Staff Report to the Zoning Administrator

Application Number: 05-0305

Applicant: Warren D. Thompson, FAIA
Owner: Monterey Oaks Estates LLC, Sunny Tut
APN: 046-311-01

Agenda Date: May 05,2006
Agenda Item: # 4
Time: After 10:00 a.m.

Project Description: Proposal to construct a two-story single-family dwelling.

Location: Located on the north side of San Andreas Road at the intersection with Ocean View Drive, between 1380 and 1400 San Andreas Road in La Selva Beach.

Supervisoral District: Second District (District Supervisor: Pine)

Permits Required: Coastal Development Permit, Grading Permit, Biotic Pre-site Review, Archaeological Site Review, Residential Development Permit, Large Dwelling Permit.

Staff Recommendation:

- Approval of Application 05-0305, based on the attached findings and conditions.
- Certification that the proposal is exempt from further Environmental Review under the California Environmental Quality Act.

Exhibits

A. Project plans
B. Findings
C. Conditions
D. Categorical Exemption (CEQA determination)
E. Assessor's parcel map, Location map
F. Zoning map, General Plan map
G. Reviewing Agency Comments
H. Entomological Consulting Services Inc. dated 12/22/03 & 9/13/04
I. SSA Landscape letter of 9/28/04
J. Review of Raas Soil Report 1/22/99
K. Grading & Drainage Plan Review by Pacific Crest Eng. Inc. 9/23/04, Fall Creek Engineering 7/15/05
L. Soquel Creek Water District 7/27/04
M. Archaeological Survey 7/16/02

Parcel Information

Parcel Size:	1.8 acres
Existing Land Use - Parcel:	vacant
Existing Land Use - Surrounding:	Single-family residences, agriculture, state beach
Project Access:	**San** Andreas Road
Planning Area:	La Selva Beach
Land Use Designation:	R-R (Rural Residential)
Zone District:	R-A (Residential Agriculture)
Coastal Zone:	X Inside ___ Outside
Appealable to Calif. Coastal Comm.	X Yes ___ No

Environmental Information

Geologic Hazards:	Not mapped/no physical evidence on site
Soils:	Baywood loamy sand, Elkhom loamy sand
Fire Hazard:	Not a mapped constraint
Slopes:	15 – 50 percent slopes at rear of lot
Env. Sen. Habitat:	Mapped biotic – Monarch butterfly
Grading:	Approx. 657 cu yards grading proposed
Tree Removal:	2 pines and 1 *oak* in front (south side) required to be retained
Scenic:	Mapped resource
Drainage:	Existing drainage adequate
Traffic:	No significant impact
Roads:	Existing roads adequate
Parks:	Existing **park** facilities adequate
Archeology:	Mapped/no physical evidence on site

Services Information

Urban/Rural Services Line:	___ Inside X Outside
Water Supply:	Soquel Creek Water District
Sewage Disposal:	CSA#12, private septic system
Fire District:	Aptos/La Selva Fire Protection District
Drainage District:	Non-zone

History

The revised project **was** submitted to the Planning Department on May 19, 2005 and deemed complete on September 8, 2005. The project was previously submitted to the Planning Department on June 17, 2002 and deemed complete on October 21, 2004 but was withdrawn. A previous application to construct a single-family dwelling on the site was approved as Coastal Development Permit # 98-0764, but was not exercised.

Project Setting

The project site is a vacant 1.8-acre parcel located in a low-density residential area along the north side of San Andreas Road in the La Selva Beach Planning Area. The proposed development is located on the relatively flat lot frontage, away from steeper slopes at the rear of the parcel. The proposed building footprint will be predominantly upslope of the 90-foot contour. The structure is proposed to be a two-story residence of 7,374 square feet, with six bedrooms and an attached four-car garage of **1,4** 16 square feet (Exhibit A).

Zoning & General Plan Consistency

The subject property is a 1.8-acre lot, located in the R-A (Residential Agriculture) zone district, a designation which allows residential uses. The proposed single-family dwelling is a principal permitted use within the zone district and the project is consistent with the site's (R-R) Rural Residential General Plan designation. The proposed structure is consistent with all development regulations of the RA zone district, including height, lot coverage, setbacks and on site parking, and no variances **are** required. The project is located along a designated scenic road as per General Plan policy 5.10.10 and the landscaping improvement plan is consistent with requirements of General Plan Policy 5.10.13 in that the natural terrain and landscaping attain a smooth transition and natural appearance and that characteristic and indigenous plant species appropriate to the area are to be utilized (Exhibit A).

The project is consistent with County Code Section 13.10.325 in that the proposed residence is landscaped to be adequately screened from public view and does not impact public views along the San Andreas scenic corridor. The project is consistent with all required zoning setbacks for the Residential Agriculture zone district and does not adversely impact neighboring property privacy or solar access. **The** project has been reviewed by the County Urban Designer for consistency with County Code Section 13.11, Design Review, and the project is conditioned to require all glazing to be non-reflective, and the proposed glazed ceramic rooting tile must be of a matt finish with no reflective qualities (Exhibit C).

Local Coastal Program Consistency

The proposed single-family dwelling is in conformance with the County's certified Local Coastal Program, in that the structure is sited and designed to be visually compatible, in scale with, and integrated with the character of the surrounding neighborhood. Natural materials and earth tone colors are utilized to maintain consistency with existing residential development. Developed parcels in the area contain single-family dwellings. Size and architectural styles vary widely in the area, and the design submitted is not inconsistent with the existing range. The project site is not located between **the** shoreline and the first public road and is not identified as a priority acquisition site in **the** County's Local Coastal Program. Consequently, the proposed project will not interfere with public access to the beach, ocean, or other nearby body of water. Public access to Manresa State Beach is available at the main entrance on San Andreas Road. Alternate public access is available at Ocean view Drive in the project vicinity.

Design Review

The proposed single-family dwelling complies with the requirements of the County Design Review Ordinance, in that the proposed project will incorporate site and architectural design features such as non-reflective ceramic tile roofing and natural color materials to reduce the visual impact of the proposed development on surrounding land uses and the natural landscape. No public views to the coastline are impacted **by** the proposed development.

Environmental Review

The project qualifies for an Environmental Exemption for the proposed project per the requirements of the California Environmental Quality Act (CEQA) under Section **15303,** New Construction of Small Structures. The environmental review process focused on the potential impacts of the project in the areas of archaeological resources, and it was found that pre-historical cultural resources were not evident at the site (Exhibit M). The project was surveyed for its potential over-wintering habitat for Monarch Butterflies (Exhibit H). It was determined that the site did not support habitat but recommended that existing eucalyptus vegetation in the **gully** at the rear of the parcel adjacent to the rail tracks be maintained as potential over-wintering habitat.

Conclusion

As proposed and conditioned, the project is consistent with all applicable codes and policies of the Zoning Ordinance and General Plan/LCP. Please see Exhibit "**B**" ("Findings") for a complete listing of findings and evidence related to the above discussion.

Staff Recommendation

- **APPROVAL** of Application Number **05-0305,** based on the attached findings and conditions.
- Certification that the proposal is exempt from further Environmental Review under the California Environmental Quality Act.

Supplementary reports and information referred to in this report are on file and available for viewing at **the Santa Cruz County Planning Department, and are hereby made a part of the administrative record for the proposed project.**

The County Code and General Plan, as well as hearing agendas and additional information are available online at: www.co.santa-cruz.ca.us

Report Prepared By: Joan Van der Hoeven
Santa Cruz County Planning Department
701 Ocean Street, 4th Floor
Santa Cruz CA 95060
Phone Number: (831) 454-5174
E-mail: pln140@co.santa-cruz.ca.us

Coastal Development Permit Findings

1. That the project is a use allowed in one of the basic zone districts, other than the Special Use (SU) district, listed in section 13.10.170(d) as consistent with the General Plan and Local Coastal Program LUP designation.

This finding can be made, in that the property is zoned R-A (Residential Agriculture), a designation which allows residential uses. The proposed single-family dwelling is a principal permitted use within the zone district, consistent with the site's (R-R) Rural residential General Plan designation. The proposed single-family dwelling is in conformance with the County's certified Local Coastal Program, in that the structure is sited and designed to be visually compatible, in scale with, and integrated with the character of the surrounding neighborhood. Natural materials and earth tone colors are utilized to maintain consistency with existing residential development. Developed parcels in the area contain single-family dwellings. Size and architectural styles vary widely in the area, and the design submitted is not inconsistent with the existing range. The project site is not located between the shoreline and the first public road and is not identified as a priority acquisition site in the County's Local Coastal Program. Consequently, the proposed project will not interfere with public access to the beach, ocean, or other nearby body of water. Public access to Manresa State Beach is available at the main entrance on San Andreas Road. Alternate public access is available at Ocean view Drive in the project vicinity.

2. That the project does not conflict with any existing easement or development restrictions such as public access, utility, or open space easements.

This finding can be made, in that the proposal does not conflict with any existing easement or development restriction such as public access, utility, or open space easements in that no such easements or restrictions are known to encumber the project site.

3. That the project is consistent with the design criteria and special use standards and conditions of this chapter pursuant to section 13.20.130 et seq.

This finding can be made, in that the development is consistent with the surrounding neighborhood in terms of architectural style; the site is surrounded by lots developed to a rural residential density; the colors shall be natural in appearance and complementary to the site; the development site is not on a prominent ridge, beach, or bluff top, and required landscaping enhancements preserve the natural setting of the scenic corridor. All glazing shall be non-reflective and the proposed ceramic glazed tile roofing shall be of a matt finish with no reflective qualities.

4. That the project conforms with the public access, recreation, and visitor-serving policies, standards and maps of the General Plan and Local Coastal Program land use plan, specifically Chapter 2: figure 2.5 and Chapter 7, and, as to any development between and nearest public road and the sea or the shoreline of any body of water located within the coastal zone, such development is in conformity with the public access and public recreation policies of Chapter 3 of the Coastal Act commencing with section 30200.

This finding can be made, in that the project site is not located between the shoreline and the first

public road. Consequently, the single-family dwelling will not interfere with public access to the beach, ocean, or any nearby body of water. Further, the project site is not identified as a priority acquisition site in the County Local Coastal Program. Public access to Manresa State Beach is available at the main beach entrance on San Andreas Road. Alternate public access is available at Ocean view Drive in the project vicinity.

5. That the proposed development is in conformity with the certified local coastal program.

This finding can be made, in that the structure is sited and designed to be visually compatible, in scale with, and integrated with the character of the surrounding neighborhood. Additionally, residential uses are allowed uses in the R-A (Residential Agriculture) zone district of the area, as well as the General Plan and Local Coastal Program land use designation. Developed parcels in the area contain single-family dwellings. Size and architectural styles vary widely in the area, and the design submitted is not inconsistent with the existing range.

Development Permit Findings

1. That the proposed location of the project and the conditions under which it would be operated or maintained will not be detrimental to the health, safety, or welfare of persons residing or working in the neighborhood or the general public, and will not result in inefficient or wasteful use of energy, and will not be materially injurious to properties or improvements in the vicinity.

This finding can be made, in that the project is located in an area designated for residential uses and is not encumbered by physical constraints to development. Construction will comply with prevailing building technology, the Uniform Building Code, and the County Building ordinance to insure the optimum in safety and the conservation of energy and resources. The proposed single-family dwelling will not deprive adjacent properties or the neighborhood of light, air, or open space, in that the structure meets all current setbacks that ensure access to light, air, and open space in the neighborhood. The front yard fencing up to six feet in height will not impact traffic flow or sight distance along San Andreas Road.

2. That the proposed location of the project and the conditions under which it would be operated or maintained will be consistent with all pertinent County ordinances and the purpose of the zone district in which the site is located.

This finding can be made, in that the proposed location of the single-family dwelling and the conditions under which it would be operated or maintained will be consistent with all pertinent County ordinances and the purpose of the R-A (Residential Agriculture) zone district in that the primary use of the property will be one single-family dwelling that meets all current site standards for the zone district.

3. That the proposed use is consistent with all elements of the County General Plan and with any specific plan which has been adopted for the area.

This finding can be made, in that the proposed residential use is consistent with the use and density requirements specified for the Rural residential (R-R) land use designation in the County General Plan.

The proposed single-family dwelling will not adversely impact the light, solar opportunities, air, and/or open space available to other structures or properties, and meets all current site and development standards for the zone district as specified in Policy 8.1.3 (Residential Site and Development Standards Ordinance), in that the single-family dwelling will not adversely shade adjacent properties, and will meet current setbacks for the zone district that ensure access to light, air, and open space in the neighborhood.

The proposed single-family dwelling will not be improperly proportioned to the parcel size or the character of the neighborhood as specified in General Plan Policy 8.6.1 (Maintaining a Relationship Between Structure and Parcel Sizes), in that the proposed single-family dwelling will comply with the site standards for the **R-A** zone district (including setbacks, lot coverage, floor area ratio, height, and number of stories) and will result in a structure consistent with a design that could be approved

on any similarly sized lot in the vicinity. The project is located along a designated scenic road as per General Plan policy 5.10.10 and the landscaping improvement plan is consistent with requirements of General Plan Policy 5.10.13 in that the natural terrain and landscaping attain a smooth transition and natural appearance and that characteristic and indigenous plant species appropriate to the area are to be utilized (Exhibit **A).**

A specific plan has not been adopted for this portion of the County.

4. That the proposed use will not overload utilities and will not generate more than the acceptable level of traffic on the streets in the vicinity.

This finding can be made, in that the proposed single-family dwelling is to be constructed on an existing undeveloped lot. The expected level of traffic generated by the proposed project is anticipated to be only one peak trip per day (1 peak trip per dwelling unit), such an increase will not adversely impact existing roads and intersections in the surrounding area.

5. That the proposed project will complement and harmonize with the existing and proposed land uses in the vicinity and will be compatible with the physical design aspects, land use intensities, and dwelling unit densities of the neighborhood.

This finding can be made, in that the proposed structure is located in a mixed neighborhood containing a variety of architectural styles, and the proposed single-family dwelling is consistent with the land use intensity and density of the neighborhood.

6. The proposed development project is consistent with the Design Standards and Guidelines (sections **13.1**1.070 through **13.1**1.076), and any other applicable requirements of this chapter.

