOLUMES

FIGURE 9



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 TRANSPORTATION  
 ENGINEERS

MMF - #10037



## MITIGATION MEASURES

### Project-Specific

The operational analysis found that the Project would not generate project-specific impacts to the study-area intersections based on County thresholds. Project-specific mitigations would not be required.

### Cumulative

The operational analysis found that the Project would not generate significant cumulative impacts at the study-area intersections based on County thresholds. The Project would, however, be required to contribute to the County's traffic mitigation fee program to offset its contribution to cumulative affects in the region.

## CONGESTION MANAGEMENT PROGRAM ANALYSIS

### Impact Criteria

The Santa Barbara County Association of Governments (SBCAG) has developed a set of traffic impact thresholds to assess the impacts of land use decisions made by local jurisdictions on regional transportation facilities located within the Congestion Management Program (CMP) roadway system. The following guidelines were developed by SBCAG to determine the significance of project-generated traffic impacts on the regional CMP system.

1. For any roadway or intersection operating at "Level of Service" (LOS) A or B, a decrease of two levels of service resulting from the addition of project-generated traffic.
2. For any roadway or intersection operating at LOS C, project-added traffic that results in LOS D or worse.
3. For intersections within the CMP system with existing congestion, the following table defines significant impacts.

Level of Service	Project-Added Peak Hour Trips
LOS D	20
LOS E	10
LOS F	10

4. For freeway or highway segments with existing congestion, the following table defines significant impacts.

Level of Service	Project-Added Peak Hour Trips
LOS D	100
LOS E	50
LOS F	50

### Potential Impacts

The following study-area intersections area located on the CMP network:

#### CMP Intersections

Clark Avenue/SR 135 SB Ramps

Clark Avenue/SR 135 NB Ramps

As shown in Tables 4 and 7, the CMP intersections are forecast to operate at LOS A and LOS B under Existing + Project and Cumulative + Project conditions. Based on the CMP impact criteria, the Project would not impact the CMP facilities in the project vicinity.

### ALTERNATIVES

#### No Project

Based on the existing General Plan designation for the site (Res 8), the maximum number of units that could be built under the No Project alternative is 77 single family residential units. Table 8 compares the No Project trip generation estimates to the trip generation estimates developed for the Project.

**Table 8  
No Project Trip Generation**

Scenario/ ITE Land Use Category	Size	ADT		P.M. Peak	
		Rate	Trips	Rate	Trips
<b>No Project</b>					
Single Family Detached Housing	77 Units	9.57	737	1.01	78

<b>Proposed Project</b>					
Continuing Care Retirement Community	257 Units	2.81	722	0.29	75
Assisted Living	257 Units	2.74	704	0.29	75
Congregate Care Facility	257 Units	2.15	553	0.19	44
Senior Adult Housing (Attached)	257 Units	3.48	894	0.16	41
Senior Adult Housing (Detached)	257 Units	3.71	953	0.27	69

As shown, developing the site with 77 single family residential units would generate 737 ADT, with 78 trips occurring during the P.M. peak hour. The daily traffic that would be generated under the No Project scenario (737 ADT) falls within the range of estimates for the various senior housing types that could be developed under the Project proposal. The peak hour estimates that would be generated under the No Project scenario (78 P.M. trips) would be higher than the range of estimates for the various senior housing types that could be developed under the Project proposal.



## REFERENCES AND PERSONS CONTACTED

### Associated Transportation Engineers

Scott A. Schell, AICP, PTP Principal Transportation Planner  
Dan L. Dawson, PTP, Supervising Transportation Planner  
Matthew Farrington, Transportation Planner I

### References

Highway Capacity Manual, Highway Research Board Special Report 209, Transportation Research Board, National Research Council, 2000.

Highway Design Manual, California Department of Transportation, 6th Edition, 2006.

Old Town Orcutt Traffic, Circulation, and Parking Study, Penfield & Smith, February, 2008.

Orcutt Community Plan Update EIR, Volume II, Key Sites, County of Santa Barbara, 1995.

Parking Generation, Institute of Transportation Engineers, 3<sup>rd</sup> Edition, 2004.

Trip Generation, Institute of Transportation Engineers, 8th Edition, 2008.

### Persons Contacted

William Robertson, County of Santa Barbara

## TECHNICAL APPENDIX

### CONTENTS:

LEVEL OF SERVICE DEFINITIONS

INTERSECTION TURNING MOVEMENTS COUNTS

INTERSECTION LEVEL OF SERVICE CALCULATION WORKSHEETS

- Reference 1 - Clark Avenue/Broadway Street
- Reference 2 - Clark Avenue/SR 135 SB Ramps
- Reference 3 - Clark Avenue/SR 135 NB Ramp
- Reference 4 - Clark Avenue/Orcutt Road
- Reference 5 - Rice Ranch Road/Orcutt Road



## INTERSECTION LEVEL OF SERVICE DEFINITIONS

The ability of a roadway system to carry traffic is most often expressed in terms of "Levels of Service" (LOS) at intersections. LOS A through F are used, with LOS A indicating very good operations and LOS F indicating poor operations. More complete level of service definitions for intersections are listed in the following table.

LOS	Definition
A	Conditions of free unobstructed flow, no delays and all signal phases sufficient in duration to clear all approaching vehicles.
B	Conditions of stable flow, very little delay, a few phases are unable to handle all approaching vehicles.
C	Conditions of stable flow, delays are low to moderate, full use of peak direction signal phases is experienced.
D	Conditions approaching unstable flow, delays are moderate to heavy, significant signal time deficiencies are experienced for short durations during the peak traffic period.
E	Conditions of unstable flow, delays are significant, signal phase timing is generally insufficient, congestion exists for extended duration throughout the peak period.
F	Conditions of forced flow, travel speeds are low and volumes are well above capacity. This condition is often caused when vehicles released by an upstream signal are unable to proceed because of back-ups from a downstream signal.

Source: Highway Capacity Manual, December 2000.

