Staff Report to the Zoning Administrator

Application Number: 06-0242

Applicant: Cove Britton for Matson Britton Architects
Owner: Mary Vidovich
APN: 042-211-28

Agenda Date: May 4,2007

Agenda Item #: 6
Time: After 10:00 a.m.

Project Description: Proposal to construct a 2-story, 3 bedroom single-family dwelling on an undeveloped lot. Requires a Coastal Development Permit and Variances to reduce the front yard setback from 15 to about 5 feet and to increase the floor area ratio from 50% to 56%.

Location: Property is an undeveloped parcel located on the east side of Rio del Mar Blvd., between 229 and 237 Rio del Mar Blvd.

Supervisoral District: 2nd District (District Supervisor: Ellen Pine)

Permits Required: Coastal Development Permit and Variances to reduce the front yard setback from 15 feet to 5 feet and to allow an increase in floor area ratio from 50% to about 56%.

Staff Recommendation:

- Certification that the proposal is exempt from further Environmental Review under the California Environmental Quality Act.
- Approval of Application 06-0242, based on the attached findings.

Exhibits

A. Project plans
B. Findings
C. Conditions **of** approval
D. Categorical Exemption (CEQA determination)
E. Assessor's parcel map
F. Zoning and General Plan map
G. Engineering Geology and Geotechnical Report acceptance letter from Joe Hanna, County Geologist, dated 8/11/05.
H. Conclusions and recommendations from the Engineering Geology report prepared by Zinn Geolgoy, dated 7/13/05.
I. Conclusions and recommendations from the Geotechnical report prepared by Haro, Kasunich, and Associates. dated 7/05.
J. Urban Designer's comments, dated 5/22/06.
K. Discretionary application comments.

Parcel Information

Parcel Size:	2,350 square feet
Existing Land Use - Parcel:	Undeveloped lot
Existing Land Use - Surrounding:	Single and multi-family residential
Project Access:	Rio del Mar Blvd.
Planning Area:	Aptos
Land Use Designation:	R-UH (Urban High Density Residential)
Zone District:	RM 2.5 (Multi-family residential, 2,500 square foot minimum)
Coastal Zone:	_X_ Inside __ Outside
Appealable to Calif. Coastal Comm	_X_ Yes __ No

Environmental Information

Geologic Hazards:	Steep slopes
Soils:	Elkhom Pfeiffer Complex
Fire Hazard:	Not a mapped constraint
Slopes:	30% to 50%
Env. Sen. Habitat:	Mapped potential Dudley's Lousewort habitat/no evidence on site
Grading:	About 68 net cubic yards
Tree Removal:	No trees proposed to be removed
Scenic:	Mapped scenic
Drainage:	Drainage to Rio del Mar Boulevard
Archeology:	**Not** mapped/no physical evidence on site

Services Information

Urban/Rural Services Line:	_X_ Inside __ Outside
Water Supply:	Soquel Creek Water District
Sewage Disposal:	Santa Cruz Sanitation District
Fire District:	Aptos/La Selva Fire District
Drainage District:	Zone 6

History

The project site is an undeveloped lot on the north side of Rio del Mar Boulevard, originally created as part of the Aptos Country Club Subdivision in 1928. The site has remained undeveloped since its creation, despite the approval of a Coastal Development Permit in 1985 for a single-family dwelling (85-1**127).**

Project Setting

The property is the only undeveloped parcel in a line of single-family residences along Rio del Mar Boulevard in the vicinity. The property is located on a ridge between the Rio del Mar flats and the ocean, and is steeply sloped to the north with slopes of about 30% at the project site. The

project is infill development in a neighborhood of small lots developed with single-family residences on the north side of Rio del Mar and multi-family residences on the south.

Zoning & General Plan Consistency

The subject property is a 2,345 square foot lot, located in the RM 2.5 (Multi-family residential) 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-UH) Urban High Density Residential General Plan designation.