This finding can be made, in that the proposed single-family dwelling and landscaping will be of an appropriate scale and type of design that will enhance the aesthetic qualities of the surrounding properties and will not reduce or visually impact available open space or any public views to the ocean in the surrounding area.

Large Dwelling Findings

1. That the project is a use allowed in one of the basic zone districts, other than the Special Use (SU) district, listed in Section 13.10.170(d) as consistent with the General Plan and Local Coastal Plan LUP designation.

The proposed single-family dwelling is an allowed use as per Zoning Implementation regulations of County Code Section 13.10.170.d. in that the residence is a principal permitted use in the Residential Agriculture Zone District which is an implementing zone district of the Rural Residential general Plan designation.

2. That the project does not conflict with any existing easement or development restrictions such as public access, utility or open space easements.

No existing easements or development restrictions such as public access, utility, or open space easements encumber the project site (Exhibit E). Public coastal access is available at Manresa State Beach and the Oceanview Drive public access point in the project vicinity

3. That the project is consistent with the Design Criteria and special use standards and conditions of this Chapter pursuant to Section 13.20.130 et seq.

The project is consistent with Coastal Zone design criteria as per County Code Section 13.20.130 in that the project is visually compatible with the character of the surrounding neighborhood. Development does not block view of the coastline or any vista points along the scenic San Andreas roadway. Mature trees have been preserved on the site and proposed landscaping serves to soften the visual impact of the proposed development (Exhibit **A).**

The building has been designed with pitched, rather than flat roofs which are surfaces with non-reflective materials. Natural materials and colors which blend with the natural cover of the site are proposed.

4. That the project conforms with the public access, recreation, and visitor-serving policies, standards and maps of the General Plan and Local Coastal Plan Land Use Plan, specifically Chapter 2, Figure 2.5 and Chapter 7.

The proposed project conforms with Chapter 2 and Chapter 7 of the LCP/General Plan in that it does not impede public access to any coastal amenity. Public access to the shoreline is available in the immediate vicinity at the Oceanview Drive access point and at Manresa State Beach.

Conditions of Approval

Exhibit A: Project Plans, 4 sheets by T2 Architects, dated 4/03/06
Septic System Design, 1 sheet by Environmental Concepts, dated 12/22/03 revised 6/01/04
Grading, Drainage, Erosion Control Plans, 11 sheets - Fall Creek Eng. – April 2005.
Landscape Plan, 1 sheet by SSA Landscape Architects dated 4/5/05.

I. This permit authorizes the construction of a two-story single-family dwelling and associated grading and landscaping. Prior to exercising any rights granted by this permit including, without limitation, any construction or site disturbance, the applicant/owner shall:

A. Sign, date, and return to the Planning Department one copy of the approval to indicate acceptance and agreement with the conditions thereof.

B. Obtain a Building Permit from the Santa Cruz County Building Official.

C. Obtain a Grading Permit from **the** Santa Cruz County Building Official.

D. Obtain an Encroachment Permit from the Department of Public Works for all off-site work performed in the County road right-of-way.

II. Prior to issuance of a Building Permit the applicant/owner shall:

A. Submit proof that these conditions have been recorded in the official records **of** the County of Santa Cruz (Office of the County Recorder).

B. Submit Final Architectural Plans for review and approval by the Planning Department. The final plans shall be in substantial compliance with the plans marked Exhibit "A" on file with the Planning Department. The final plans shall include the following additional information:

1. Identify finish of exterior materials and color of roof covering for Planning Department approval. Any color boards must be in 8.5" x 11" format.

2. Grading, drainage, and erosion control plans.

3. Details showing compliance with fire department requirements.

4. For any structure proposed to be within **3** feet of the maximum height limit for the zone district, the building plans must include a roof plan and a surveyed contour map of the ground surface, superimposed and extended to allow height measurement of all features. Spot elevations shall be provided at points on the structure that have the greatest difference between ground surface and the highest portion of the structure above. This requirement is in addition to the standard requirement of detailed elevations and cross-sections

A. All site improvements shown on the final approved Building Permit plans shall be installed.

B. All inspections required by the building permit shall be completed to the satisfaction of the County Building Official.

C. The project must comply with all recommendations of the approved soils reports by Steven Raas & Associates dated 10/12/98 with updates by Pacific Crest Engineering dated 12/15/03 and Fall Creek Engineering dated 7/15/05.

D. Pursuant to Sections 16.40.040 and 16.42.100 of the County Code, if at any time during site preparation, excavation, or other ground disturbance associated with this development, any artifact or other evidence of an historic archaeological resource or a Native American cultural site is discovered, the responsible persons shall immediately cease and desist from all further site excavation and notify the Sheriff-Coroner if the discovery contains human remains, or the Planning Director if the discovery contains no human remains. The procedures established in Sections 16.40.040 and 16.42.100, shall be observed.

IV. Operational Conditions

A. In the event that future County inspections of the subject property disclose noncompliance with any Conditions of this approval or any violation of the County Code, the owner shall pay to the County the full cost of such County inspections, including any follow-up inspections and/or necessary enforcement actions, up to and including permit revocation.

B. All landscaping shall be maintained. The Eucalyptus grove at the rear of the parcel, down slope from the residence, shall be maintained as potential Monarch Butterfly over-wintering habitat.

Minor variations to this permit which do not affect the overall concept **or** density may he approved by the Planning Director at the request of the applicant or staff **in** accordance with Chapter 18.10 of the County Code.

Please note: This permit expires *two* years from the effective date unless you obtain the required permits and commence construction.

Approval Date: _____

Effective Date: _____

Expiration Date: _____

and the topography of the project site which clearly depict the total height of the proposed structure.

5. All glazing shall be non-reflective. The "glazed ceramic tile" roofing shall be a matt finish with no reflective qualities.

C. Meet all requirements of and pay any required drainage fees to the County Department of Public Works, Drainage. Drainage fees will be assessed on the net increase in impervious area. Confirm soil permeability prior to installation of infiltration chambers. Provide the background information analyzing the 90" percentile storm event resulting in the intensity used in the chamber calculations. Label the proposed length of the energy dissipation pool at the drainage system outlet. Label layer thickness for the porous pavement detail. Provide specifications for the material and compaction requirements of the stone reservoir.

D. Meet all requirements of Department of Public Works Road Engineering Division. The driveway shall be 2-inches of asphalt concrete over 6-inches of aggregate base within the Countyright-of-way. Given the driveway width of approximately 18 feet, returns at the intersection of the driveway and San Andreas Road shall be 11 feet. Show the structural section for the driveway with porous pavement. A five foot bump out is recommended to back out from the exterior garage space.

E. Submit final landscape plans for review and approval. Plans shall show the retention of two small pines and one *oak* in the front yard, and shall demonstrate retention of potential Monarch Butterfly habitat at the rear of the lot.

F. Obtain an Environmental Health Clearance for this project from the County Department of Environmental Health Services.

G. Meet all requirements and pay any applicable plan check fee of the Aptos/La Selva Fire Protection District.

H. Pay the current fees for La Selva Beach Parks and Child Care mitigation for six bedrooms. Currently, these fees are, respectively, $800 and $109 per bedroom.

I. Provide required off-street parking for *6* cars. Parking spaces must be 8.5 feet wide by 18 feet long and must be located entirely outside vehicular rights-of way. Parking must be clearly designated on the plot plan.

J. Submit a written statement signed by an authorized representative of the school district in which the project is located confirming payment in full of all applicable developer fees and other requirements lawfully imposed by the school district.

III. All construction shall be performed according to the approved plans for the Building Permit. Prior to final building inspection, the applicant/owner must meet the following conditions:

Don Bussey	**Joan Van der Hoeven**
Deputy Zoning Administrator	**Project Planner**

Appeals: Any property owner, or other person aggrieved, or **any other person whose interests are adversely affected by any act or determination of the Zoning Administrator, may appeal the act or determination to the Planning Commission in accordance with chapter 18.10** of **the Santa Cruz County Code.**

EXHIBIT C

A. All site improvements shown on the final approved Building Permit plans shall be installed.

B. All inspections required by the building permit shall be completed to the satisfaction of the County Building Official.

C. The project must comply with all recommendations of the approved soils reports by Steven Raas & Associates dated 10/12/98 with updates **by** Pacific Crest Engineering dated 12/15/03 and Fall Creek Engineering dated 7/15/05.

D. Pursuant to Sections 16.40.040 and 16.42.100 of the County Code, **if** at any time during site preparation, excavation, or other ground disturbance associated with this development, any artifact or other evidence of an historic archaeological resource or a Native American cultural site is discovered, the responsible persons shall immediately cease and desist from all further site excavation and notify the Sheriff-Coroner if the discovery contains human remains, or the Planning Director if the discovery contains no human remains. The procedures established in Sections 16.40.040 and 16.42.100, shall be observed.

IV. Operational Conditions

A. In the event that future County inspections of the subject property disclose noncompliance with any Conditions of this approval or any violation of the County Code, the owner shall pay to the County the full cost of such County inspections, including any follow-up inspections and/or necessary enforcement actions, up to and including permit revocation.

B. All landscaping shall he maintained. The Eucalyptus grove at the rear of the parcel, down slope from the residence, shall be maintained as potential Monarch Butterfly over-wintering habitat.

Minor variations to this permit which do not affect **the** overall concept or density may be approved by the Planning Director at the **request** of the applicant or staff in accordance with Chapter 18.10 of the County Code.

Please note: This permit expires two years from the effective date unless you obtain the required permits and commence construction.

Approval Date: _____

Effective Date: _____

Expiration Date: _____

Application # 05-0305
APN: 046-311-01
Owner: Monterey Oaks Estates LLC, Sunny Tut

Don Bussey	**Joan Van der Hoeven**
Deputy Zoning Administrator	**Project Planner**

Appeals: Any property owner, or other person aggrieved, or any other person whose interests are adversely affected by any act or determination of the Zoning Administrator, may appeal the act or determination to the Planning Commission in accordance with chapter 18.10 of the Santa Cruz County Code.

EXHIBIT C

CALIFORNIA ENVIRONMENTAL QUALITY ACT
NOTICE OF EXEMPTION

The Santa Cruz County Planning Department has reviewed the project described below and has determined that it is exempt from the provisions of CEQA as specified in Sections 15061 - 15332 of CEQA for the reason(s) which have been specified in this document.

Application Number: 05-0305
Assessor Parcel Number: 046-311-01
Project Location: On the north side of San Andreas Road at the intersection with Ocean View Drive, between 1380 & 1400 San Andreas Road, La Selva Beach.

Project Description: Proposal to construct a two-story single-family dwelling

Person or Agency Proposing Project: Warren D. Thompson, FAIA

Contact Phone Number: 559-222-3992

A. ____ The proposed activity is not a project under CEQA Guidelines Section 15378.
B. ____ The proposed activity is not subject to CEQA as specified under CEQA Guidelines Section 15060 (c).
C. ____ **Ministerial Proiect** involving only the **use** of fixed standards or objective measurements without personal judgment.
D. ____ **Statutorv Exemption** other than **a** Ministerial Project (CEQA Guidelines Section 15260 to 15285).

Specify type:

E. __X__ **Categorical Exemption**

Specify **type:** Class 3 - New Construction or Conversion of Small Structures (Section 15303)

F. Reasons why the project is exempt:

New construction of small structures - one single family dwelling

In addition, none of the conditions described in Section 15300.2 apply to this project.

Date:

Joan Van der Hoeven, AICP Project Planner

EXHIBIT D

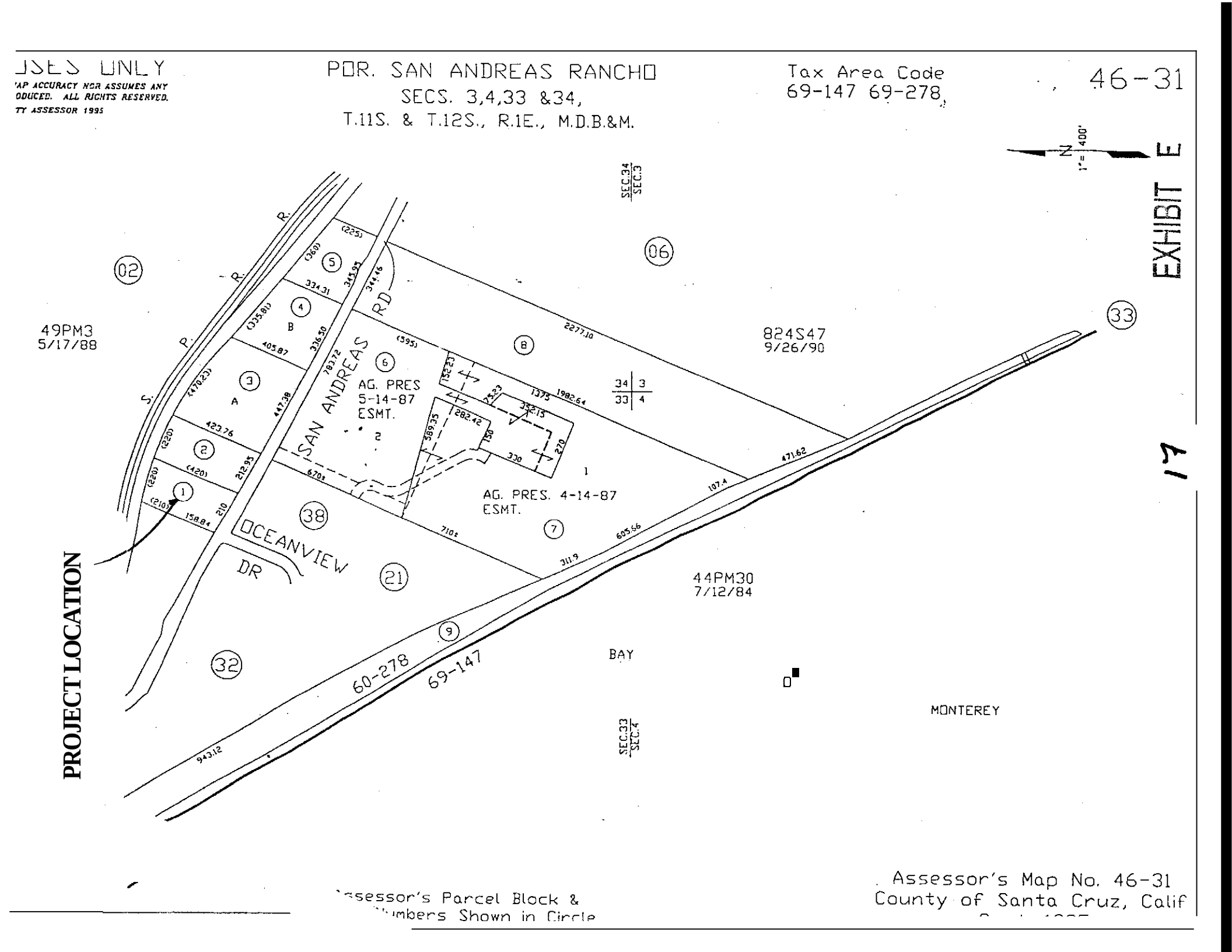
POR. SAN ANDREAS RANCHO
SECS. 3,4,33 &34,
T.11S. & T.12S., R.1E., M.D.B.&M.