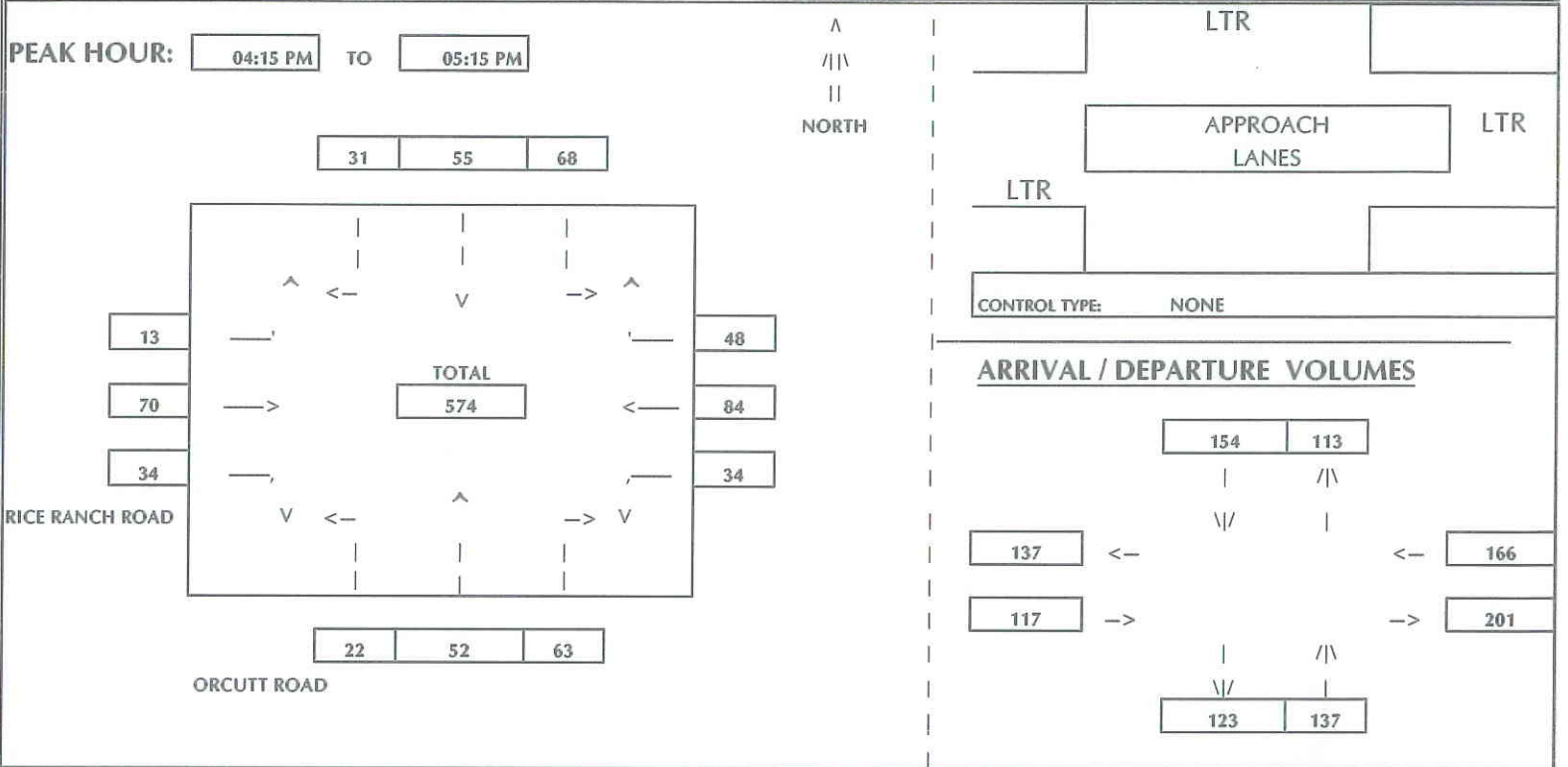
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**INTERSECTION TURNING MOVEMENTS COUNTS**

# ASSOCIATED TRANSPORTATION ENGINEERS

## INTERSECTION TURNING MOVEMENT SUMMARY

**PROJECT:** ORCUTT KEY SITE 17      **PROJECT #:** 10037      **COUNT DATE:** 05-25-2010      **FILE NAME:** 05PM  
**N-S Approach:** ORCUTT ROAD      **COUNT TIME:** 04:00 P.M. TO 6:00  
**E-W Approach:** RICE RANCH ROAD      **CITY:** ORCUTT      **WEATHER:** OVERCAST



TIME PERIOD		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
From	To	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	VOLUMES

### COUNT DATA

04:00 PM	—	04:15 PM	2	11	18	9	15	12	7	17	3	10	32	10	146
04:15 PM	—	04:30 PM	7	22	33	30	30	17	12	35	6	19	53	18	282
04:30 PM	—	04:45 PM	10	37	51	46	43	24	15	54	15	28	72	25	420
04:45 PM	—	05:00 PM	13	47	65	63	59	32	17	72	20	37	94	39	558
05:00 PM	—	05:15 PM	24	63	81	77	70	43	20	87	37	44	116	58	720
05:15 PM	—	05:30 PM	27	77	94	88	85	50	22	103	43	54	130	69	842
05:30 PM	—	05:45 PM	31	91	111	100	92	55	25	120	47	62	147	76	957
05:45 PM	—	06:00 PM	36	102	123	119	105	61	26	134	56	74	167	91	1094

### TOTAL BY PERIOD

04:00 PM	—	04:15 PM	2	11	18	9	15	12	7	17	3	10	32	10	146
04:15 PM	—	04:30 PM	5	11	15	21	15	5	5	18	3	9	21	8	136
04:30 PM	—	04:45 PM	3	15	18	16	13	7	3	19	9	9	19	7	138
04:45 PM	—	05:00 PM	3	10	14	17	16	8	2	18	5	9	22	14	138
05:00 PM	—	05:15 PM	11	16	16	14	11	11	3	15	17	7	22	19	162
05:15 PM	—	05:30 PM	3	14	13	11	15	7	2	16	6	10	14	11	122
05:30 PM	—	05:45 PM	4	14	17	12	7	5	3	17	4	8	17	7	115
05:45 PM	—	06:00 PM	5	11	12	19	13	6	1	14	9	12	20	15	137

### HOURLY TOTALS

04:00 PM	—	05:00 PM	13	47	65	63	59	32	17	72	20	37	94	39	558
04:15 PM	—	05:15 PM	22	52	63	68	55	31	13	70	34	34	84	48	574
04:30 PM	—	05:30 PM	20	55	61	58	55	33	10	68	37	35	77	51	560
04:45 PM	—	05:45 PM	21	54	60	54	49	31	10	66	32	34	75	51	537
05:00 PM	—	06:00 PM	23	55	58	56	46	29	9	62	36	37	73	52	536



## INTERSECTION LEVEL OF SERVICE CALCULATION WORKSHEETS

- Reference 1 - Clark Avenue/Broadway Street
- Reference 2 - Clark Avenue/SR 135 SB Ramps
- Reference 3 - Clark Avenue/SR 135 NB Ramp
- Reference 4 - Clark Avenue/Orcutt Road
- Reference 5 - Rice Ranch Road/Orcutt Road