Site standards

The RM 2.5 site standards apply to the site, as outlined in the table below. The majority of the homes along Rio del Mar Boulevard between Kingsbury Drive and the Esplanade do not comply with these standards, as they were constructed prior to the implementation of site standards.

	RM-2.5 **Site Standards**	**Proposed**
Front yard setback	**15'**	5'*
Rear yard setback	**15'**	15'
Side yard setbacks	5' each side	**5'** each side
Maximum height	28'	28'
Maximum % lot coverage	40%	39.9%
Maximum Floor Area Ratio	50%	56%*

The project **as** proposed requires variances to reduce the front yard setback from 15 feet to 5 feet and to increase the floor area ratio from 50% to about 56%.

Front yard setback variance

The small size, dimensions of the lot, with a depth of 61 feet and a width of 40 feet, combined with the topography of the site, represent special circumstances that constrain development on site and prevent the construction of a house of a similar size to surrounding residences. The lots on the north side of Rio del Mar Boulevard are small (in the 1,500 to 3,000 square foot range), with most house sizes in the 1,200 square feet to 2,200 square feet range. The house as proposed is 1,565 square feet counting the garage and carport, on the lower end of the range of house sizes along Rio del Mar Boulevard. The applicant claims that strict application of the front yard setback would require a reduction in the second floor living area and would deprive the property owner of habitable space comparable to houses in the vicinity, none of which meet all RM-2.5 site standards.

The proposed reduction in the front yard setback is consistent with surrounding homes on the north side of Rio del Mar Boulevard, and multiple variances have been approved in the vicinity (see following table).

Address & APN	Variance application	Approved setback
201 Rio del Mar Blvd 042-211-37	85-0671	Garage setback reduced from 20' to 2'
205 Rio del Mar Blvd 042-211-36	4331-U	FYSB reduced to I3'
213 Rio del Mar Blvd 042-211-34	84-443-V,CZ	FYSB reduced to 0' for garage, about 8' for 2nd story
217 Rio del Mar Blvd 042-211-38	88-0511	FYSB reduced 3' lower, 12' to 2'' story
243 Rio del Mar Blvd 042-211-24	87-0202	Reduce FYSB to 2', 5' to second story
263 Rio del Mar Blvd 042-281-05	87-0363	Reduce FYSB to 2' 6" for deck, 6'-6" to house
265 Rio del Mar Blvd 042-281-06	521-V	Reduce FYSB
273 Rio del Mar Blvd 042-281-09	85-1129	Reduce FYSB to 5', 1' 6" for deck

To approve a variance, three specific findings must be made as required by State law. The first variance finding states:

> ***That because of special circumstances applicable to the property, including size, shape, topography, location, and surrounding existing structures, the strict application of the Zoning Ordinance deprives such property of privileges enjoyed by other property in the vicinity and under identical zoning classification.***

This finding can be made for the design as proposed, as the small lot size, narrow width of the lot, steep topography, combined with off-street parking requirements represent special circumstances that would deny the property owner of privileges enjoyed by neighboring properties. Adjacent properties on the north side of Rio del Mar Boulevard have the same zoning and exhibit similar physical constraints as the subject parcel, with small lot sizes and steep slopes to the rear, and most are within two to five feet of the front property line.

> ***(T)he granting of the variance will be in harmony with the general intent and purpose of zoning objectives and will not be materially detrimental to public health, safety, or welfare or injurious to property or improvements in the vicinity.***

The proposed project, with the reduction in the front yard setback, may partially reduce views of the ocean over the top of the site from the three residences immediately upslope of the property (237,239, and 241 Rio del Mar Blvd.). While some obstruction of private views over the top of existing development is unavoidable at this location due to the location and orientation of the upslope residences, the main viewshed down Rio del Mar Boulevard toward the ocean and beach will be preserved as the proposed dwelling will not encroach closer to the edge of the right of way as houses on adjacent downslope properties