Tax Area Code
69-147 69-278

46-31

EXHIBIT E

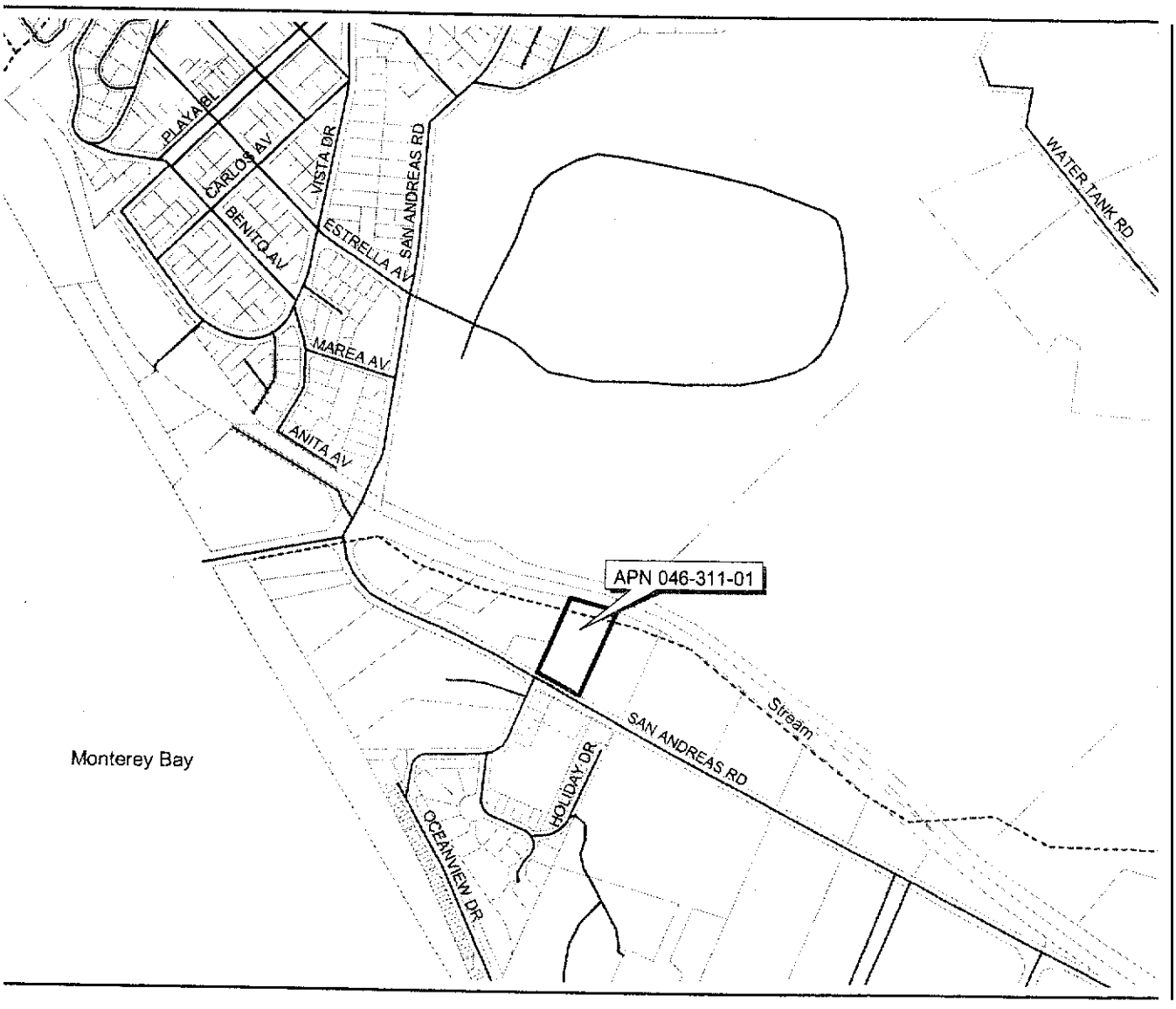
17



Assessor's Parcel Block &
Numbers Shown in Circle

Assessor's Map No. 46-31
County of Santa Cruz, Calif

Location Map



Map created by Santa Cruz County
Planning Department:
February 2004

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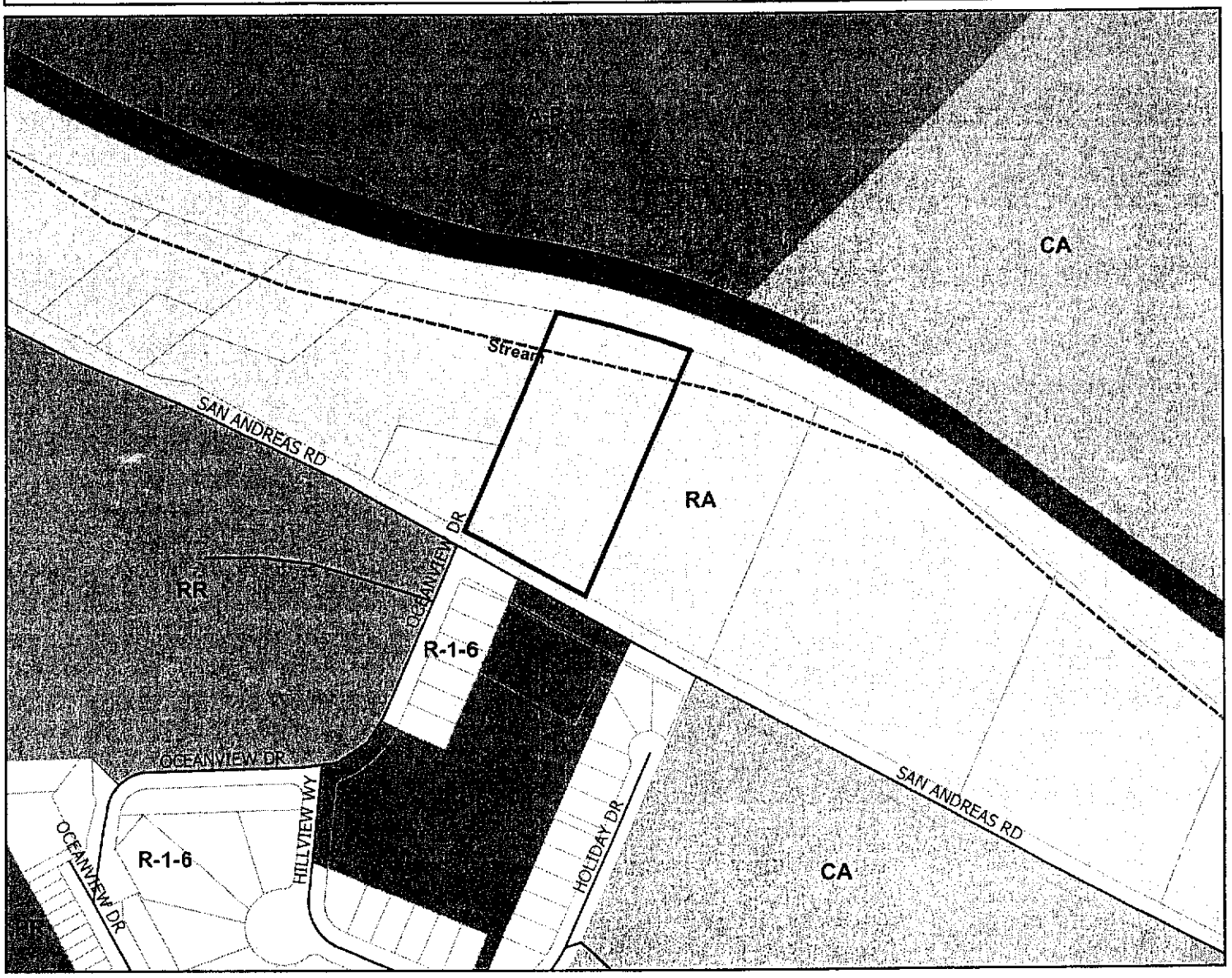
EXHIBIT E

Zoning Map



340 170 0 340 680 1,020 1,360 Feet

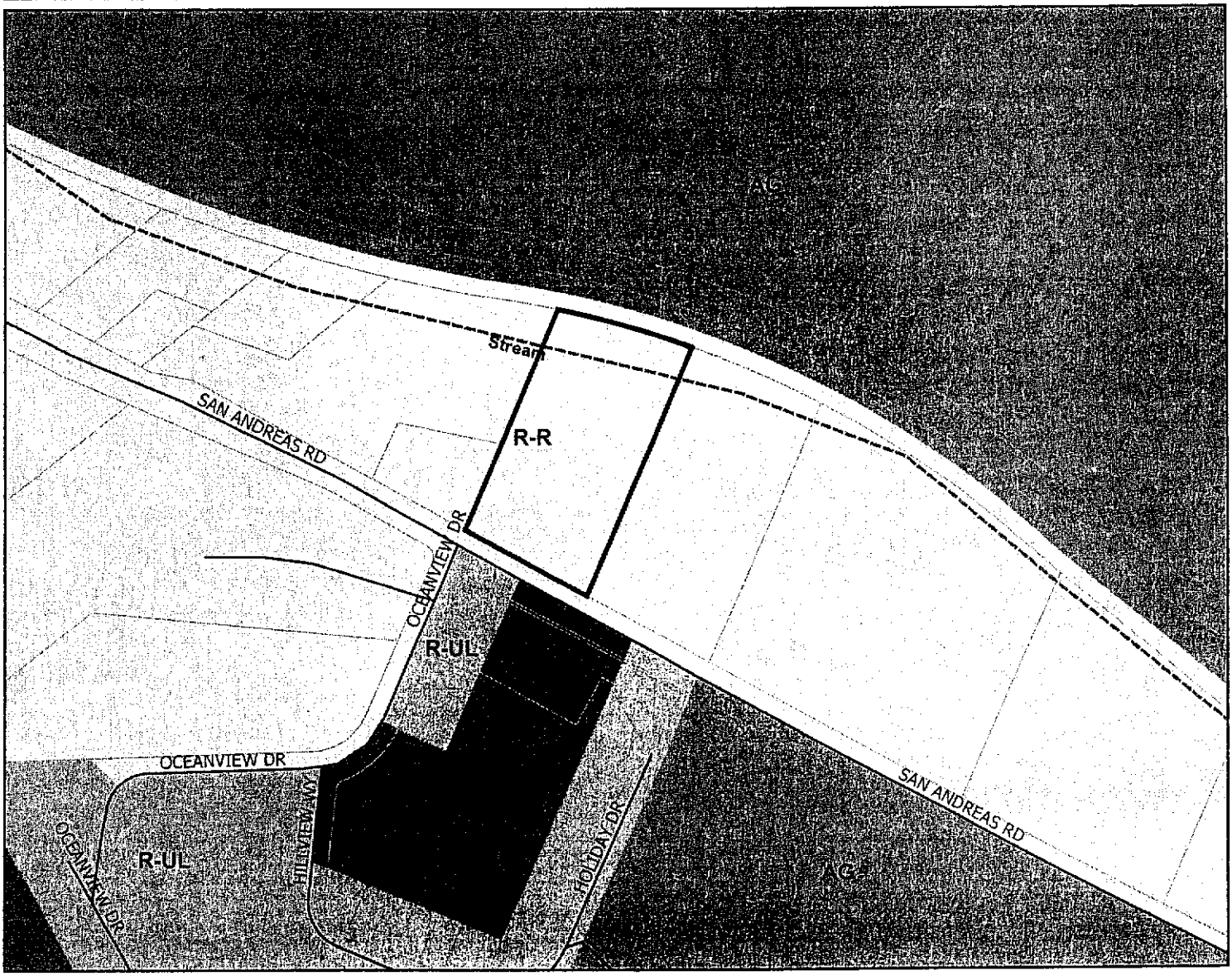
Legend

- APN 046-311-01
- **Streets**
- Assessors Parcels
- AGRICULTURE (A)
- AGRICULTURE COMMERCIAL (CA)
- AGRICULTURE RESIDENTIAL (RA)
- PARK (PR)
- PUBLIC FACILITY (PF)
- RESIDENTIAL-RURAL (RR)
- RESIDENTIAL-SINGLE FAMILY (R-1)

N W E S

Map Created by
County of Santa Cruz
Planning Department
May 2005

General Plan Designation Map



Legend

- APN 046-311-01
- Streets
- Assessors Parcels
- INTERMITTENT STREAM
- Agriculture (AG)
- Parks and Recreation (O-R)
- Residential-Rural (R-R)
- Residential - Urban Low Density (R-UL)

N
W E
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Map Created by
County of Santa Cruz
Planning Department
May 2005

COUNTY OF SANTA CRUZ
DISCRETIONARY APPLICATION COMMENTS

Project Planner: Joan Van Der Hoeven
Application No.: 05-0305
APN: 046-311-01

Date January 13, 2006
Time 15 32 50

Environmental Planning Completeness Comments

========== UPDATED ON JUNE 9, 2005 BY KENT M EDLER ========= The plans as submitted are complete in regards to grading.
========== UPDATED ON JUNE 17, 2005 BY ROBERT S LOVELAND ==========
NO COMMENT
========== UPDATED ON SEPTEMBER 7, 2005 BY KENT M EDLER ==========

The grading plan remains complete.