## ALL-WAY STOP CONTROL ANALYSIS

General Information		Site Information	
Analyst	MMF	Intersection	CLARK/BROADWAY
Agency/Co.	ATE	Jurisdiction	SANTA BARBARA COUNTY
Date Performed	5/20/2010	Analysis Year	EXISTING
Analysis Time Period	P.M. PEAK HOUR		

Project ID	
East/West Street: CLARK AVENUE	North/South Street: BROADWAY

### Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
	L	T	R	L	T	R
Movement						
Volume (veh/h)	33	113	34	32	99	77
%Thrus Left Lane						

Approach	Northbound			Southbound		
	L	T	R	L	T	R
Movement						
Volume (veh/h)	37	43	46	81	16	27
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	L	TR	L	TR	LTR		LTR	
PHF	1.00	1.00	1.00	1.00	1.00		1.00	
Flow Rate (veh/h)	33	147	32	176	126		124	
% Heavy Vehicles	4	4	4	4	4		4	
No. Lanes	2		2		1		1	
Geometry Group	5		5		2		2	
Duration, T	1.00							

### Saturation Headway Adjustment Worksheet

Prop. Left-Turns	1.0	0.0	1.0	0.0	0.3		0.7	
Prop. Right-Turns	0.0	0.2	0.0	0.4	0.4		0.2	
Prop. Heavy Vehicle	0.0	0.0	0.0	0.0	0.0		0.0	
hLT-adj	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.2
hRT-adj	-0.7	-0.7	-0.7	-0.7	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	0.6	-0.1	0.6	-0.2	-0.1		0.1	

### Departure Headway and Service Time

hd, initial value (s)	3.20	3.20	3.20	3.20	3.20		3.20	
x, initial	0.03	0.13	0.03	0.16	0.11		0.11	
hd, final value (s)	5.98	5.31	5.95	5.14	4.97		5.12	
x, final value	0.05	0.22	0.05	0.25	0.17		0.18	
Move-up time, m (s)	2.3		2.3		2.0		2.0	
Service Time, t <sub>s</sub> (s)	3.7	3.0	3.7	2.8	3.0		3.1	

### Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	283	397	282	426	376		374	
Delay (s/veh)	9.03	9.48	8.99	9.56	9.01		9.22	
LOS	A	A	A	A	A		A	
Approach: Delay (s/veh)	9.40		9.48		9.01		9.22	
LOS	A		A		A		A	
Intersection Delay (s/veh)	9.31							
Intersection LOS	A							

## ALL-WAY STOP CONTROL ANALYSIS

General Information		Site Information	
Analyst	DLD	Intersection	CLARK/BROADWAY
Agency/Co.	ATE	Jurisdiction	SANTA BARBARA COUNTY
Date Performed	6/11/2010	Analysis Year	EXISTING+PROJECT
Analysis Time Period	P.M. PEAK HOUR		

Project ID	
East/West Street: CLARK AVENUE	North/South Street: BROADWAY

### Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
	L	T	R	L	T	R
Movement						
Volume (veh/h)	33	115	34	32	101	77
%Thrus Left Lane						

Approach	Northbound			Southbound		
	L	T	R	L	T	R
Movement						
Volume (veh/h)	37	43	46	81	16	27
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	L	TR	L	TR	LTR		LTR	
PHF	1.00	1.00	1.00	1.00	1.00		1.00	
Flow Rate (veh/h)	33	149	32	178	126		124	
% Heavy Vehicles	4	4	4	4	4		4	
No. Lanes	2		2		1		1	
Geometry Group	5		5		2		2	
Duration, T	1.00							

### Saturation Headway Adjustment Worksheet

Prop. Left-Turns	1.0	0.0	1.0	0.0	0.3		0.7	
Prop. Right-Turns	0.0	0.2	0.0	0.4	0.4		0.2	
Prop. Heavy Vehicle	0.0	0.0	0.0	0.0	0.0		0.0	
hLT-adj	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.2
hRT-adj	-0.7	-0.7	-0.7	-0.7	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	0.6	-0.1	0.6	-0.2	-0.1		0.1	

### Departure Headway and Service Time

hd, initial value (s)	3.20	3.20	3.20	3.20	3.20		3.20	
x, initial	0.03	0.13	0.03	0.16	0.11		0.11	
hd, final value (s)	5.98	5.32	5.96	5.15	4.98		5.14	
x, final value	0.05	0.22	0.05	0.25	0.17		0.18	
Move-up time, m (s)	2.3		2.3		2.0		2.0	
Service Time, t <sub>s</sub> (s)	3.7	3.0	3.7	2.8	3.0		3.1	

### Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	283	399	282	428	376		374	
Delay (s/veh)	9.03	9.52	8.99	9.60	9.03		9.24	
LOS	A	A	A	A	A		A	
Approach: Delay (s/veh)	9.43		9.51		9.03		9.24	
LOS	A		A		A		A	
Intersection Delay (s/veh)	9.34							
Intersection LOS	A							



## ALL-WAY STOP CONTROL ANALYSIS

General Information		Site Information	
Analyst	MMF	Intersection	CLARK/BROADWAY
Agency/Co.	ATE	Jurisdiction	SANTA BARBARA COUNTY
Date Performed	5/20/2010	Analysis Year	CUMULATIVE
Analysis Time Period	P.M. PEAK HOUR		

Project ID	
East/West Street: CLARK AVENUE	North/South Street: BROADWAY

### Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
	L	T	R	L	T	R
Movement						
Volume (veh/h)	90	150	100	25	185	60
%Thrus Left Lane						

Approach	Northbound			Southbound		
	L	T	R	L	T	R
Movement						
Volume (veh/h)	65	80	20	90	65	50
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	L	TR	L	TR	LTR		LTR	
PHF	1.00	1.00	1.00	1.00	1.00		1.00	
Flow Rate (veh/h)	90	250	25	245	165		205	
% Heavy Vehicles	4	4	4	4	4		4	
No. Lanes	2		2		1		1	
Geometry Group	5		5		2		2	
Duration, T	1.00							

### Saturation Headway Adjustment Worksheet

Prop. Left-Turns	1.0	0.0	1.0	0.0	0.4		0.4	
Prop. Right-Turns	0.0	0.4	0.0	0.2	0.1		0.2	
Prop. Heavy Vehicle	0.0	0.0	0.0	0.0	0.0		0.0	
hLT-adj	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.2
hRT-adj	-0.7	-0.7	-0.7	-0.7	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	0.6	-0.2	0.6	-0.1	0.1		0.0	