Floor area ratio variance

In addition to the reduced front yard setback, an increase the maximum floor area ratio from 50% to 56% is requested in order to accommodate the required off-street parking. Three off-street parking spaces are required for a three-bedroom house, and County Code section 13.10.554(a)(3) requires a vertical clearance of at least 7 feet, ***6*** inches for each parking space. The small size of the lot and the steep slope requires most of the habitable space to be constructed over the required parking, and due to the vertical clearance requirements all of this covered parking will count toward floor area ratio, resulting in a floor area ratio of about *56%*. The granting of the variance to floor area ratio will not constitute a special privilege as most homes on the north side of Rio del Mar Boulevard at this location already exceed the maximum 50% floor area ratio for the zone district, with many in the range 60% to 120%. The granting of the variance will allow adequate parking to be provided on site and will allow the property owner a single-family dwelling of a reasonable size compared to adjacent properties.

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. The house will only be visible from the beach at the Esplanade, but is infill development integrated into the surrounding neighborhood. The property is not located between the beach and the first through public road, and will therefore not interfere with public access.

Design **Review**

The proposed single-family dwelling complies with the requirements of the County Design Review Ordinance, in that two story homes of a similar size predominate along Rio del Mar Boulevard at this location, most of which encroach significantly into the front yard setback. The color, materials, and architectural style are compatible with the **mix** in the surrounding neighborhood, as determined by the County's Urban Designer (Exhibit J).

Drainage

The site currently drains to the north, down the slope toward Venetian Road. Due to slope stability concerns, both the project Engineering Geologist and the project Geotechnical Engineer recommend that surface and roof drainage from the project be directed toward Rio del Mar Boulevard (Exhibits G and H). However, the Department of Public Works-Stomwater Management Division considers this to be a diversion from natural drainage patterns and requires mitigation measures to accommodate the additional runoff onto Rio del Mar Boulevard (See Exhibit K). Stormwater Management still has concerns about the proposed mitigation measures, and additional mitigation measures or a change in the proposed drainage plan may be required in order to obtain building permit approval (Condition of Approval II.B.3).

Conclusion

As proposed with the proposed variances and conditioned, the project will be 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

- Certification that the project is categorically exempt from further review under the California Environmental Quality Act.

- Approval of Application Number **06-0242,** based on the attached findings.

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 bearing agendas and additional information are available online at: www.co.santa-cruz.ca.us

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Application #: 06-0242
AFN: **042-211-28**
Owner: **Mary Vidovich**

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 RM 2.5 (Multi-family residential, 2,500 square foot minimum), 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-UH) Urban High Density 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.

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 bulk, mass, scale, and architectural style, in that the site is surrounded by lots developed to an urban density of with residences of a similar size. The site is located along a ridge, but constitutes infill development within an existing developed neighborhood.

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.

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. Residential uses are allowed uses in the RM 2.5 (Multi-family residential, 2,500 square foot minimum) zone district, as well **as** the General Plan and Local Coastal Program land use designation. Developed parcels in the area contain single-family dwellings of a similar size with similar setbacks, and the design submitted is consistent with the existing range.

EXHIBIT B

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APN: 042-211-28
Owner: Mary Vidovich

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. Construction will comply with prevailing building technology, the Uniform Building Code, the County Building ordinance, and the recommendations of the Engineering Geologic and Geotechnical reports prepared for the site, insuring 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 will maintain a similar front yard setback as surrounding homes. Any blockage of views from upslope properties will be minimal as the residence will not encroach closer to the edge of the Rio del Mar Boulevard right-of-way than surrounding development, maintaining the main viewshed toward the beach.

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 (with the exception of the requested front yard setback and floor area ratio variances) and the purpose of the RM 2.5 (Multi-family residential, 2,500 square foot minimum) zone district in that the primary use of the property will be one single-family dwelling. In order to construct a single-family dwelling of comparable size to surrounding residences, variances to the front yard setback and floor area ratio are requested.

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 Urban High Density Residential (R-UH) land use designation in the County General Plan.

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 be of a similar height, bulk, mass, and scale to surrounding residences and will result in a structure consistent with a design that could be approved on any similarly sized lot in the vicinity with similar constraints.