Environmental Planning Miscellaneous Comments

========== REVIEW ON JUNE 9, 2005 BY KENT M EDLER ==========

1. At the buidling permit stage an erosion control plan needs to be submitted that shows erosion and sediment control measures to be implemented during construction. This should include the use of silt fencing, stabilized construction entrance. straw wattles, etc.

2. A plan review letter and possibly an update to the soils report (depending on if the building permit is applied for 3 years after the last update) will be required at the building permit stage.
========== UPDATED ON SEPTEMBER 7, 2005 BY KENT M EDLER ==========

Project Review Completeness Comments

========== REVIEW ON JUNE 17, 2005 BY JOAN VAN DER HOEVEN =========
Project is substantially consistant with prior application 02-0308 -

interior modifications. Address Public Works Drainage and Environmental Health concerns as noted below in order to meet requirements for the project to move ahead to hearing.

Project Review Miscellaneous Comments

========== REVIEW ON JUNE 17, 2005 BY JOAN VAN DER HOEVEN =========
No fencing shall be allowed within the public right-of-way.Address road engineering concerns for driveway compliance with fire dept regulations.

Dpw Drainage Completeness Comments

LATEST COMMENTS HAVE **NOT YET** BEEN SENT TO PLANNER FOR THIS AGENCY

========== REVIEW ON JUNE 6. 2005 BY ALYSON B TOM ========= Application with civil plans dated April 2005 has been recieved. Please address the following:

1) This project is required to minimize proposed impervious areas. Please describe how this will be accomplished. Consider utilizing alternative surfacing or other measures.

EXHIBIT G

2) Will this site recieve runoff from offsite? Will runoff from San Andreas Road flow down the proposed driveway? If so. how will this runoff be accommodated?

3) This project is required to mitigate for storm water runoff quantity impacts. Will the runoff rate from the project site increase as a result of this project? From county-wide USDA soils survey the soils at the south end of the parcel are highly permeable. Does the proposed location of the drainage system outlet take advantage of these permeable soils? Provide site specific information (soils information. etc.) and analysis that demonstrate that the runoff rate will remain unchanged. orprovide an analysis of the downstream runoff path demonstrating that it is adequate for handling the added runoff (include analysis of downstream road culverts).

For questions regarding this review Public Works stormwater management staff is available from 8-12 Monday throuqh Friday. All submittals *for* this project should be made through the Planning Department
========== UPDATED ON AUGUST 22. 2005 BY ALYSON B TOM ========= Application with drainage plans dated July 2005 has been received and is cornplete'with regards to drainage for the discretionary stage. Please see miscellaneous comments for issues to be addressed prior to building permit issuance.

Dpw Drainage Miscellaneous Comments

LATEST COMMENTS HAVE **NOT YET** BEEN SENT TO PLANNER FOR THIS AGENCY

---------- REVIEW ON JUNE 6, 2005 BY ALYSON B TOM ========= Additional site specific details may be required at the building permit stage.

Submit a geotechnical review letter approving of the final drainage plan.
========== UPDATED ON AUGUST 22, 2005 BY ALYSON B TOM ========== The following should be addressed prior to building permit issuance:

1) While the proposal *to* install infiltration chambers is acceptable it seems that a drainage plan that utilizes surface spreading of runoff may be able to limit post development runoff to pre development levels given that the site soils are highly permeable (6-20 in/hr per the USDA soils survey). An alternative design would be acceptable if the soils permeability is confirmed and spreading is sufficient.

2) Please provide the background information analyzing for the 90th percentile storm event resulting in the intensity used in the chamber calculations.

3) Please label the proposed length of the energy dissipation pool at the drainage system outlet.

4) The applicant is responsible for obtaining an encroachment permit for the work in the County road right of way.

5) Please label layer thicknesses for the porous pavement detail. Please also provide specifications for the material and compation requirements of the stone reservoir

Dpw Driveway/Encroachment Completeness Comments

========== REVIEW ON MAY 31, 2005 BY RUTH L ZADESKY ==========

Dpw Driveway/Encroachment Miscellaneous Comments

========== REVIEW ON MAY 31, 2005 BY RUTH L ZADESKY ==========
Driveway to conform to County Design Criteria Standards.
Encroachment permit required for all off-site work in the County road right-of-way.
Fencing is not allowed within the County road right-of-way.

Dpw Road Engineering Completeness Comments

========== REVIEW ON JUNE 9, 2005 BY TIM N NYUGEN ==========
The driveway needs to meet fire department requirements. Therefore, show on project plans how the driveway will meet access standards required by the General Plan Policy Description of turnarounds and turnouts required. ========== UPDATED ON AUGUST 29. 2005 BY GREG J MARTIN ==========
Application is complete The plans shall need to be modified in order to receive a building permit. The driveway shall be 2 inches of asphalt concrete over six inches of aggregate base within the County right-of-way, Given the driveway width of approximately 18 feet, returns at the intersection of the driveway and San Andreas Road shall be 11 feet. Show the structural section for the driveway with porous pavement. Each required parking space should be numbered and dimensioned including those in the garage. The exterior garage space shall have difficulty backing up. A five foot bumpout is recommended to backout. If you have any questions please call Greg Martin at 831-454-2811.

Dpw Road Engineering Miscellaneous Comments

========== REVIEW ON JUNE 9. 2005 BY TIM N NYUGEN ==========
NO COMMENT
========== UPDATED ON AUGUST 29, 2005 BY GREG J MARTIN ==========

Environmental Health Completeness Comments

========== REVIEW ON JUNE 9, 2005 BY JIM G SAFRANEK ========== Septic appl. is approved. However, the proposed wall at entry (see site plan) does not appear to meet setback of 5' to expansion field.

Environmental Health Miscellaneous Comments

========== REVIEW ON JUNE 9, 2005 BY JIM G SAFRANEK ==========
NO COMMENT

Aptos-La Selva Beach Fire Prot Dist Completeness C

LATEST COMMENTS HAVE **NOT YET** BEEN SENT TO PLANNER FOR THIS AGENCY

========== REVIEW ON JUNE 10, 2005 BY ERIN K STOW ==========
DEPARTMENT NAME:Aptos/La Selva Fire Dept. APPROVED

All Fire Department building requirements and fees will be addressed in the Building Permit phase.
Plan check is based upon plans submitted to this office. Any changes or alterations shall be re-submitted for review prior to construction.

Aptos-La Selva Beach Fire Prot Dist Miscellaneous

LATEST COMMENTS HAVE **NOT YET** BEEN SENT TO PLANNER FOR THIS AGENCY

========== REVIEW ON JUNE 10, 2005 BY ERIN K STOW ==========
NO COMMENT

EXHIBIT G

COUNTY OF SANTA CRUZ | **Planning Department**

IT DI IC MEMO

APPLICATION N O 03-0308 (4th routing)

Date: July 15,2004

To: Joan Van der Hoeven, Project Planner

From: Larry Kasparowitz, Urban Designer

Re: Design Review for a Large Dwelling at San Andreas Road, La Selva Beach (Monterey Oaks Estates, LLC/ owner, applicant)

GENERAL PLAN / ZONING CODE ISSUES

Design Review Authority

13.11.040 *(c)* New single family residences or remodels of 7,000 square feet or larger.

13.10.325 Large dwelling permit requirements and design guidelines.

(i) The proposed structure is compatible with its surroundings given the neighborhood, locational or environmental context and its design is consistent with the Large Dwelling Design Guidelines in subsection (d) below.

Design Review Evaluation

13.11.040 *(c)*

Evaluation Criteria	Meets criteria In code (✔)	Does not meet criteria (✔)	Urban Designer's Evaluation
Compatible Site Design			
Location and type of access to the site	✔		
Building siting in terms of its location and orientation	✔		
Building bulk, massing and scale	✔		
Parking location and layout	✔		
Relationship to natural site features and environmental influences	✔		
Landscaping		✔	
Streetscape relationship	✔		
Street design and transit facilities			N/A
Relationship to existing structures	✔		

EXHIBIT G

Natural Site Amenities and **Features**			
Relate to surrounding topography	✔		
Retention of natural amenities	✔		
Siting and orientation which takes advantage of natural amenities	✔		
Ridgeline protection			N/A
Views			
Protection of public viewshed	✔		
Minimize impact on private views	✔		
Safe and Functional Circulation			
Accessible to the disabled, pedestrians, bicycles and vehicles			N/A
Solar Design and Access			
Reasonable protection for adjacent properties	✔		
Reasonable protection for currently occupied buildings using a soar energy system			N/A
Noise			
Reasonable protection for adjacent properties	✔		

EXHIBIT G

Design Review Authority

13.11.040 Projects requiring design review

(a) Single home construction, and associated additions involving 500 square feet or more, within coastal special communities and sensitive sites as defined in this Chapter.

13.11.030 Definitions

(u) 'Sensitive Site" shall mean any property located adjacent to a scenic road or within the viewshed of a scenic road as recognized in the General Plan; or located on a coastal bluff, or on a ridgeline.

Evaluation Criteria	Meets criteria In code (✔)	Does not meet criteria (✔)	Urban Designer's Evaluation
Location and type of access to the site	✔		
Building siting in terms of its location and orientation	✔		
Building bulk, massing and scale	✔		
Parking location and layout	✔		
Relationship to natural site features and environmental influences	✔		
Landscaping	✔		
Streetscape relationship			**NIA**
Street design and transit facilities			**NIA**
Relationship to existing structures	✔		
Retention of natural amenities	✔		
Siting and orientation which takes advantage of natural amenities	✔		
Ridgeiine protection			**NIA**
Accessible to the disabled, pedestrians, bicycles and vehicles			**NIA**

Solar Design and Access			
Reasonable protection for adjacent properties	✔		
Reasonable protection for currently occupied buildings using a solar energy system			N/A
Noise			
Reasonable protection for adjacent properties	✔		

Evaluation Criteria	Meets criteria in code (✔)	Does not meet criteria (✔)	Urban Designer's Evaluation
Massing of building form	✔		
Building silhouette	✔		
Spacing between buildings			N/A
Street face setbacks	✔		
Character of architecture	✔		
Building scale	✔		
Proportion and composition of projections and recesses, doors and windows, and other features	✔		
Location and treatment of entryways	✔		
Finish material, texture and color	✔		
Scale			
Scale is addressed on appropriate	✔		
Building design provides solar access that is reasonably protected for adjacent properties			N/A
Building walls and major window areas are oriented for passive solar and natural lighting	✔		

Design Review Authority

13.20.130 The Coastal Zone Design Criteria are applicable to any development requiring a Coastal Zone Approval.

Design Review Standards

13.20.130 Design criteriafor coastal zone developments

Evaluation Criteria	Meets criteria In code (✔)	Does not meet criteria (✔)	Urban Designer's Evaluation
Visual Compatibility			
All new development shall be sited, designed and landscaped to be visually compatible and integrated with the character of surrounding neighborhoods or areas	✔		
Minimum Site Disturbance			
Grading, earth moving, and removal of major vegetation shall be minimized.	✔		
Developers shall be encouraged to maintain all mature trees over 6 inches in diameter except where circumstances require their removal, such as obstruction of the building site, dead or diseased trees, or nuisance species.	✔		
Special landscape features (rock outcroppings, prominent natural landforms, tree groupings) shall be retained.	✔		
Ridgeline Development			
Structures located near ridges shall be sited and designed not to project above the ridgeline or tree canopy at the ridgeline	✔		
Land divisions which would create parcels whose only building site would be exposed on a ridgetop shall not be permitted			**N/A**
Landscaping			
New or replacement vegetation shall be compatible with surrounding vegetation and shall be suitable to the climate, soil, and ecological characteristics of the area			*See comments.*

Development shall be located, if possible, on parts of the site not visible or least visible from the public view.			**NIA**
Development shall not block views of the shoreline from scenic road turnouts, rest stops or vista points			**NIA**
Site Planning			
Development shall be sited and designed to fit the physical setting carefully so that its presence is subordinate to the natural character of the site, maintaining the natural features (streams, major drainage, mature trees, dominant vegetative communities)	✔		
Screening and landscaping suitable to the site shall be used to soften the visual impact of development in the viewshed		✔	**See *comments***
Building design			
Structures shall be designed to fit the topography of the site with minimal cutting, grading, or filling for construction	✔		
Pitched, rather than flat roofs, which are surfaced with non-reflective materials except for solar energy devices shall be encouraged	✔		
Natural materials and colors which blend with the vegetative cover of the site shall be used, or if the structure is located in an existing cluster of buildings, colors and materials shall repeat or harmonize with those in the cluster	✔		
Large agricultural structures			
The visual impact of large agricultural structures shall **be** minimized by locating the structure within or near an existing group of buildings			**N/A**
The visual impact of large agricultural structures shall be minimized by using materials and colors which blend with the building cluster or the natural vegetative cover of the site (except for greenhouses).			**N/A**

The visual impact of large agricultural structures shall be minimized by using landscaping to screen or soften the appearance of the structure			**NIA**
Restoration			
Feasible elimination or mitigation of unsightly, visually disruptive or degrading elements such as junk heaps, unnatural obstructions, grading scars, or structures incompatible with the area shall be included in site development			**NIA**
The requirement for restoration of visually blighted areas shall be in scale with the size of the proposed project			**NIA**
Materials, scale, location and orientation of signs shall harmonize with surrounding elements			**N/A**
Directly lighted, brightly colored, rotating, reflective, blinking, flashing or moving signs are prohibited			**N/A**
Illumination of signs shall be permitted only for state and county directional and informational signs, except in designated commercial and visitor serving zone districts			**NIA**
In the Highway 1 viewshed, except within the Davenport commercial area, only CALTRANS standard signs and public parks, or parking lot identification signs, shall be permitted to be visible from the highway. These signs shall be of natural unobtrusive materials and colors			**N/A**
Beach Viewsheds			
Blufftop development and landscaping (e.g., decks, patios, structures, trees, shrubs, etc.) in rural areas shall be set back from the bluff edge a sufficient distance to be out of sight from the shoreline, or if infeasible, not visually intrusive			**N/A**
No new permanent structures on open beaches shall be allowed, except where permitted pursuant to Chapter 16.10 (Geologic Hazards) or Chapter 16.20 (Grading Regulations)			**NIA**

finishes which harmonize with the character of the area. Natural materials are preferred			N/A

Aptos/La Selva Fire Protection District
6934 Soquel Drive ▪ Aptos, **CA 95003**
Phone # **831-685-6690** ▪ Fax # **831-685-6699**

June 8,2005

Planning Department
County of Santa Cruz
Attention: Joan **Van** der Hoeven
701 Ocean Street
Santa Cruz, CA 95060

Subject AFN: 46-311-01/ Appl #05-0305
San Andreas Road

Dear Ms. Van der Hoeven:

Aptos/La Selva Fire Department has reviewed the plans for the above cited project and has no objections as presented.