### Departure Headway and Service Time

hd, initial value (s)	3.20	3.20	3.20	3.20	3.20		3.20	
x, initial	0.08	0.22	0.02	0.22	0.15		0.18	
hd, final value (s)	6.67	5.88	6.77	6.09	6.06		5.91	
x, final value	0.17	0.41	0.05	0.41	0.28		0.34	
Move-up time, m (s)	2.3		2.3		2.0		2.0	
Service Time, t <sub>s</sub> (s)	4.4	3.6	4.5	3.8	4.1		3.9	

### Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	340	500	275	495	415		455	
Delay (s/veh)	10.71	12.63	9.80	13.08	11.39		11.90	
LOS	B	B	A	B	B		B	
Approach: Delay (s/veh)	12.12		12.77		11.39		11.90	
LOS	B		B		B		B	
Intersection Delay (s/veh)	12.13							
Intersection LOS	B							

## ALL-WAY STOP CONTROL ANALYSIS

General Information				Site Information			
Analyst	DLD	Intersection	CLARK/BROADWAY				
Agency/Co.	ATE	Jurisdiction	SANTA BARBARA COUNTY				
Date Performed	6/11/10	Analysis Year	CUMULATIVE+PROJECT				
Analysis Time Period	P.M. PEAK HOUR						

Project ID	
East/West Street: CLARK AVENUE	North/South Street: BROADWAY

### Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
	L	T	R	L	T	R
Movement						
Volume (veh/h)	90	152	100	25	187	60
%Thrus Left Lane						

Approach	Northbound			Southbound		
	L	T	R	L	T	R
Movement						
Volume (veh/h)	65	80	20	90	65	50
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	L	TR	L	TR	LTR		LTR	
PHF	1.00	1.00	1.00	1.00	1.00		1.00	
Flow Rate (veh/h)	90	252	25	247	165		205	
% Heavy Vehicles	4	4	4	4	4		4	
No. Lanes	2		2		1		1	
Geometry Group	5		5		2		2	
Duration, T	1.00							

### Saturation Headway Adjustment Worksheet

Prop. Left-Turns	1.0	0.0	1.0	0.0	0.4		0.4	
Prop. Right-Turns	0.0	0.4	0.0	0.2	0.1		0.2	
Prop. Heavy Vehicle	0.0	0.0	0.0	0.0	0.0		0.0	
hLT-adj	0.5	0.5	0.5	0.5	0.2	0.2	0.2	0.2
hRT-adj	-0.7	-0.7	-0.7	-0.7	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	0.6	-0.2	0.6	-0.1	0.1		0.0	

### Departure Headway and Service Time

hd, initial value (s)	3.20	3.20	3.20	3.20	3.20		3.20	
x, initial	0.08	0.22	0.02	0.22	0.15		0.18	
hd, final value (s)	6.68	5.89	6.78	6.10	6.08		5.92	
x, final value	0.17	0.41	0.05	0.42	0.28		0.34	
Move-up time, m (s)	2.3		2.3		2.0		2.0	
Service Time, t <sub>s</sub> (s)	4.4	3.6	4.5	3.8	4.1		3.9	

### Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	340	502	275	497	415		455	
Delay (s/veh)	10.72	12.71	9.81	13.16	11.42		11.93	
LOS	B	B	A	B	B		B	
Approach: Delay (s/veh)	12.18		12.85		11.42		11.93	
LOS	B		B		B		B	
Intersection Delay (s/veh)	12.19							
Intersection LOS	B							



#10037 KEY SITE 17 PROJECT

REF: 02 PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

TIME PERIOD: *P.M. PEAK HOUR*  
 N/S STREET: *SR 135 SB RAMP*  
 E/W STREET: *CLARK AVENUE*  
 CONTROL TYPE: *SIGNAL*

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(A) EXISTING:	0	0	0	297	2	191	0	512	14	164	479	0
(B) PROJECT-ADDED	0	0	0	0	0	14	0	29	2	0	14	0
(C) CUMULATIVE	0	0	0	215	0	240	0	525	5	165	515	0

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND	SOUTH BOUND	EAST BOUND	WEST BOUND
		LT R	T TR	L TT

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)  
 SCENARIO 2 = EXISTING + PROJECT VOLUMES(A + B)  
 SCENARIO 3 = CUMULATIVE (C)  
 SCENARIO 4 = CUMULATIVE + PROJECT VOLUMES (B + C)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES				SCENARIO V/C RATIOS					
			1	2	3	4	1	2	3	4		
NBL	0	0	0	0	0	0	-	-	-	-		
NBT	0	0	0	0	0	0	-	-	-	-		
NBR (a)	0	0	0	0	0	0	-	-	-	-		
SBL	0	0	297	297	215	215	-	-	-	-		
SBT	1	1600	2	2	0	0	0.187 *	0.187 *	0.134 *	0.134 *		
SBR	1	1600	191	205	240	254	0.119	0.128	0.150	0.159		
EBL	0	0	0	0	0	0	-	-	-	-		
EBT	2	3200	512	541	525	554	0.164 *	0.174 *	0.166 *	0.175 *		
EBR	0	0	14	16	5	7	-	-	-	-		
WBL	1	1600	164	164	165	165	0.103 *	0.103 *	0.103 *	0.103 *		
WBT	2	3200	479	493	515	529	0.150	0.154	0.161	0.165		
WBR (b)	0	0	0	0	0	0	-	-	-	-		
LOST TIME:							0.100 *	0.100 *	0.100 *	0.100 *		
TOTAL INTERSECTION CAPACITY UTILIZATION:							0.554	0.564	0.503	0.512		
SCENARIO LEVEL OF SERVICE:							A	A	A	A		

NOTES:

INTERSECTION CAPACITY UTILIZATION WORKSHEET

TIME PERIOD: **P.M. PEAK HOUR**  
 N/S STREET: **SR 135 NB RAMP**  
 E/W STREET: **CLARK AVENUE**  
 CONTROL TYPE: **SIGNAL**

**TRAFFIC VOLUME SUMMARY**

VOLUMES	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(A) EXISTING:	30	2	354	0	0	0	120	714	0	0	640	241
(B) PROJECT-ADDED	2	0	0	0	0	0	15	14	0	0	12	0
(C) CUMULATIVE	25	0	364	0	0	0	80	680	0	0	685	255

**GEOMETRICS**

LANE GEOMETRICS	NORTH BOUND		SOUTH BOUND	EAST BOUND		WEST BOUND	
	LT	TR		L	TT	T	TR

**TRAFFIC SCENARIOS**

SCENARIO 1 = EXISTING VOLUMES (A)  
 SCENARIO 2 = EXISTING + PROJECT VOLUMES(A+B)  
 SCENARIO 3 = CUMULATIVE (C)  
 SCENARIO 4 = CUMULATIVE + PROJECT VOLUMES (B+C)