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

EXHIBIT B

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 in neighborhood already developed with urban services. The expected level of traffic generated by the proposed project is anticipated to be only about one peak trip per day (1 peak trip per dwelling unit), and 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 neighborhood of both single-family and multi-family dwellings, and the proposed single-family dwelling is consistent with the land use intensity and density along the north side of Rio del Mar Boulevard. Most houses in the vicinity are two stories in height and are located within five feet of the Rio del Mar right of way, similar to the proposed project.

6. The proposed development project is consistent with the Design Standards and Guidelines (sections 13.11.070 through 13.11.076), and any other applicable requirements of this chapter.

This finding can be made, in that the proposed single-family dwelling will be of an appropriate scale and type of design that will be compatible with the surrounding properties and will not reduce **or** visually impact available open space in the surrounding area. Furthermore, the height, bulk, mass, and scale of the residence will be similar to that **of** surrounding residences.

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Variance Findings

1. That because of special circumstances applicable to the property, including size, shape, topography, location, and surrounding existing structures, the strict application of the Zoning Ordinance deprives such property of privileges enjoyed by other property in the vicinity and under identical zoning classification.

This finding can be made, in that justification for the requested front yard setback and floor area ratio variances exists due to special circumstances related to the size of the lot (at 2,350 square feet), the dimensions of the site (with a depth of only 61 feet and a width of **38** feet), and the steep topography of the site. These conditions, when combined with the strict application of the RM-2.5 site standards regarding height regulations, minimum clearance for off-street parking requirements, and the front yard setback requirement, deny the property owner of a reasonably sized residence compared to surrounding homes on Rio del Mar Boulevard. In order to provide the required off-street parking spaces under County Code, a significant portion of the living area must be accommodated on the second story, as most **of** the first floor must he dedicated to parking that must meet a clearance of at least 7' 6" in height. **Also,** since the site is steeply sloped to the rear, the height limit for the zone district restricts any second story to the front half of the site. Combined, these restrictions would allow a habitable area **of** only about 950 square feet in size, as **the** second floor could only accommodate about *500* square feet of living area and still meet all setbacks and the height limit. The majority of homes along the north side of Rio del Mar Boulevard have habitable areas of over 1,200 square feet (including many over 2,000 square feet), frequently on smaller lots and without the provision of all off-street parking spaces required by County Code. Therefore, the strict application **of** the zoning ordinance would deprive the property owner of the privilege of a reasonably sized living area as enjoyed by residents on adjacent parcels.

2. That **the** granting of the variance will be in harmony with the general intent and purpose of zoning objectives and will not be materially detrimental **to** public health, safety, or welfare or injurious to property or improvements in the vicinity.

This finding can be made, in that access to light, air, and open space will not be significantly reduced compared to surrounding residences, most of which already encroach into the setbacks. The wide right-of-way for Rio del Mar Boulevard mitigates the reduced setbacks as it provides about **16** feet of additional open space between the property line and the roadway as traveled. Furthermore, the requested variances are driven by off-street parking requirements and would provide all required parking on-site, mitigating the current parking problem in the vicinity.

The project as proposed will partially reduce views of the ocean from the **three** residences immediately upslope of the property (237,239, and 241 Rio del Mar Blvd.). Two of the upslope residences look over the subject property toward the ocean, but views are already mostly obscured by development to the west (downslope) of the project site. Development to the east consists of full two-story residences within one to five feet of the front property line, in most cases closer to the right-of-way than the proposed residence. The main viewsheds for residences to the east (uphill) of the project site are down the Rio del Mar Boulevard right-of-way and from rear decks looking over the Rio del Mar flats, viewsheds that will be maintained under the current proposal.

EXHIBIT B

3. That the granting of such variances shall not constitute a grant of special privileges inconsistent with the limitations upon other properties in the vicinity and zone in which such is situated.