- Any other requirements will be addressed in the Building Permit phase.
- Plan check is based upon plans submitted to this office. Any changes or alterations **shall** be resubmitted for review prior to construction.

****

In order to obtain building application approval, recommend you have the DESIGNER add appropriate NOTES and DETAILS showing the following information **on** the plans **that are submitted** for **BUILDING PERMIT.**

NOTE on the plans that these plans are in compliance with California Building and Fire Codes **(2001)** and District Amendment.

NOTE on the plans the OCCUPANCY CLASSIFICATION, BUILDING CONSTRUCTION TYPE / FIRE RATING , and SPRINKLERED or NON-SPRINKLERED as determined by building official and outlined in Part IV of the California Building Code.
(e.g. **R-3, Type** V-N, Sprinklered)

SHOW on the plans a public fire hydrant within 250 feet of any portion of the building meeting the minimum required fire flow for the building. This information can be obtained from the water company.

EXHIBIT G

FIRE FLOW requirements for the subject property are 2,200 gallons. NOTE on the plans the REQUIRED and AVAILABLE FIRE FLOW. The AVAILABLE FIRE FLOW information can be obtained from the water company.

NOTE on the plans that the building shall be protected by an approved automatic fire sprinkler system complying with the currently adopted edition of NFPA 13D and adopted standards of the Aptos/La Selva Fire Protection District.

NOTE that the designer/installer shall submit three **(3)** sets of plans and calculations for the underground and overhead Residential Automatic Fire Sprinkler System to this agency for approval. Installation shall follow our guide sheet.

NOTE on the plans that an UNDERGROUND FIRE PROTECTION SYSTEM WORKING DRAWING must be prepared by the designer/installer. The plans shall comply with the UNDERGROUND FIRE PROTECTION SYSTEM INSTALLATION POLICY HANDOUT.

NOTE on the plans, building numbers shall be provided. Numbers shall be a minimum of four(4) inches in height on a contrasting background and visible from the street. Where numbers are not visible from the street, additional numbers shall be installed on a directional sign at the property driveway and the street.

NOTE on the plans that the roof covering shall be no less **than** Class "B" rated roof.

SHOW on the **plans, DETAILS** of compliance with the driveway requirements. The driveway shall be 12 feet minimum width and maximum twenty percent slope.

The driveway shall be in place to the following standards prior to any framing construction, or construction will be stopped:

- The driveway surface shall be "all weather", a minimum *6"* of compacted aggregate base rock, Class 2 or equivalent, certified **by** a licensed engineer to 95% compaction and shall be maintained.
- ALL WEATHER SURFACE shall be a minimum of *6"* of compacted Class II base rock for grades **up** to and including 5%, **oil** and screened for grades up to and including 15%, and 2" asphaltic concrete for grades exceeding 15%, but in no case exceeding 20%
- The maximum grade of the road shall not exceed 20%, with grades of 15% not permitted for distances of more than 200 feet at a time.
- The driveway shall have an overhead clearance of **14** feet vertical distance for its entire width.
- A turn-around area **which** meets the requirements of the fire department shall be provided for access roads and driveways in excess of 150 feet in length.
- Drainage details for the road or driveway shall conform to current engineering practices, including erosion control measures.
- All private access roads, driveways, turn-a-rounds and bridges are the responsibility of the owner(s) of record and shall be maintained to ensure the fire department safe and expedient passage at all times.

EXHIBIT G

The driveway shall be thereafter maintained to these standards at all times.

GATE REQUIREMENTS: NOTE THE FOLLOWING ON THE BUILDING PLANS:

- ELECTRONIC CONTROL: Security Gates equipped with electronic control devices shall have an approved fire department override key switch installed. **PROVIDE** a "Knox" Key Switch. Authorization forms for ordering the Knox Key Switch can be obtained directly at the Fire Department at 6934 Soquel Drive in Aptos.

- FAIL SAFE OPERATION PROVISION: All electronically controlled security gates shall be provided with manual override to allow operation of the gate during power outage.

- GENERAL REQUIREMENTS

1. Access gates shall be a minimum of 2 feet wider than the access road **(14 feet** minimum). When open, gates shall not obstruct any portion of the required access roadway **or** driveway width.

2. Gates shall be adequately supported to prevent dragging.

3. Gates shall be operable by one person.

4. Gates may swing in either direction and shall be open a full 90 degrees. Sliding gates shall slide parallel to the security fence.

5. All gates shall remain in the open position when not attended or locked, or when electronic fire department key switches has activated.

6. Overhead gate structures shall have a **minimum** of 15 feet vertical clearance.

NOTE on the plans that a 30 foot clearance will be maintained with non-combustible vegetation around all structures or to the property line whichever is a shorter distance.

EXCEPTION: Single specimens of trees, ornamental shrubbery or similar plants used **as** ground covers, provided they do not form a means of rapidly transmitting fire from native growth to any structure.

NOTE on the plans the job copies of the building and fire systems plans and permits must be on-site during inspections.

Note: As **a** condition of submittal of these **plans,** the submitter, designer and installer certify that these plans and details comply with applicable Specifications, Standards, Codes and Ordinances, agree that they are solely responsible for compliance with applicable Specifications, Standards, Codes and Ordinances, and further agree to correct

EXHIBIT G

any deficiencies noted by this review, subsequent review, inspection or other source, and, to hold harmless and without prejudice, the reviewer and reviewing agency.

Sincerely,

Jim Dias, Fire Marshal
Fire Prevention Division
Aptos/La Selva Fire Protection District

Cc: Monterey Oaks Estates LLC
187 Via Soderini
Aptos, CA 95003

EXHIBIT G

COUNTY OF SANTA CRUZ Planning Department

MEMORANDUM

Application No: **05-0305** (third routing)

Date: April 4, 2006

To: Joan Vanderhoeven, Project Planner

From: Lawrence Kasparowitz, Urban Designer

Re: Design Review for a new residence at San Andreas Road, La Selva Beach

GENERAL PLAN / ZONING CODE ISSUES

Desinn **Review** Authority

13.11.040 Projects requiring design review.

(a) Single home construction, and associated additions involving 500 square feet or more, within coastal special communities and sensitive sites as defined in this Chapter.

13.11.030 Definitions

(u) 'Sensitive Site" shall mean any property located adjacent to a scenic *road* or within the viewshed of a scenic road as recognized in the General Plan; or located on a coastal bluff, or on a ridgeline.

Add as Conditions of Approval:

1. *The "glazedceramic tile" roofing shall be a matt finish with no reflective qualities.*
2. *All glazing shall be non-reflective.*

EXHIBIT G

Richard A. Arnold, Ph.D
President

Entomological Consulting Services, Ltd.

104 Mountain View Court, Pleasant Hill, CA 94523 • (921) 825-3784 • FAX 827-1809
bugdctr@home.com • mvw.ecslrd.com
New email address: bupdctr@corncast.net

13 September 2004

Mr. Warren Douglas Thompson, FAIA
T^2 Architects
5151 North Palm, Suite 500
Fresno, CA 93704

RE: APN 046-311-01 at La Selva Beach, Tut Residence
Review of Landscaping Plan

Dear Mr. Thompson:

This letter responds to your recent solicitation for my review of the proposed landscaping plan for the planned Tut residence located on San Andreas Road in the La Selva Beach area of Santa ***Cruz*** County. The plan that I reviewed was prepared by SSA Landscape Architects, Inc. and T^2 Architects, is dated July 6,2004, and consisted of two pages of oversize plan sheets.

Please recall that in my report, dated December 22,2003, I determined that potential overwintering habitat for *the* Monarch butterfly occurred at the rear of the subject property and on neighboring properties. However, during my two site visits to the property, no overwintering Monarchs were actually observed. Nonetheless, Monarchs may utilize the potential overwintering habitat at a later date. For this reason, I previously recommended the use of pine, eucalyptus, or other non-deciduous trees to provide wind screening along San Andreas Road.

Although the olive trees on the landscape plan are evergreen, it is my understanding that this species typically grows to a maximum height of only 30 feet. **As** noted in my earlier report, Monarchs cluster on trees at heights of 6 to 75 feet above ground, but most commonly at heights between 15 to 50 feet. Thus the trees planted along San Andreas Road need to be at least 50 feet tall at maturity, preferably taller to provide effective windscreening for the potential overwintering habitat at the rear of the property. Although the new residence will provide some wind screening, I suggest that the olive trees in the front yard be replaced by appropriate species of pine, eucalyptus, or redwood that are not only evergreen but would also be expected to achieve these target heights. With this minor change, I approve the landscaping plan.

Sincerely,

Richard A. Arnold

Richard A. Arnold, Ph.D
President

EXHIBIT H

Richard A. Arnold, Ph.D.
President

Entomological Consulting Services, Ltd.

104 Mountain View Court, Pleasant Hill, CA 94523 • (925) 821-3784 • FAX 827-1809
bugdctr@home.com • www.ecsltd.com
New email address: bugdctr@comcast. net

22 December 2003

Mr. Mark Treuge
DDM Land Use Consultants
4637 Scotts Valley Drive, Suite #B1
Scotts Valley, CA 95066

RE: APN 046-311-01 at La Selva Beach in Santa Cruz County, CA
Proposed Single-family Residence by Sonny Tut
Habitat Assessment for Overwintering Monarch Butterflies

Dear Mr. Treuge:

This letter reports the findings of my recent habitat assessment survey at the above-referenced property as a winter roosting site of the Monarch butterfly (*Danaus plexippus*). Briefly I can summarize the findings of habitat assessment by stating that the aforementioned property along with neighboring properties support trees that the overwintering Monarch butterfly roosts on or that provide essential wind protection for potential roost trees. I did not observe overwintering Monarchs at the property during two site visits during the fall of this year. Siting of the proposed new single-family residence has been done in a manner to avoid and minimize impacts to the potential overwintering habitat. For these reasons, I conclude that the proposed single-family residence by the Tut family will not adversely impact the Monarch butterfly or its potential overwintering habitat at this property.

The remainder of my report describes the property and my survey methods and findings in more detail. In addition, background information on the Monarch butterfly and characteristics of its winter roosting habitat are presented.

Project Site Description.

The project site is an undeveloped, 1.87-acre parcel located in a residential neighborhood in the La Selva Beach community of Santa Cruz County. It is situated on the north side of San Andreas Road, near its intersection with Ocean View Drive. The portion of the property along San Andreas Road is generally flat and characterized by ruderal grassland and ornamental pine trees. The rear portion of the property descends into a gully with a small grove of Eucalyptus trees and dense brush. Adjacent properties include a rail road track, plus agricultural and residential uses. The proposed project is a new single-family residence, which will be built in the front approximately one-third of the site. Existing vegetation in the rear of the property will be maintained.

Background Information on the Monarch Butterfly and its Winter Roosting Habitat.

Monarchs cannot survive the colder winter months of most parts of North America. For this reason, Monarch butterflies travel to their wintering areas during the fall months of each year. Monarchs that live west of the Rocky Mountains migrate to coastal areas of California, while those that live east of the Rockies travel to a few sites in the mountains of Central Mexico. In coastal California, winter roosting sites range from northern Baja California to southern Mendocino County. Although most winter roosting sites in California are usually located within 0.5 to 1 mile of the coast (Weiss et al. 1991, Nagano and Lane 1985), roosts have occasionally been found farther inland.

Along the Santa Cruz coastline, there are several locations of Monarch winter roosts between Moore Creek just north of the City of Santa Cruz and Watsonville (Nagano and Lane 1985; California Natural Diversity Data Base 2003). A known overwintering location occurs at nearby Manresa State Beach (California Natural Diversity Data Base 2003). During my inspection of the neighborhood surrounding the project site, I noted several small groves of Eucalyptus trees on the north side of San Andreas Road and generally located along the railroad tracks. Although I am not aware whether any of these small Eucalyptus stands near the project site are known roosting locations, one or more records in the California Natural Diversity Data Base (2003) may refer to them.

In California, clustering behavior begins once migrating Monarchs reach their overwintering sites in the fall. Two types of clustering occur:

a) temporary aggregations that are transient clusters of short duration; and
h) permanent roosts that are long term (past the winter solstice) hibernal clusters which also possess the environmental conditions that allow the butterflies to mate in January and February before their spring dispersal (Urquhart 1960).

In the fall months, typically in September and October, numerous, generally small temporary aggregations are formed, especially in areas where nectar plants are plentiful near the coast. Monarchs at many of these sites disperse to permanent roosting sites as nectar sources, air temperature, and day length decrease. Some sites may serve as permanent roosts one year and temporary aggregations another year, or a mixture of the two. Also, some locations may occasionally not be used for either purpose.

Overwintering sites are characterized by groves of trees of mixed height and diameter, with an understory of brush. Often there is a small clearing within a stand of trees, or formed by a combination of the trees and surrounding topography, *to* provide shelter for the butterfly. These overwintering sites protect the butterfly from prevailing on-shore winds and freezing temperatures, plus exposure to the sun. The vegetation serves as a thermal "blanket" which moderates extreme weather conditions (Calvert and Brower 1982). At some locations, nearby buildings may provide some protection as well.