**LEVEL OF SERVICE CALCULATIONS**

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES				SCENARIO V/C RATIOS					
			1	2	3	4	1	2	3	4		
NBL	0	0	30	32	25	27	-	-	-	-		
NBT	1	1600	2	2	0	0	0.020	0.021	0.016	0.017		
NBR	1	1600	354	354	364	364	0.221 *	0.221 *	0.228 *	0.228 *		
SBL	0	0	0	0	0	0	-	-	-	-		
SBT	0	0	0	0	0	0	-	-	-	-		
SBR	0	0	0	0	0	0	-	-	-	-		
EBL	1	1600	120	135	80	95	0.075 *	0.084 *	0.050 *	0.059 *		
EBT	2	3200	714	728	680	694	0.223	0.228	0.213	0.217		
EBR	0	0	0	0	0	0	-	-	-	-		
WBL	0	0	0	0	0	0	-	-	-	-		
WBT	2	3200	640	652	685	697	0.275 *	0.279 *	0.294 *	0.298 *		
WBR	0	0	241	241	255	255	-	-	-	-		
<i>LOST TIME:</i>							0.100 *	0.100 *	0.100 *	0.100 *		
<b>TOTAL INTERSECTION CAPACITY UTILIZATION:</b>							0.671	0.684	0.672	0.685		
<b>SCENARIO LEVEL OF SERVICE:</b>							B	B	B	B		

**NOTES:**

Printed: 06/11/10

#10037 KEY SITE 17 PROJECT

REF: 04 PM

INTERSECTION CAPACITY UTILIZATION WORKSHEET

TIME PERIOD: **P.M. PEAK HOUR**  
 N/S STREET: **ORCUTT ROAD**  
 E/W STREET: **CLARK AVENUE**  
 CONTROL TYPE: **SIGNAL**

TRAFFIC VOLUME SUMMARY

VOLUMES	NORTH BOUND			SOUTH BOUND			EAST BOUND			WEST BOUND		
	L	T	R	L	T	R	L	T	R	L	T	R
(A) EXISTING:	34	38	69	125	28	30	130	821	65	55	816	116
(B) PROJECT-ADDED	0	0	0	0	0	0	0	14	0	0	12	0
(C) CUMULATIVE	50	48	79	119	16	25	109	949	80	64	918	116

GEOMETRICS

LANE GEOMETRICS	NORTH BOUND		SOUTH BOUND		EAST BOUND		WEST BOUND	
	L	TR	L	TR	L	T	TR	L

TRAFFIC SCENARIOS

SCENARIO 1 = EXISTING VOLUMES (A)  
 SCENARIO 2 = EXISTING + PROJECT VOLUMES(A+B)  
 SCENARIO 3 = CUMULATIVE (C)  
 SCENARIO 4 = CUMULATIVE + PROJECT VOLUMES (B+C)

LEVEL OF SERVICE CALCULATIONS

MOVE-MENTS	# OF LANES	CAPACITY	SCENARIO VOLUMES				SCENARIO V/C RATIOS					
			1	2	3	4	1	2	3	4		
NBL	1	1600	34	34	50	50	0.021 *	0.021 *	0.031 *	0.031 *		
NBT	1	1600	38	38	48	48	0.067	0.067	0.079	0.079		
NBR (a)	0	0	69	69	79	79	-	-	-	-		
SBL	0	0	125	125	119	119	-	-	-	-		
SBT	1	1600	28	28	16	16	0.114 *	0.114 *	0.100 *	0.100 *		
SBR	0	0	30	30	25	25	-	-	-	-		
EBL	1	1600	130	130	109	109	0.081 *	0.081 *	0.068 *	0.068 *		
EBT	2	3200	821	835	949	963	0.277	0.281	0.322	0.326		
EBR	0	0	65	65	80	80	-	-	-	-		
WBL	1	1600	55	55	64	64	0.034	0.034	0.040	0.040		
WBT	2	3200	816	828	918	930	0.291 *	0.295 *	0.323 *	0.327 *		
WBR (b)	0	0	116	116	116	116	-	-	-	-		
LOST TIME:							0.100 *	0.100 *	0.100 *	0.100 *		
TOTAL INTERSECTION CAPACITY UTILIZATION:							0.607	0.611	0.622	0.626		
SCENARIO LEVEL OF SERVICE:							B	B	B	B		

NOTES:



## ALL-WAY STOP CONTROL ANALYSIS

General Information		Site Information	
Analyst Agency/Co. Date Performed Analysis Time Period	MMF ATE 5/26/2010 P.M. PEAK HOUR	Intersection Jurisdiction Analysis Year	ORCUTT/RICE RANCH SANTA BARBARA COUNTY EXISTING

Project ID	
East/West Street: RICE RANCH ROAD	North/South Street: ORCUTT ROAD

Volume Adjustments and Site Characteristics						
Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	13	70	34	34	84	48
%Thrus Left Lane						
Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	22	52	63	68	55	31
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LTR		LT	R	LTR		LTR	
PHF	1.00		1.00	1.00	1.00		1.00	
Flow Rate (veh/h)	117		118	48	137		154	
% Heavy Vehicles	4		4	0	4		4	
No. Lanes	1		2		1		1	
Geometry Group	4a		5		2		2	
Duration, T	1.00							

Saturation Headway Adjustment Worksheet								
Prop. Left-Turns	0.1		0.3	0.0	0.2		0.4	
Prop. Right-Turns	0.3		0.0	1.0	0.5		0.2	
Prop. Heavy Vehicle	0.0		0.0	0.0	0.0		0.0	
hLT-adj	0.2	0.2	0.5	0.5	0.2	0.2	0.2	0.2
hRT-adj	-0.6	-0.6	-0.7	-0.7	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	-0.1		0.2	-0.7	-0.2		0.0	

Departure Headway and Service Time								
hd, initial value (s)	3.20		3.20	3.20	3.20		3.20	
x, initial	0.10		0.10	0.04	0.12		0.14	
hd, final value (s)	4.88		5.57	4.65	4.65		4.83	
x, final value	0.16		0.18	0.06	0.18		0.21	
Move-up time, m (s)	2.0		2.3		2.0		2.0	
Service Time, t <sub>s</sub> (s)	2.9		3.3	2.3	2.7		2.8	

Capacity and Level of Service								
	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	367		368	298	387		404	
Delay (s/veh)	8.80		9.51	7.65	8.65		9.09	
LOS	A		A	A	A		A	
Approach: Delay (s/veh)	8.80		8.97		8.65		9.09	
LOS	A		A		A		A	
Intersection Delay (s/veh)	8.89							
Intersection LOS	A							