This finding can be made, in that most surrounding homes on the north side **of** Rio del Mar Boulevard have front yard setbacks of between one and five feet, and floor area ratios of between 60% and 120%. Eight variances to front yard setback requirements have been granted along the north side of Rio del Mar Boulevard, in many cases down to 2 ½ feet of the property line ***(see*** table in Variances discussion in the staff report), and most homes constructed prior to 1960 are non-conforming with regards to front yard setbacks. Most houses in the vicinity were constructed prior to the implementation of the floor area ratio regulations, and many significantly exceed the maximum 50% floor area ratio for the RM-2.5 zone district. Therefore, the reduction in front yard setbacks and the increase in floor area ratio will not constitute the grant of the special privilege compared to surrounding properties. Furthermore, the floor area ratio variance is requested in order to provide all of the required off-street parking, standards that most existing residences do not meet.

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APN: **042-211-28**
Owner: Mary **Vidovich**

Conditions of Approval

Exhibit **A:** Project plans, 11 sheets; sheets P1 **through** P6 drawn by Cove Britton, Architect, dated 7/26/06 (sheets P2, P5, and P6 rev. 4/12/07), sheets C1 through C4 drawn by Richard Irish, Civil Engineer, dated 10/24/06.

I. This permit authorizes the construction of a three-bedroom single-family dwelling with a front yard setback of five feet and a floor area ratio of up to ***56%.*** 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. Any changes from the approved Exhibit **"A"** for this development permit on the plans submitted for the Building Permit must be clearly called out and labeled by standard architectural methods to indicate such changes. Any changes that are not properly called out and labeled will not be authorized by any Building Permit that is issued for the proposed development. The final plans shall include the following additional information:

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

2. **A** grading plan. **A** grading permit will be required if more than 100 cubic yards of grading is proposed.

3. **A** drainage plan for review and approval by the Department of Public Works, Drainage. This plan must demonstrate that off-site impacts will be mitigated.

EXHIBIT B

4. ***An*** erosion control plan.

5. As the structure is proposed to be within 2 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 and the topography of the project site which clearly depict the total height of the proposed structure.

6. Details showing compliance with fire department requirements.

7. Details confirming that the underfloor areas will not exceed 7' 6" in height.

C. Submit four copies of the approved Discretionary Permit with the Conditions of Approval attached. The Conditions of Approval shall be recorded prior to submittal, if applicable.

D. Meet all requirements of and pay Zone 6 drainage fees to the County Department of Public Works, Drainage. Drainage fees will be assessed on the net increase in impervious area.

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

F. Submit **3** copies of a plan review letter from the project geologist upon building permit submittal, for review and approval by Environmental Planning staff.

G. Submit **3** copies of a plan review letter from the project geotechnical engineer for review and approval by Environmental Planning staff.

H. Pay the current fees for Parks and Child Care mitigation for three bedrooms Currently, these fees are, respectively, $1,000 and $109 per bedroom.

I. Pay the current fees for Roadside and Transportation improvements for one single-family dwelling. Currently, these fees are $4,400 per unit (split evenly between Roadside and Transportation Improvements.

J. Provide required off-street parking for three 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.

K. 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.

L. Complete and record a Declaration of Restriction to maintain the structure as a single-family dwelling. **You** may not alter the **wording of this** declaration. Follow the instructions to record and return the form to the Planning Department.

M. Submit an agreement for the maintenance of the proposed drainage system (including any silt and grease traps). This agreement shall be approved by both the Planning Department and the Department of Public Works, Drainage.

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:

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 and engineering geologic reports.

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. Drainage facilities must be maintained per the approved maintenance agreement (see Condition ILM).

V. As a condition of this development approval, the holder of this development approval ("Development Approval Holder"), is required to defend, indemnify, and hold harmless the COUNTY, its officers, employees, and agents, from and against any claim (including attorneys' fees), against the COUNTY, it officers, employees, and agents to attack, set

aside, void, or annul this development approval of the COUNTY or any subsequent amendment of this development approval which is requested by the Development Approval Holder.