Recent research has demonstrated that forest canopy structure is a primary determinant of microclimatic conditions in forest stands, and is undoubtedly an important factor in the Monarch's selection of particular locations as overwintering roosts (Bell 1997; Leong 1990; Sakai et al. 1989; Weiss et al. 1991). Many of the best overwintering sites provide a

heterogeneous mixture of habitat conditions and resultant microclimatic conditions that assist the Monarchs to survive seasonal changes in climatic conditions during the winter. For example, overwintering habitats must provide wind protected roost locations (usually tree branches that are 15-50 feet above ground), with buffered temperatures, relatively high humidity, and filtered sunlight throughout the fall and winter months. As weather conditions and exposure to sunlight vary over the winter months, high habitat heterogeneity at an overwintering site permits the Monarch roosts to satisfy their thermoregulatory needs by moving from tree to tree in response to changes in weather conditions. Thus during the early part of the overwintering period (October – November), when daily temperature maxima are relatively high, Monarchs tend to cluster in locations that provide brief morning insolation, with mid-day and afternoon shade. Later in the season (December – February), when temperature maxima are lower, they tend *to* roost in trees that receive afternoon sunlight. Trees surrounding roost locations, known as windbreak or buffer trees, provide both wind protection and ameliorate microclimatic conditions near the roost trees.

A number of cluster sites in coastal California are located in groves of introduced trees. Favored trees for Monarch roosts include, Blue Gum *(Eucalyptus globulus),* River Gum *(E. camaldulensis),* Monterey Pine *(Pinus radiata),* and Monterey Cypress *(Cupressus macrocarpa).* although a number of other native and introduced species of trees are also utilized (Lane 1993). Clusters typically form between about 15 and 50 feet above ground, but have been observed as low as 6 feet and as high as *75* feet.

Cluster sites are protected from winds by a combination of tree cover (i.e., spatial configuration and density) and topography. Gullies, canyons, creek drainages, and the lee sides of hills are areas where Monarchs will roost, if the appropriate tree cover is present. Although the butterflies are inactive on colder, rainy, or foggy days, they will fly from the cluster on warmer, sunny days to obtain the water and nectar that are needed to sustain the butterflies through the winter. Thus, a nearby source of water and an abundance of fall and winter-blooming nectar plants are also important factors in determining where the butterflies will roost. Monarchs can obtain water from natural or man-made bodies of water, runoff from sprinklers, and dew on vegetation (Nagano and Lane 1985). Important nectar plants at many winter roosting sites include, *Eucalyptus* trees, Coyote Bush *(Baccharis),* wild mustard *(Brassica).* and Bottlebrush *(Callistemon),* although other native and introduced species will be used if available.

In concluding this discussion, I would like to emphasize that although a number of basic features are important determinants in the suitability of a particular location to serve as an overwinter roosting site by the Monarch butterfly, there is also an interaction of these and other factors that is only beginning to be understood by researchers. Also, because features of a site can change due to the growth of trees and understory vegetation, thinning or removal of trees, removal of brush, changes in nectar plant abundance, etc., Monarch usage of a particular site may vary from year-to-year and for longer durations. Indeed, new roosting sites continue to be discovered in California as conditions become favorable, even in areas where roosts were not previously observed. Similarly, when habitat quality deteriorates at locations that previously supported winter roosts, Monarchs will cease to roost at these sites. Clearing of brush and thinning of trees are common vegetation management practices that have adversely impacted Monarch roosting sites, even on public lands (Nagano and Lane 1985; Weiss et al. 1991).

Survey Methods.

I visited the project site on November 6th and December 10th, 2003, and surveyed the entire project site by hiking. During my survey of the project site and the surrounding residential neighborhood, I noted the presence of various plants and features that are known to be important to the Monarch butterfly at known overwinter roosting sites (see Background Information). In particular, I searched for the favored trees that are used as roosts, examined the spatial configuration and density of favored trees, sheltered areas within the groves of roosting trees, nectar plants, water sources, and areas with an understory of brush. Since the timing of my site visits coincided with the fall portion of the Monarch's overwintering period, I also searched all trees at the subject property for roosting Monarchs.

Results and Discussion.

As described earlier, overwintering habitat for the Monarch butterfly generally consists of the following components:

a) roost trees;
b) trees peripheral to the roost that provide primary and secondary wind protection;
c) fall and winter-blooming nectar sources; and
d) sources of water, such as dew, lawn irrigation, stream, etc.

No overwintering Monarch butterflies were observed at the subject property during either of my site visits during the fall of 2003. However, an overwintering roost is known from the nearby Manresa State Beach (California Natural Diversity Data Base 2003). Even though no Monarchs were observed at the subject property, the rear of this site supports trees that could potentially be utilized as roost trees by the Monarch. The surrounding Eucalyptus trees, the gully, and the pine trees in the front of the property provide wind protection to these potential roost trees at the rear. I should also note that several of the Eucalyptus trees grow on neighboring properties. Nectar plants, namely ivy and *Baccharis* were also noted on-site. Water would likely be obtained from dew and fog drip on the vegetation.

Conclusions and Recommendations.

Although no Monarchs were observed at the subject property during my two site visits, I recommend that the existing vegetation at the rear of the site be protected and maintained in its current condition. The architectural site plan prepared by T^2 Architects (dated June 14, 2003), illustrates the proposed home sited in the front portion of the site, which will minimize impacts to the existing vegetation in the rear of the property. A few trees will be trimmed or removed to accommodate the new residence. Although the new residence will provide some wind protection to the trees at the rear of the property, I suggest that additional trees be planted as part of the landscaping in the front portion of the site (especially along San Andreas Road) to provide supplemental wind protection. Pines or eucalyptus, as already occur on the property, may be used or other non-deciduous tree species. Fire breaks or other fire maintenance activities should be coordinated with the local fire district to avoid impacts to the vegetation at the rear of the property. Any fire places in the home or elsewhere on the property should be gas operated rather than wood-burning.

If these recommendations are followed, the potential overwintering habitat of the

Monarch should be protected and no adverse impacts to the butterfly or its potential overwintering habitat at the subject property are anticipated.

References Cited.

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Urquhart, F.A. 1960. The Monarch butterfly. University of Toronto Press. 361 pp.

Weiss, S.B., P.M. Rich, D.D. Murphy, W.H. Calvert, and P.R. Ehrlich, 1991. Forest canopy structure at overwintering Monarch butterfly sites: measurements with hemispherical photography. Conservation Biology 5:165-175.

If you have any questions about my report, please contact me.

Sincerely,

Richard A. Arnold

Richard **A.** Arnold, Ph.D
President

$3

EXHIBIT H

September 28, 2004

LANDSCAPE ARCHITECTS INCORPORATED

Mr. Warren Thonipson
5151 N. Palm Ave.
Suite 500
Fresno, CA 93704

RE: Entomological Consulting Services, Ltd. Plan review Letter dated September 13, 2004

Dear Warren,

In response to the plan review letter prepared by Entomological Consulting Services, Ltd date September 13,2004 regarding APN # 046-31 1-01 and County project # 02-0308 we offer the following alternative.

We believe that the design developed in concert with you and the client best reflects tlie goals and desires of our client by providing a landscape design which establishes a pedestrian scale planting along the road protecting the view corridor while providing desired privacy. We also responded to concerns regarding butterfly habitat by planting Monterey Cypress trees along the western edge which also provides buffer from prevailing winds on this site.

However, if more plant material is required to increase habitat for potential Monarch nesting then we propose adding eucalyptus or pines to the North / Northwest comer of the property and not along San Andreas Road where these types of trees will create a situation where ornamental landscapes will suffer.

If we can be of further assistance with this matter please do not hesitate to call,

Regards,

Mark S. Bagiński, ASLA
Associate

MSB/msb

[illegible]
[illegible] Soquel, Suite 40[illegible]
Santa Cruz, California 9506[illegible]
[illegible]

EXHIBIT 1

PLANNING DEPARTMENT

GOVERNMENTAL CENTER

COUNTY OF **SANTACRUZ**

701 OCEAN STREET
FIX (408) 454-2131

SANTA CRUZ, CALIFORNIA 95060
(408) 454-2560

ENV. PLANNING

January 22, 1999

Greg Nickel
424 Santa Monica
La Selva Beach, CA 95076

SUBJECT: Review of soil report by Steven Raas & Associates dated 10-12-98, PROJECT NUMBER: 98118-SZ75-J61
APN: 046-311-01, APPLICATION NUMBER: 98-0011

Dear Applicant:

Thank you for submitting the soil report for the parcel referenced above. The report was reviewed for conformance with County Guidelines for Soils/Geotechnical Reports and also €or completeness regarding site specific hazards and accompanying technical reports (e.g. geologic, hydrologic, etc.). The purpose of this letter is to inform you that the Planning Department has accepted the report and the following recommendations become permit conditions:

1. All report recommendations must be followed.

2. Final plans shall indicate the foundation design as detailed in the report including engineered foundations for construction on steeper slopes.

3. Final plans shall show the drainage system as detailed in the soils engineering report including outlet locations and appropriate energy dissipation devices.

4. Final plans shall reference the approved soils engineering report and state that all development shall conform to the report recommendations.

5. Prior to building permit issuance, the soil engineer must submit a brief building, grading and drainage plan review letter to Environmental Planning stating that the plans and foundation design are in general compliance with the report recommendations. If, upon plan review, the engineer requires revisions or additions, the applicant shall

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submit to Environmental Planning two copies of revised plans and a final plan review letter stating that the plans, as revised, conform to the report recommendations.

6. The soil engineer must inspect all foundation excavations and a letter of inspection must be submitted to Environmental Planning and your building inspection prior to pour of concrete.

7. For all projects, the soil engineer must submit a final letter report to Environmental Planning and your building inspector regarding the compliance with all technical recommendations of the soil report prior to final inspection. For all projects with engineered fills, the soil engineer must submit a final grading report (reference August 1997 County Guidelines for Soils/Geotechnical Reports) to Environmental Planning and your building inspector regarding eh compliance-with all technical recommendations of the soil report prior to final inspection.

The soil report acceptance is only limited to the technical adequacy of the report. Other issues, like planning, building design, septic or sewer approval, etc, may still require resolution.

The Planning Department will check final development plans to verify project consistency with report recommendations and permit conditions prior to building permit issuance. If not already done, please submit two copies of the approved soil report at the time of building permit application for attachment to your building plans.

Please call 454-3164 if we can be of any assistance

Sincerely,

JOEL SCHWARTZ
Geotechnical Associate

FOR: JOE HANNA
County Geologist CEG 1313

cc: Bob Stakem, Project Planner
Soils engineering firm
Building plan check

98-0011s/056

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FINAL SOILS-GRADING REPORTS

Prior to final inspection clearance a final soils report must be prepared and submitted for review for all projects with engineered fills. These reports, at a minimum, must include:

1. Climatic Conditions

   Indicate the climatic conditions during the grading processes and indicate any weather related delays to the operations.

2. Variations of Soil Conditions and/or Recommendations

   Indicate the accomplished ground preparation including removal of inappropriate soils or organic materials, blending or unsuitable materials with suitable soils, and the keying and benching of the site in preparation for the fills.

3. Ground Preparation

   The extent of ground preparation and the removal of inappropriate materials, blending of soils, and keying and benching of fills.

4. Optimum Moisture/Maximum Density Curves

   Indicate in a table the optimum moisture maximum density curves. Append the actual curves at the end of the report.

5. Compaction Test Data

   The compaction test locations must be shown on same topographic map as the grading plan and the test values must be tabulated with indications of depth of test from the surface of final grade, moisture content of test, relative compaction, failure of tests (i.e. those less than 90% of relative compaction), and re-testing of failed tests.

6. Adequacy of the Site for the Intended Use

   The soils engineer must re-conform her/his determination that the site is safe for the intended use.

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DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

GENERAL

1. The results of our investigation indicate that from a geotechnical engineering standpoint the property may be developed as proposed provided these recommendations are included in the design and construction.

2. Our laboratory testing indicates that the near surface soils possess low expansive properties.

3. Grading and foundation plans should be reviewed by Steven Raas & Associates, Inc during their preparation and prior to contract bidding.

4. Steven Raas & Associates, Inc. should be notified **at least four (4)** working days prior to any site clearing and grading operations on the property in order to observe the stripping and disposal of unsuitable materials, and to coordinate this work with the grading contractor. During this period, a pre-construction conference should be held on the site, with at least the owner's representative, the grading contractor, a county representative and one of our engineers present. At this time, the project specifications and the testing and inspection responsibilities will be outlined and discussed,

5. Field observation and testing must be provided by a representative of Steven Raas & Associates, Inc., to enable them to form an opinion as to the degree of conformance of the exposed site conditions to those foreseen in this report, regarding the adequacy of the site preparadon, the acceptability of fill materials, and the extent to which the earthwork construction and the degree of compaction comply with the specification requirements. Any work related to grading performed without the full knowledge of, and not under the direct

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observation of Steven Raas & Associates, Inc., the Geotechnical Engineer, will render the recommendations of this report invalid.

SITE PREPARATION

6. The initial preparation of the site will consist of the removal of trees as required and the debris. Septic tanks and leaching lines, if found, must be completely removed. The extent of this soil removal will be designated by a representative of Steven Raas & Associates, Inc. in the field. This material must be removed from the site.

7. Any wells encountered shall be capped in accordance with the requirements of the County Health Department. The strength of the cap shall be equal to the adjacent soil and shall not be located within 5 feet of a structural footing.

8. Any voids created by tree removal, septic tank, and leach line removal must be backfilled with properly compacted native soils that are free of organic and other deletenous materials or with approved import fill.

9. Surface vegetation and organically contaminated topsoil should then be removed from the area to be graded. These soils may be stockpiled for future landscaping. The required depth of stripping will vary with the time of year and must be based upon visual observations of a representative of Steven Raas & Associates, Inc. It is anticipated that the depth of stripping may be 2 to 4 inches.

10. Following the stripping, the area should be excavated to the design grades. The exposed soils in the building and paving areas should be scarified, moisture conditioned, and compacted as an engineered fill except for any contaminated material noted by a representative of Steven Raas & Associates, Inc. in the field. The moisture conditioning

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procedure will depend on the time of year that the work is done, but it should result in the soils being 1 to 3 percent over their optimum moisture content at the time of compaction.