## ALL-WAY STOP CONTROL ANALYSIS

General Information		Site Information	
Analyst Agency/Co. Date Performed Analysis Time Period	DLD ATE 6/11/2010 P.M. PEAK HOUR	Intersection Jurisdiction Analysis Year	ORCUTT/RICE RANCH SANTA BARBARA COUNTY EXISTING+PROJECT

Project ID	North/South Street: ORCUTT ROAD
East/West Street: RICE RANCH ROAD	

Volume Adjustments and Site Characteristics						
Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	13	72	34	34	86	48
%Thrus Left Lane						
Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	22	52	63	68	55	31
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	<i>LTR</i>		<i>LT</i>	<i>R</i>	<i>LTR</i>		<i>LTR</i>	
PHF	1.00		1.00	1.00	1.00		1.00	
Flow Rate (veh/h)	119		120	48	137		154	
% Heavy Vehicles	4		4	0	4		4	
No. Lanes	1		2		1		1	
Geometry Group	4a		5		2		2	
Duration, T	1.00							

Saturation Headway Adjustment Worksheet								
Prop. Left-Turns	0.1		0.3	0.0	0.2		0.4	
Prop. Right-Turns	0.3		0.0	1.0	0.5		0.2	
Prop. Heavy Vehicle	0.0		0.0	0.0	0.0		0.0	
hLT-adj	0.2	0.2	0.5	0.5	0.2	0.2	0.2	0.2
hRT-adj	-0.6	-0.6	-0.7	-0.7	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	-0.1		0.2	-0.7	-0.2		0.0	

Departure Headway and Service Time								
hd, initial value (s)	3.20		3.20	3.20	3.20		3.20	
x, initial	0.11		0.11	0.04	0.12		0.14	
hd, final value (s)	4.88		5.57	4.65	4.66		4.84	
x, final value	0.16		0.19	0.06	0.18		0.21	
Move-up time, m (s)	2.0		2.3		2.0		2.0	
Service Time, t <sub>s</sub> (s)	2.9		3.3	2.4	2.7		2.8	

Capacity and Level of Service								
	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	369		370	298	387		404	
Delay (s/veh)	8.83		9.53	7.66	8.67		9.11	
LOS	A		A	A	A		A	
Approach: Delay (s/veh)	8.83		9.00		8.67		9.11	
LOS	A		A		A		A	
Intersection Delay (s/veh)	8.91							
Intersection LOS	A							



## ALL-WAY STOP CONTROL ANALYSIS

General Information		Site Information	
Analyst Agency/Co. Date Performed Analysis Time Period	DLD ATE 6/11/2010 P.M. PEAK HOUR	Intersection Jurisdiction Analysis Year	ORCUTT/RICE RANCH SANTA BARBARA COUNTY CUMULATIVE

Project ID	
East/West Street: RICE RANCH ROAD	North/South Street: ORCUTT ROAD

Volume Adjustments and Site Characteristics						
Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	22	114	36	35	101	72
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	23	53	63	71	56	42
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LTR		LT	R	LTR		LTR	
PHF	1.00		1.00	1.00	1.00		1.00	
Flow Rate (veh/h)	172		136	72	139		169	
% Heavy Vehicles	4		4	0	4		4	
No. Lanes	1		2		1		1	
Geometry Group	4a		5		2		2	
Duration, T	1.00							

Saturation Headway Adjustment Worksheet								
Prop. Left-Turns	0.1		0.3	0.0	0.2		0.4	
Prop. Right-Turns	0.2		0.0	1.0	0.5		0.2	
Prop. Heavy Vehicle	0.0		0.0	0.0	0.0		0.0	
hLT-adj	0.2	0.2	0.5	0.5	0.2	0.2	0.2	0.2
hRT-adj	-0.6	-0.6	-0.7	-0.7	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	-0.0		0.2	-0.7	-0.2		0.0	

Departure Headway and Service Time								
hd, initial value (s)	3.20		3.20	3.20	3.20		3.20	
x, initial	0.15		0.12	0.06	0.12		0.15	
hd, final value (s)	5.08		5.71	4.81	4.96		5.08	
x, final value	0.24		0.22	0.10	0.19		0.24	
Move-up time, m (s)	2.0		2.3		2.0		2.0	
Service Time, t <sub>g</sub> (s)	3.1		3.4	2.5	3.0		3.1	

Capacity and Level of Service								
	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	422		386	322	389		419	
Delay (s/veh)	9.71		9.99	8.02	9.14		9.68	
LOS	A		A	A	A		A	
Approach: Delay (s/veh)	9.71		9.31		9.14		9.68	
LOS	A		A		A		A	
Intersection Delay (s/veh)	9.46							
Intersection LOS	A							

## ALL-WAY STOP CONTROL ANALYSIS

General Information		Site Information	
Analyst Agency/Co. Date Performed Analysis Time Period	DLD ATE 6/11/2010 P.M. PEAK HOUR	Intersection Jurisdiction Analysis Year	ORCUTT/RICE RANCH SANTA BARBARA COUNTY CUMULATIVE+PROJECT

Project ID	
East/West Street: RICE RANCH ROAD	North/South Street: ORCUTT ROAD

Volume Adjustments and Site Characteristics						
Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	22	116	36	35	103	72
%Thrus Left Lane						
Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	23	53	63	71	56	42
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LTR		LT	R	LTR		LTR	
PHF	1.00		1.00	1.00	1.00		1.00	
Flow Rate (veh/h)	174		138	72	139		169	
% Heavy Vehicles	4		4	0	4		4	
No. Lanes	1		2		1		1	
Geometry Group	4a		5		2		2	
Duration, T	1.00							

Saturation Headway Adjustment Worksheet								
Prop. Left-Turns	0.1		0.3	0.0	0.2		0.4	
Prop. Right-Turns	0.2		0.0	1.0	0.5		0.2	
Prop. Heavy Vehicle	0.0		0.0	0.0	0.0		0.0	
hLT-adj	0.2	0.2	0.5	0.5	0.2	0.2	0.2	0.2
hRT-adj	-0.6	-0.6	-0.7	-0.7	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	-0.0		0.2	-0.7	-0.2		0.0	

Departure Headway and Service Time								
hd, initial value (s)	3.20		3.20	3.20	3.20		3.20	
x, initial	0.15		0.12	0.06	0.12		0.15	
hd, final value (s)	5.09		5.72	4.81	4.97		5.10	
x, final value	0.25		0.22	0.10	0.19		0.24	
Move-up time, m (s)	2.0		2.3		2.0		2.0	
Service Time, t <sub>s</sub> (s)	3.1		3.4	2.5	3.0		3.1	