A. COUNTY shall promptly notify the Development Approval Holder of any claim, action, or proceeding against which the COUNTY **seeks** to be defended, indemnified, or held harmless. COUNTY shall cooperate fully in such defense. If COUNTY fails to notify the Development Approval Holder within sixty ***(60)*** days of any such claim, action, or proceeding, or fails to cooperate fully in the defense thereof, **the** Development Approval Holder shall not thereafter be responsible to defend, indemnify, or hold harmless the COUNTY if such failure to notify or cooperate was significantly prejudicial to the Development Approval Holder.

B. Nothing contained herein shall prohibit the COUNTY from participating in the defense of any claim, action, or proceeding if both of the following occur:

1. COUNTY bears its own attorney's fees and costs; and

2. COUNTY defends the action in good faith.

C. Settlement. The Development Approval Holder shall not be required to pay or perform any settlement unless such Development Approval Holder has approved the settlement. When representing the County, the Development Approval Holder shall not enter into any stipulation or settlement modifying or affecting the interpretation or validity of any of the terms or conditions of the development approval without the prior written consent of the County.

D. Successors Bound. "Development Approval Holder" shall include the applicant and the successor'(s) in interest, transferee(s), and assign(s) of the applicant.

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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 on the expiration date listed below unless you obtain the required permits and commence construction.**

Approval Date: _____

Effective Date: _____

Expiration Date: _____

Don Bussey	David Keyon
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: 06-0242
Assessor Parcel Number: 042-211-28
Project Location: No situs, between 229 and 237 Rio del Mar Blvd.

Project Description: Construct one single-family dwelling

Person or Agency Proposing Project: Cove Britton for Matson Britton Architects

Contact Phone Number: (831) 425-0544

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. ____ **Statutory Exemption** other than a Ministerial Project (CEQA Guidelines Section 15260 to 15285).

Specify type:

E. __X__ **Categorical Exemption**

Specify type: 15303: New construction of small structures

F. Reasons why the project is exempt:

Construction of one single-family dwelling

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

_____ Date:_____
David Keyon, Project Planner

EXHIBIT D

TRANSMITTAL - LEVEL 5,6 & 7

DATE: _____

TO: support staff

FROM: David Keyon

RE: Application # **06-0242**

PLEASE COMPLETE THE ITEMS CHECKED BELOW:

Return all original documents to the planner, unless checked 4 ❑ Use original documents for distribution

❑ Make ——copies of the attached documents; distribute as follows:

- ❑ Mail copies to: ❑ Applicant ❑ Owner ❑ Applicant/Owner (if same)
- ❑ Send a copy to District Supervisor _____ (via Inter-office mail)
- ❑ Send copies to: ❑ DPW Surveyor (Plans & Conditions – all land divisions)
  - ❑ Housing (Conditions – projects with affordable housing reqts.)
  - ❑ _____
- ❑ Extra copy to planner
- ❑ Mail a copy to the California Coastal Commission: ❑ Certified Mail ❑ Send attached plans
- ❑ Mail copy of **Coastal** Exclusion to Coastal Commission with any attached documents/exhibits.
- ❑ Mail copy of permit conditions to:_____ (Local Fire District)

❑ Send copy of CEQA notice to the Clerk of the Board:

- ❑ Notice of Exemption
- ❑ Notice of Determination/Negative Declaration
- ❑ Certificate of Fee Exemption

❑ Special instructions:

- ❑ Send attached exhibit(s) to:
  ❑ Applicant ❑ owner ❑ Applicant/Owner (if same)
- ❑ Send attached recordable documents to:
  ❑ Applicant ❑ Owner ❑ Applicant/Owner (if same)
- ❑ _____
- ❑ _____

Completed by: _____

(support staff) (date)