Note: If this work is done during or soon after the rainy season, the on-site soils may be too wet to be used **as** engineered fill.

11. With the exception of the upper 8 inches of subgrade in paved areas and driveways, the soil on the project should he compacted to a minimum of 90% of its maximum dry density. The upper 8 inches of subgrade in the pavement areas and all aggregate subbase and aggregate base should be compacted to a minimum of 95% of its maximum dry density.

12. The maximum dry density will be obtained from a laboratory compaction curve run in accordance with ASTM Procedure #D1557-91. This test will also establish the optimum moisture content of the material. Field density testing will be in accordance with ASTM Test #D2922.

13. Should the use of imported fill he necessary on this project, the fill material should be:

a. free of organics, debris, and other deleterious materials
b. granular in nature, well graded, and contain sufficient binder to allow utility trenches to stand open
c. free of rocks in excess of 2 inches in size
d. have a Plasticity Index between **4** and 12
e. have a minimum Sand Equivalent of 20, and
f. have a minimum Resistance "R" Value of 30, and be non-expansive

14. Samples of any proposed imported fill planned for use on this project should be submitted to Steven Raas & Associates, Inc. for appropriate testing and approval not less than **4** working days before the anticipated jobsite delivery.

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CUT AND FILL SLOPES

15. **All** fill slopes should be constructed with engineered fill meeting the minimum density requirements of this report and have a gradient no steeper than 2:1 (horizontal to vertical). Fill slopes should not exceed 15 feet in vertical height unless specifically reviewed by Steven Raas & Associates, Inc. Where the vertical height exceeds 15 feet, intermediate benches must be provided. These benches should be at least 6 feet wide and sloped to control surface drainage. **A** lined ditch should be used on the bench.

16. Fill slopes should be keyed into the native slopes by providing a 10 foot wide base keyway sloped negatively at least 2% into the bank. The depth of the keyways will vary, depending on the materials encountered. It is anticipated that the depth of the keyways may be 3 to 6 feet, but at all locations shall be at least 2 feet into firm material.

Subsequent keys may be required as the fill section progress upslope. Keys will be designated in the field by a representative of Steven Raas & Associates, Inc. See Figure No. 9 for general details.

17. Cut slopes shall not exceed a 2:1 (horizontal to vertical) gradient and a 15 foot vertical height unless specifically reviewed by a representative of Steven Raas & Associates, Inc. Where the vertical height exceeds 15 feet, intermediate benches must be provided. These benches should be at least 6 feet wide and sloped to control surface drainage. **A** lined ditch should be used on the bench.

18. The above slope gradients are based on the strength characteristics of the materials under conditions of normal moisture content that would result from rainfall falling directly on the slope, and do not take into account the additional activating forces applied by seepage from spring areas. Therefore, in order to maintain stable slopes at the recommended gradients, it is important that any seepage farces and accompanying hydrostatic pressure encountered be relieved by adequate drainage. Drainage facilities may include subdrains, gravel blankets,

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rockfill surface trenches or horizontally drilled drains. Configurations and type of drainage will be determined by a representative of Steven Raas & Associates, Inc. during the grading operations.

19. The surfaces of all cut and fill slopes should be prepared and maintained to reduce erosion. This work, at a minimum, should include track rolling of the slope and effective planting. The protection of the slopes should be installed as soon as practicable so that a sufficient growth will be established prior to inclement weather conditions. It is vital that no slope be left standing through a winter season without the erosion control measures having been provided.

20. The above recommended gradients do not preclude periodic maintenance of the slopes, as minor sloughing and erosion may take place.

21. If a fill slope is to be placed above a cut slope, the toe of the fill slope should be set back at least 8 feet horizontally from the top of the cut slope. A lateral surface drain should be placed in the area between the cut and fill slopes.

SLOPE EROSION **CONTROL**

22. The surface soils are classified as moderately to highly erodable. Therefore, the finished ground surface should be planted with ground cover and continually maintained to minimize surface erosion.

FOUNDATIONS - **SPREAD FOOTINGS**

23. At the time we prepared this report, the grading plans had not been completed and the Structure location and foundation details had not been finalized. We request an opportunity

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to review these items during the design stages to determine if supplemental recommendations will be required.

24. If the entire building is constructed above the 90 contour (on the relatively flat upper portion of the lot), and considering the soil characteristics and site preparation recommendations, it is our opinion that an appropriate foundation system to support the proposed structures will consist of reinforced concrete spread footings bedded into firm native soil or engineered fills of the on-site soils. This system could consist of continuous exterior footings, in conjunction with interior isolated spread footings or additional continuous footings or concrete slabs.

25. Footing widths should be based on the allowable bearing value but not less than **12** inches for 1 story and 15 inches for 2 story structures. Footings should be embedded below the lowest adjacent grade not less than 12 inches for 1 story structures and 18 inches for 2 story structures. Footing excavations must be observed by a representative of Steven Raas & Associates, Inc. before steel is placed and concrete is poured to insure bedding into proper material. The footing excavations should be thoroughly saturated prior to placing concrete.

26. Footings constructed to the given criteria may be designed for the following allowable bearing capacities:

a. 1,800 psf for Dead **plus** Live Load
b. a 1/3rd increase for Seismic or Wind Load

In computing the pressures transmitted to the soil by the footings, the embedded weight of the footing may be neglected.

27. No footing should be placed closer than 8 feet to the top of a fill slope nor 6 feet from the base of a cut slope.

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28. The footings should contain steel reinforcement as determined by the Project Structural Engineer in accordance with applicable UBC or **ACI** Standards.

FOUNDATION - PIER AND GRADE BEAM

30. If a portion of the home is to be constructed below the 90 contour on the face of the slope, it is our opinion that the home should be founded and end bearing cast-in-place reinforced concrete piers in conjunction with reinforced concrete grade beams. **A** mixed foundation system, consisting of piers and grade beams on the slopes and spread footings on the flatter areas is not recommended due to the potential for differential settlement between the two foundation types.

31. The end bearing piers should be designed for the following criteria:

a. Minimum pier embedment should be 10 feet below the ground surface Actual depths could depend upon **a** lateral force analysis performed by your structural engineer.

b. Minimum pier size should be 18 inches in diameter and all pier holes must be free of loose material on the bottom.

c. Active pressures from the upper 5 feet of soil below the 90 contour against the piers is 35 psf/ft of depth and acts on a plane which is 1% times the pier diameter.

d. Passive pressures of 300 psf/ft of depth can be developed. acting over a plane 1% times the pier diameter. Neglect passive pressure in the top 2 feet of soil.

e. The allowable end bearing capacity is 4,000 psf, with a 1/3rd increase for wind or seismic loading.

f. All pier construction must be observed by a Steven Raas & Associates, Inc. Any piers constructed without the full knowledge and continuous

observation of Steven Raas & Associates, Inc., will render the recommendations of this report invalid.

32. The piers and grade beams should contain steel reinforcement as determined by the Project Structural Engineer.

SLAB-ON-GRADE CONSTRUCTION

33. Concrete slab-on-grade floors may be used for ground level construction on native soil or engineered fill on the portion of the structure founded above the 90 contour. Slabs may be structurally integrated with the footings. If the slabs are constructed as "free floating" slabs, they should be provided with a minimum ¼ inch felt separation between the slab and footing. The slabs should be separated into approximately 15' x 15' square sections with dummy joints or similar type crack control devices.

34. All concrete slabs-on-grade should be underlain by a minimum 4 inch thick capillary break of ¾ inch clean crushed rock, It is recommended that neither Class II baserock nor sand be employed as the capillary break material.

35. Where floor coverings are anticipated or vapor transmission may be a problem, a waterproof membrane should be placed between the granular layer and the floor slab in order to reduce moisture condensation under the floor coverings. **A** 2 inch layer of moist sand on top of the membrane will help protect the membrane and will assist in equalizing the curing rate of the concrete.

36. Requirements for pre-wetting of the subgrade soils prior to the pouring of the slabs will depend on the specific soils and seasonal moisture conditions and will be determined by a representative of Steven Raas & Associates, Inc. at the time of construction. It is important that the subgrade soils be thoroughly saturated at the time the concrete is poured.

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37. Slab thickness, reinforcement, and doweling should be determined by the Project Structural Engineer.

UTILITY TRENCHES

38. Utility trenches that are parallel to the sides of the building should be placed so that they do not extend below a line sloping down and away at a 2:1 (horizontal to vertical) slope from the bottom outside edge of all footings.

39. Trenches may be backfilled with the native materials or approved import granular material with the soil compacted in thin lifts to a minimum of 95% of its maximum dry density in paved areas and 90% in other areas.

40. Jetting of the trench backfill should be carefully considered as it may result in an unsatisfactory degree of compaction.

41. Trenches must be shored as required by the local agency and the State of California Division of Industrial Safety construction safety orders.

LATERAL PRESSURES

42. Retaining walls with a horizontal backfill and full drainage should be designed using the following criteria:

a. When walls are free to yield an amount sufficient to develop the active earth pressure condition (about ½% of height), design for an active earth pressure of 35 psf/ft of depth.

b. When walls are restrained at the top design for the following at-rest earth pressure of 50 psf/ft of depth.

c. For resisting passive earth pressure use 300 psf/ft of depth.

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d. **A** "coefficient of friction" between base of foundation and soil of 0.35.

e. Any live or dead loads which will transmit a force to the wall. Refer to Figure No. 10.

f. The resultant seismic force on the wall is $20H^2$ and acts at a point $0.6H$ up from the base of the wall. This force has been estimated using the Mononobe-Okabe method of analysis.

Should the slope behind the retaining walls be other than horizontal, supplemental design criteria will be provided for the active earth or at rest pressures for the particular slope angle.

43. The above criteria are based on fully drained conditions. Therefore, we recommend that permeable material meeting the State of California Standard Specification Section 68-1.025, Class 1, Type **A,** be placed behind the wall, with a minimum width of 12 inches and extending for the full height of the wall to within 1 foot of the ground surface. The rock should be covered with Mirafi 140 filter fabric or equivalent and then compacted native soil placed to the ground surface. **A** 4 inch diameter perforated rigid plastic or metal drain pipe should be installed within 3 inches of the bottom of the granular backfill and be discharged to a suitable, approved location.

44. The area behind the wall and permeable material should be compacted with approved soil to a minimum relative dry density of 90%.

SURFACE DRAINAGE

45. Surface water must not be allowed to pond or be trapped adjacent to the building foundations nor on the building pad nor in the parking areas.

46. **All** roof eaves should be guttered, with the outlets from the downspouts provided with adequate capacity to carry the storm water from the structures to reduce the possibility of soil

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saturation and erosion. The connection should be in a closed conduit which discharges at an approved location away from the structures and the graded area.

47. Final grades should be provided with a positive gradient away from all foundations in order to provide for rapid removal of the surface water from the foundations to an adequate discharge point. Concentrations of surface water runoff should be handled by providing necessary structures, such as paved ditches, catch basins, etc.

48. Cut and fill slopes shall be constructed so that surface water will not be allowed to drain over the top of the slope face. This may require berms along the top of fill slopes and surface drainage ditches above cut slopes.

49. Irrigation activities at the site should not be done in an uncontrolled or unreasonable manner.

50. The building and surface drainage facilities must not be altered nor any filling or excavation work performed in the area without first consulting Steven Raas & Associates, Inc.

PAVEMENT DESIGN

51. The design of the pavement section was beyond our scope of services for this project. To have the selected pavement sections perform to their greatest efficiency, it is very important that the following items be considered:

a. Properly moisture condition the subgrade and compact it to a minimum of 95% of its maximum dry density, at a moisture content 1-3% over the optimum moisture content.

b. Provide sufficient gradient to prevent ponding of water.

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c. Use only quality materials of the type and thickness (minimum) specified. **All** baserock must meet CALTRANS Standard Specifications for Class 2 Aggregate Base, and be angular in shape.

d. Compact the base and subbase uniformly to a minimum of 95% of its maximum dry density.

e. Place the asphaltic concrete only during periods of fair weather when the free air temperature is within prescribed limits.

f. Maintenance should be undertaken on a routine basis.

PLAN REVIEW

52. We respectfully request an opportunity to review the plans during preparation and before bidding to insure that the recommendations of this report have been included and to provide additional recommendations, if needed.

EXHIBIT J

FALL CREEK ENGINEERING, INC.
Civil • Environmental • Wafer Resource Engineering and Sciences
Tel. (831) 426-9054 P.O. **Box** 7894, Santa Cruz, **CA** 95061 Fax. (831) 426-4932

July 15,2005

Joan Van der Moeven, AICP
County of Santa Cruz
701 Ocean Street 4th Floor
Santa Cruz, CA 95060

Subject: Response to Comments **for** Application # **05-0305, APN # 046-311-01,** Monterey **Oaks** Estates, **LLC.**

Dear Joan:

Fall Creek Engineering, Inc. (FCE) has prepared this letter to respond to comments received from County of Santa Cruz staff on the above referenced project in a letter dated June 17,2005. FCE has revised the accompanying drawings in response to the comments and prepared the following responses:

1. The erosion control plan has been modified to include both a temporary stabilized construction entrance and straw wattles. The temporary stabilized construction entrance will prevent soil tracking onto San Andreas Road from vehicles exiting tlie site during construction. The straw wattles will capture and prevent sediments from exiting tlie site during construction activities and until the hillslope on the northern portion of the property is adequately vegetated. (Sheet 8 and 9).

2. In order to minimize impervious area, the driveway surfacing has been changed to include the use of porous pavement. Porous pavement will intercept and infiltrate rainfall therefore decreasing tlie amount of stormwater runoff. Additionally porous pavement increases the roughness of the surface thus decreasing runoff velocities (Sheet 2 and 7).

3. The site will not receive runoff from offsite. **A** small drainage channel on the northern side of San Andreas Road will collect and convey stormwater away from the driveway and entrance to the property. **A** culvert will be installed under the driveway entrance to allow stormwater runoff to prevent the runoff from backwatering and entering tlie property via the driveway (Sheet 7 and 8).