Capacity and Level of Service								
	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	424		388	322	389		419	
Delay (s/veh)	9.75		10.02	8.03	9.16		9.70	
LOS	A		B	A	A		A	
Approach: Delay (s/veh)	9.75		9.34		9.16		9.70	
LOS	A		A		A		A	
Intersection Delay (s/veh)	9.49							
Intersection LOS	A							

## **APPENDIX G**

### **Greenhouse Gas Emissions/ Global Climate Change**

- Support for Use of Bay Area Air Quality Management District Greenhouse Gas Emissions Standards**



## **Support for Use of Bay Area Air Quality Management District Greenhouse Gas Emissions Standards**

This memorandum discusses factual background and justification for the County's interim reliance on thresholds of significance for GHG emissions developed and proposed by the Bay Area Air Quality Management District (BAAQMD). The County is presently working to develop an inventory of current GHG emissions and a Climate Action Strategy and Climate Action Plan based on this data. Until County-specific data becomes available and significance thresholds applicable to GHG emissions are developed and formally adopted, the County has developed interim procedures that rely on the proposed BAAQMD standards. While Santa Barbara County land use patterns differ from those in the Bay Area as a whole, Santa Barbara County is similar to certain Bay Area counties (in particular, Sonoma, Solano, and Marin) in terms of population growth, land use patterns, General Plan policies, and average commute patterns and times. Because of these similarities, the methodology used by BAAQMD to develop its GHG emission significance thresholds, as well as the thresholds themselves, have applicability to Santa Barbara County and represent the best available interim standards for Santa Barbara County.

### **A. Summary of BAAQMD Methodology**

The BAAQMD has developed a methodology and significance thresholds for GHG emissions using the emission reduction goals of AB 32 while taking into account the emission reduction strategies outlined in the Scoping Plan. BAAQMD proposes thresholds for both land use projects (stationary and non-stationary sources) and plans. Using the emission reductions levels required to meet the goals of AB 32, BAAQMD identified two methods and thresholds for land use projects. The first threshold is based on a gap analysis and the second threshold is based on what would be considered a GHG-efficient project. The BAAQMD also established thresholds for land use plans based on the GHG-efficient method. Thresholds for stationary sources were established using a separate method specific to stationary source polluters.

#### **1. Project-Level Thresholds**

##### *The Gap Analysis Approach*

This approach focuses on a limited set of State mandates that appear to have the greatest potential to reduce land use development related GHG emissions. The BAAQMD's eight steps in determining the threshold are outlined below.

- 1) Determine growth in emissions attributable to land use driven sectors.
- 2) Estimate the anticipated GHG reductions affecting the same land use-driven emissions sectors associated with the AB 32 Scoping Plan.

- 3) Determine the gap between statewide inventory estimates and the estimated reductions from the adopted AB 32 Scoping Plan. The gap identified represents the additional GHG emissions reductions needed statewide from land use-driven emissions sectors, which represents new land use developments' share of the emissions reductions needed to meet the statewide reduction goals.
- 4) Determine the percent reduction that the gap represents in the land-use driven sectors from the BAAQMD's inventory. Identify the amount of reductions needed to meet this gap.
- 5) Assess historical CEQA documents to determine the frequency distribution trend of project sizes and types that have been subject to CEQA for the past several years.
- 6) Forecast new land use development for the Bay Area through the year 2020.
- 7) Estimate GHG emissions from each land use development project type and size using URBEMIS. Determine the amount of GHG emissions that can reasonable be reduced through current mitigation measures for future development projects subject to CEQA.
- 8) Conduct a sensitivity analysis of the GHG mass emissions threshold needed to achieve the desired reduction identified in Step 4. The mass emissions threshold is what would be needed to achieve the emissions reductions necessary by 2020 to meet the Bay Area's fare share of the statewide gap from land use-driven emissions.

Using these steps, BAAQMD identified a significance threshold of 1,100 MT of CO<sub>2</sub>e/year for other than stationary sources.

#### *Efficiency-Based Approach*

The threshold was determined by dividing the emissions inventory goal for 2020 (for land use-related sectors only) by the estimated 2020 population and employment. The number given by this calculation provides what would be considered a GHG efficient project if its emissions were to remain below that level.

This approach resulted in a significance threshold of 4.6 MT CO<sub>2</sub>e/California Service Population/yr (residents + employees) for other than stationary sources.

#### *Stationary Sources*

BAAQMD determined a threshold of 10,000 MT CO<sub>2</sub>/year for greenhouse gas emissions from stationary sources. This threshold was developed based on estimating CO<sub>2</sub> emissions from projects in the Air District from 2005 – 2007. Only CO<sub>2</sub> emissions were included as they represent the majority of GHG

emissions from stationary combustion. Emissions were estimated for the maximum permitted amount. Using this data, BAAQMD determined that a threshold of 10,000 MT CO<sub>2</sub>/year would encompass 95% of all GHG emissions from stationary sources. While this threshold would capture 95% of emissions, only 10% of new permits would actually hit this threshold. Thus the threshold captures the large significant polluters.

## **2. Plan-Level Thresholds**

Plans would be considered to have less than significant GHG emissions if they are:

- 1) Consistent with a locally adopted GHG Reduction Plan or Climate Action Plan
- 2) Less than the efficiency threshold identified for plan level GHG impacts, 6.6 MT CO<sub>2</sub>e/California Service Population/yr (residents + employees). This efficiency threshold was calculated using all emissions sectors, rather than just the land use based sectors as was done for project level thresholds. This difference is due to the fact that plans are comprised of more than just land use related emissions (e.g. industrial).

### **B. Reasoning for Santa Barbara County Reliance on BAAQMD Standards**

Until the County of Santa Barbara has formally adopted thresholds of significance for GHG emissions, the County must look to other jurisdictions with similar characteristics for guidance in the interim. A lead agency may consider thresholds of significance adopted or recommended by other public agencies, provided they are supported by substantial evidence. CEQA Guidelines Section 15064.7(c). Currently the BAAQMD is the first air quality management district to have formally adopted GHG thresholds. As described above, BAAQMD's thresholds are based on a sound, factually supported methodology. While land use patterns in Santa Barbara County are different from the Bay Area as a whole region, the BAAQMD does contain county jurisdictions very similar to Santa Barbara County. Santa Barbara County and several Bay Area counties have similar demographics, land use patterns, and behaviors, while other Bay Area counties are quite different in these characteristics. Given that the BAAQMD's adopted thresholds provide the best and most defensible significance criteria available at this time, the County proposes to refer to the BAAQMD thresholds for determinations of impact significance with respect to GHG emissions as an interim measure. Once data is available on GHG emissions for Santa Barbara County, a locally based analysis will be conducted to update the significance criteria.