4. Stormwater runoff quantities will be mitigated through the use of infiltration chambers. The stormwater runoff from the roof and driveway will be collected in a series of drain pipes and discharge into the chambers allowing tlie water to infiltrate into the soils. The chambers have been sized to capture and detain the 90th percentile storm event. Overflow from the chambers will be directed to an energy dissipation pool located on the downward slope on the northern portion of the property (Sheet 7, 8, and 11).

EXHIBIT K

Thank you for the opportunity to respond to these comments and FCE appreciates the County's staff thorough and complete review of the subject plans. If you have any additional questions or comments, please do not hesitate to contact me at (831) 426-9054.

Sincerely,

Robyn Cooper
Associate Engineer

Enclosures

Cc: Kent Edler, Environmental Planning, Santa Cruz
Alyson Tom, Department of Public Works, Santa Cruz
Tim Nyugen, Department of Public Works, Santa Cruz
Sonny Tut, Santa Cruz
Warren Thompson, Fresno

EXHIBIT K

Pacific Crest Engineering Inc. www.4pacific-crest.com

Geotechnical Group
444 Airport Blvd, Suite 106
Watsonville, CA 95076
Phone: 831-722-9446
Fax: 831-722-9155

Chemical Process Group
195 Aviation Way, Suite 203
Watsonville, **CA** 95076
Phone: 831-763-6191
Fax: 831-763-6195

December 15,2003

Project No. 98118-SZ75-J61

Mr. Sunny Tut
Monterey Oaks Estates
187 Via Soderini
Aptos, CA95003

Subject: **Update to the** Existing Geotechnical Investigation Report
New Residence
San Andreas Road Parcel – APN 046-31 1-01
La Selva Beach, California

Dear Mr. Tut,

As you requested, Pacific Crest Engineering Inc., is providing geotechnical engineering services on your new residence project located on San Andreas Road, Parcel No. APN 046-31 1-01, in La Selva Beach, California.

The original Geotechnical Investigation Report for this project was prepared by Steven Raas & Associates, Inc., in October 1998. In January of 2002, Steven Raas & Associates, Inc., and Pacific Crest Engineering Inc., merged to become one company under the name Pacific Crest Engineering Inc. The new company, Pacific Crest Engineering Inc., will provide continuing geotechnical engineering services to projects such as your new residence project.

The original Geotechnical Investigation Report for this project was completed in October 1998. Since some time has passed since this original report was prepared and since some building codes have changed since then, we are preparing this letter report to update that original Geotechnical Investigation Report.

On December 5, 2003, a representative of Pacific Crest Engineering Inc., visited the project site to observe the current conditions on the site, The project site appears to be essentially unchanged from the conditions noted in the original Geotechnical Investigation Report. The parcel is still undeveloped with limited vegetation other than several large trees around the perimeter of the parcel. Some of the larger trees have been felled though the stumps remain. A new house has been constructed on the property directly west of this parcel. There does not appear to be any significant changes nor modifications to the site since the original Geotechnical Investigation Report was prepared.

From our discussions and our review of the preliminary conceptual plans you provided, we understand that you propose to design and construct a predominately two-story single family

EXHIBIT K

dwelling with a footprint of approximately 4,400 square feet. **A** basement is proposed for below the dining room and kitchen area of the new residence and consequently this portion of the house will be three stories.

The specific location and general details of your proposed residence is very comparable to the proposed residence investigated in the original Geotechnical Investigation Report for this parcel. From a comparison of the proposed location of your residence with the locations the test borings advanced as part of the original investigation, we note that two of the test borings are located within the new residence footprint and the third is located in the driveway area. The number and location of these existing test borings is sufficient to characterize the project site adequately for the design and construction of your new residence project, subject to the limitations section of the original Geotechnical Investigation Report.

From our recent site visit, the preliminary conceptual plans you provided, discussions with you, and review of the existing Geotechnical Investigation Report, we recommend that your new residence project should be designed and constructed in accordance with the recommendations included in the existing Geotechnical Investigation Report dated October 12, 1998, with the following additions and comments:

1. **Seismic Design and Ground Shaking**

Ground shaking will be felt on the project site. Structures founded on thick soft soil deposits are more likely to experience more destructive shaking, with higher amplitude and lower frequency, than structures founded on bedrock. Generally, shaking will be more intense closer to earthquake epicenters. Thick soft soil deposits large distances from earthquake epicenters, however, may result in seismic accelerations significantly greater than expected in bedrock. Structures built in accordance with the latest edition of the Uniform Building Code for Seismic Zone 4 have an increased potential for experiencing relatively minor damage which should be repairable. The seismic design of the project should be based on the 1997 Uniform Building Code as it has incorporated the most recent seismic design parameters. The following values for the seismic design of the project site were derived or taken from the 1997 UBC.

TABLE No. 1, The 1997 UBC Seismic Design Parameters

Seismic Zone	Zone 4
Seismic Zone Factor	$Z = 0.4$
Soil Profile Type	Stiff Soil (S_D)
Near Source Factor N_a	$N_a = 1.0$
Seismic coefficient C_a	$C_a = 0.44$
Near Source Factor N_v	$N_v = 1.14$
Seismic coefficient C_v	$C_v = 0.73$

2. **Main Residence - Pier and Grade Beam Foundation**

Since a portion of the proposed residence will be located below the 90 foot contour and in accordance with the recommendations of the original Geotechnical Investigation Report, we recommend that the residence should be designed and constructed with a pier and grade beam foundation.

EXHIBIT K

3. Retaining Walls

Retaining walls integral with the main residence should be designed and constructed with a pier and grade beam foundation. For recommendations for the design and construction of these retaining walls and foundations, please refer to the original Geotechnical Investigation Report for this project.

Retaining walls not directly integrated with the main residence may be designed with either a spread footing foundation or a pier and grade beam foundation. If a spread footing foundation is utilized, the footings should be embedded a minimum of 24 inches below the lowest adjacent grade. For other recommendations regarding a retaining walls and spread footing foundations, please refer to the original Geotechnical Investigation Report for this project. If a pier and grade beam foundation is utilized, the pier and grade beam foundation should be designed and constructed in accordance with the recommendations included in the original Geotechnical Investigation Report for this project.

If you have any questions regarding this letter or project, please contact our office at your convenience.

Very truly yours,

GEOFORENSICS TEST ENGINEERING INC.

CERTIFIED ENGINEERING GEOLOGIST DUNCAN S. GEDDES No. 2176 STATE OF CALIFORNIA

Duncan S. Geddes
Senior Geologist
C.E.G. 2176
Exp. 2/28/04

REGISTERED PROFESSIONAL ENGINEER MICHAEL D. KLEAMES No. GE 2204 Exp. 3-31-04 GEOTECHNICAL STATE OF CALIFORNIA

Michael D. Kleames, G.E.
President\Principal Geotechnical Engineer
G.E. 2204
Exp. *313* 1/04

H:\PF\1989-99 SRA\98118 Tut Res San Andreas Rd\Update to gl doc

Copies: 2 to Mr. Sunny Tut
1 to DDM, Attention: Mark Treuge
1 to T-Squared Architects, Attention: Warren D. Thompson

EXHIBIT K

SOQUEL CREEK WATER DISTRICT
P.O. Box 158
Mail to: 5180 Soquel Drive
Soquel, CA 95073-0158
PHONE (831) 475-8500 FAX (831) 475-4291

PROJECT COMMENT SHEET

Date of Review: 07/27/04
Reviewed By: Carol Carr

Returned Project Comments to: Joan Van der Hoeven, County of Santa Cruz, Planning Department, 701 Ocean St., Ste. 400, Santa Cruz, CA 95060-4073

Owner: Monterey Oaks Estates, LLC, 167 Via Soderini, Aptos, CA 96003

Applicant Monterey Oaks Estates, LLC, 187 Via Soderini, Aptos, CA 96003

Type of Permit: Development Permit
County Application #: 02-0308

Subject APN: 046-311-01
Location: Property is located on the north side of San Andreas Road, at it's intersection with Oceanview Drive, between 1400 and 1380 San Andreas Road, La Selva Beach.

Project Description: Proposal to grade about 657 cubic yards of material and construct a two story single family dwelling.

Notice

Notice is hereby given that the Board of Directors of the Soquel Creek Water District is considering adopting policies to mitigate the impact of development on the local groundwater basins. The proposed project would be subject to these and any other conditione of service that the District may adopt prim to granting water service.

It should not be taken as a guarantee that service will be available to the project in the future or that additional conditions will not be impoeed by the District prior io granting water service.

Requirements

The developer/applicant, without cost to the District, shall:

1) Destroy any wells on the property in accordance with State Bulletin No. 74;
2) Satisfy all conditione imposed by the District to assure necessary water pressure, flow and quality;
3) Satisfy all conditione for water conservation required by the District at the time of application for service. including the following:
   a) All applicants for new watar service from Soquel Creek Water District shall be required to offset expected water use of their respective development by a 1.2 to 1 ratio by retrofitting existing developed property within the Soquel Creek Water District service area so that any new development has a "zero impact" on the District's groundwater supply. Applicants for new service shall bear those costs associated with the retrofit as deemed appropriate by the District up to a maximum eet by the District and pay any associated feee set by the District to reimburse administrative and inspection coste in accordance with District procedures for implementing this program.
   b) Plans for a water efficient landscape and irrigation system shall be submitted to District Conservation Staff for approval;

EXHIBIT L

SOQUEL CREEK WATER DISTRICT
P.O. BOX 158
Mail to: 5180 Soquel Drive
Soquel, CA 95073-0158
PHONE (831) 475-8500 FAX (831) 475-4291

PROJECT COMMENT SHEET

c) All interior plumbing fixtures shall be low-flow and have the EPA Energy Star label;

District Staff shall inspect the completed project for compliance with all conservation requirements prior to commencing water service;

4) Complete LAFCO annexation requirements, if applicable;

5) All units shall be individually metered with a minimum size of 5/8-inch by ¾-inch standard domestic water meters;

A memorandum of the terms of this letter shall be recorded with the County Recorder of the County of Santa Cruz to insure that any future property owners are notified of the conditione set forth herein.

Soquel Creek Water District Project Review Comments:

1. SCWD has reviewed plans prepared by T-Squared Architects, Fall Creek Engineering Inc., and SSA Landscape Architects and has made comments. 1) This parcel ia currently not within the Soquel Creek Water District's boundaries. Applicant should verify conditions of service with the Local *Agency* Formation Commission (LAFCO). LAFCO is located in the County Government Center at: 701 Ocean Street Rm. 318-D, Santa Cruz, CA 95060, Phone (831) 464-2066, *Fax* (831) 464.2068. 2) Once the parcel has been included in the SCWD service area a New Water Service Application Request will need to be completed and submitted to the SCWD Board of Directors; however, please be advised that additional conditions may be impoeed as per the above Notice. 3) The applicant shall be required ta offset the expected water use of their respective development by a 1.2 to 1 ratio by retrofitting existing developed property within the Soquel Creek Water District service area. Applicants for new service shall bear thoee costs associated with the retrofit. Calculations for the expected water demand of this project have been provided. These calculations are baeed on the preliminary plans, and are subject to change. Final calculations are pending finalization of the project plans. 4) All interior plumbing fixtures shall be low flow and have the EPA Energy Star label 6) The landscape-planting plans have been reviewed and approved by District Conservation Staff. However, *total* turf area reductions have been suggested (please see the attached comment sheet). 6) A Fire Protection Requirements Form will need to be completed and reviewed by the appropriate Fire District. 7) Water pressure in this area *may* be high. A *Water Waiver for Pressure and/or Flow* may need to be recorded.

Attachments:

- ☐ Soquel Creek Water District Procedures for Processing Minor Land Divisions (MLD) dated November 9,1992
- ☐ Soquel Creek Water District Procedures for Processing Water Service Requests for Subdivisions and Multiple Unit Developments
- ☐ Resolution 78-7, Resolution of the Board of Directors of the Soquel Creek County Water District Establishing Landscape Design and Irrigation Water Use Policy
- ☒ Water Demand Offset Policy Fact Sheet
- ☒ Soquel Creek Water District New Water Service Application Request.
- ☐ Soquel Creek Water District Variance Application
- ☒ Soquel Creek Water District Water Waiver For Pressure and/or Flow
- ☒ Fire Protection Requirements Form

EXHIBIT L

Joan

The turf area for the Tut residence (APN 046-311-01) was calculated based on the total lot square footage. The calculation should be based on the total developed landscape area, 15,100 s.f. This yields about 21% total turf area for the landscape, as noted on the landscape plan. Still, the turf area is under 25%, as required by the Santa Cruz County Landscape Ordinance. However I would recommend reducing the turf area by about 50% so that the total turf area does not exceed 1,600 s.f.

I recommend this because the planned turf area would require about 90 units of water each irrigation season to live. (1unit=748 gallons). By cutting the turf area down, we would hope to lessen the water consumption that landscapes of this size require during the dry months. The District would like to see a decrease in summertime pumping to help mitigate the groundwater depletion that is currently occurring, especially in the service area in which this project is located.

If the user requires a large play area, perhaps the project could incorporate synthetic turf or some mix of both synthetic and natural turf.

The project complies with the current landscape ordinance, so it is approved as designed. The above recommendations will, however, create a landscape that is better designed to meet future water supply costs and possible limitations.

Best regards,

Roy Sikes
Water Conservation Specialist
Soquel Creek Water District
831.475.8501 ext. 146

EXHIBIT L

COUNTY OF SANTA CRUZ

PLANNING DEPARTMENT
701 OCEAN STREET, SUITE 310, SANTA CRUZ, CA 95060
(831) 454-2580 FAX (831)454-2131 TDD (831) 454-2123
ALVIN JAMES, DIRECTOR

July 16,2002

Monterey Oaks Estates
187 Via Soderini
Aptos, **CA** 95003

SUBJECT: Archaeological Reconnaissance Survey for
Application 02-0308, APN 046-311-01

To Whom It May Concern,

The County's archaeological survey team has completed the Phase 1 archaeological reconnaissance for the parcel named above. The research has concluded that pre-historical cultural resources were not evident at the site. **A** copy of the review documentation is attached for your records. No further archaeological review will be required for the proposed development. Please contact me at (831) 454-3372 if you have any questions regarding this review.

Sincerely,

Dan Monroe
Planning Technician

EXHIBIT M