To the extent that Santa Barbara County is similar to certain counties in the Bay Area with similar land use patterns and past population growth rates, Santa Barbara County can be expected to continue to grow in a similar fashion to these Bay Area in the future as well. Examining land use policies in General Plans in the two regions, which guide growth in the future, provides support for this conclusion. Given



that the two regions would be expected to have similar future growth, the forecast for future land use development in BAAQMD's gap analysis threshold methodology should also generally apply to Santa Barbara County, such that the BAAQMD thresholds would also be relevant to Santa Barbara County. It should be noted that this methodology also applies in blanket fashion to areas that are very different from Santa Barbara County.

The BAAQMD encompasses all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties as well as the southwestern portion of Solano County and southern Sonoma County. While not all of these Counties are analogous to Santa Barbara County in land use characteristics, population growth, etc., three of these counties, Sonoma, Solano, and Marin, are considered to be Benchmark Counties to Santa Barbara County.<sup>1</sup> Benchmark Counties are considered to have common characteristics including, but not limited to, the following: total population of more than 250,000 but less than 500,000; suburban to rural environments; do not contain a large metropolitan city and are known for their scenic beauty and environmental focus. Table 1 below summarizes the population characteristics and commuter behavior for all Bay Area counties and Santa Barbara County. Sonoma and Solano Counties present a very similar picture to that of Santa Barbara County. The other seven counties show very different characteristics, especially with respect to population size and vehicle miles travelled (VMT). Marin and Napa Counties are smaller counties with slower growth, while the remaining counties contain a much larger populations and corresponding VMT.

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<sup>1</sup> Santa Barbara County Operating Plan for 2010-1011

Table 1. Bay Area and Santa Barbara County Characteristics<sup>234 5</sup>

County	Population (2010)	% Change in Population (2009-2010)	Average Annual Growth Rate (2000 – 2009)	Average Household Size <sup>6</sup>	Average Commute Time (minutes)	Daily VMT (millions)
Santa Barbara	434,481	1	0.86	2.73	20	9.7
Napa	138,917	0.9	1.13	2.63	24	4.5
<b>Marin</b>	<b>260,651</b>	<b>0.8</b>	<b>0.5</b>	<b>2.36</b>	<b>29</b>	<b>6.2</b>
<b>Solano</b>	<b>427,837</b>	<b>0.5</b>	<b>0.79</b>	<b>2.9</b>	<b>30</b>	<b>7.2</b>
<b>Sonoma</b>	<b>493,285</b>	<b>1.2</b>	<b>0.67</b>	<b>2.53</b>	<b>25</b>	<b>10.6</b>
San Mateo	754,285	1.2	0.61	2.74	25	19.4
San Francisco	856,095	1.1	0.96	2.42	29	12.4
Contra Costa	1,073,005	1.1	1.24	2.76	32	25.7
Alameda	1,574,857	1.1	0.86	2.75	28	38
Santa Clara	1,880,876	1.3	1.12	2.91	24	40.1

<sup>2</sup> 2006 -2008 American Communities Survey

<sup>3</sup> Source: Inventory of Bay Area Greenhouse Gas Emissions, BAAQMD, 2010

<sup>4</sup> Vision 2030: SBCAG 2008 Regional Transportation Plan

<sup>5</sup> California Department of Finance

<sup>6</sup> 2006 -2008 American Communities Survey

The efficiency-based approach applies to the entire State of California since the threshold which was calculated is based upon the State’s greenhouse gas emissions inventory and population growth and employment data. None of the data used to calculate this threshold was region or county-specific data. Therefore, it applies equally to Santa Barbara County as to other parts of the state.

The method used to calculate the threshold which applies to stationary sources is an industry-based threshold rather than land use-based. Some of the stationary sources represented in both regions include oil and gas industry, landfills, electric utilities, cogeneration, and food and agriculture (such as wine fermentation). Oil refineries were found to be the largest source of GHG emissions in the industrial sector in the Bay Area.<sup>7</sup> Data is not yet available for GHG emissions from stationary sources in Santa Barbara County, but the oil and gas industry is the most prominent industrial use in the County.

CAPCOA conducted an analysis of permitting activity to estimate the number of stationary source projects with potentially significant GHG emissions for a given threshold that could be seen in a given year for the four largest air districts. The results of that analysis for a 10,000 MT/yr threshold is presented in Table 2 below.

Table 2. Potential Stationary Source Projects Affected a Given Threshold<sup>8</sup>

	BAAQMD	Sacramento Metropolitan AQMD	San Joaquin Valley Unified APCD	South Coast AQMD
Applications per year affected at threshold of:	1,499	778	1,535	1,179
10,000 MT/yr	7	5	26	8

CARB has predicted that a threshold of 25,000 MT/year would capture greater than 90% of emissions from stationary sources. If this prediction holds true, then a lower threshold of 10,000 metric tons is

<sup>7</sup> Source Inventory of Bay Area Greenhouse Gas Emissions, BAAQMD, 2010

<sup>8</sup> CEQA & Climate Change, CAPCOA, 2008

likely to capture an even greater percentage of emissions. BAAQMD found that a 10,000 MT/yr threshold would capture 95% of GHG emissions, while SCAQMD found that this same threshold would capture at least 90% of GHG emissions.<sup>9</sup> Table 2 illustrates that the 10,000 MT/yr threshold will capture greater than 90% of GHG emissions from stationary sources while only affecting a small portion of polluters for the four largest air districts. Without a GHG emissions inventory, the percentage of GHG emissions that would be captured from stationary sources in Santa Barbara County by this threshold cannot be determined with specificity.

However, insofar as Santa Barbara County is similar to the four air districts listed in Table 3, this high capture rate should hold true for Santa Barbara County as well. Santa Barbara County is located adjacent to the SCAQMD district, with that district including neighboring Ventura County. Additionally, Santa Barbara County, SCAQMD and BAAQMD are all coastal regions. As discussed above, BAAQMD contains many of the same types of stationary source polluters as Santa Barbara County. Given these factual similarities, the BAAQMD's rationale for a 10,000-metric ton significance criterion for stationary sources also applies to Santa Barbara County.

### **C. Conclusion**

Given the similar population growth, land use patterns, General Plan policies, and behaviors such as average commute time that exist between these two regions, Santa Barbara County's future land use development can be shown to be similar to the Bay Area counties within the BAAQMD's jurisdiction discussed above. Relying as an interim measure on BAAQMD's gap analysis threshold methodology and significance thresholds for GHG emissions can therefore be justified. Because they are not based on region-specific data, the efficiency-based standards are applicable statewide.

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<sup>9</sup> South Coast Air Quality Management District, Draft Guidance Document – Interim CEQA GHG Significance Threshold