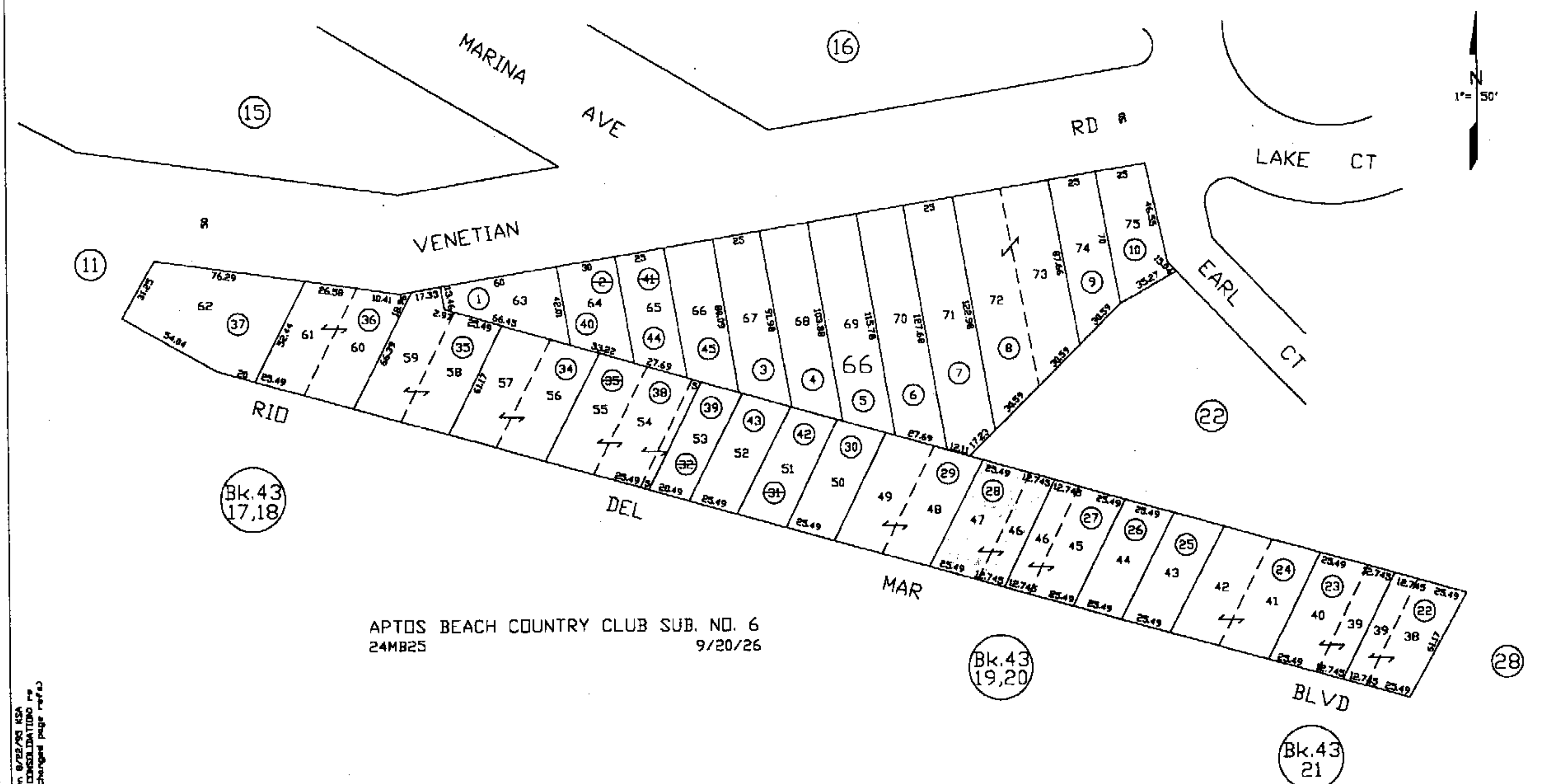
FOR TAX PURPOSES ONLY

THE ASSESSOR MAKES NO GUARANTEE AS TO MAP ACCURACY NOR ASSUMES ANY LIABILITY FOR OTHER USES. NOT TO BE REPRODUCED.

POR. APTOS RANCHO
S. 1/2 SEC. 18, T.11S., R.1E. M.D.B. & M.

Tax Area Code
69-273

42-21



APTOS BEACH COUNTRY CLUB SUB. NO. 6
24MB25 9/20/26

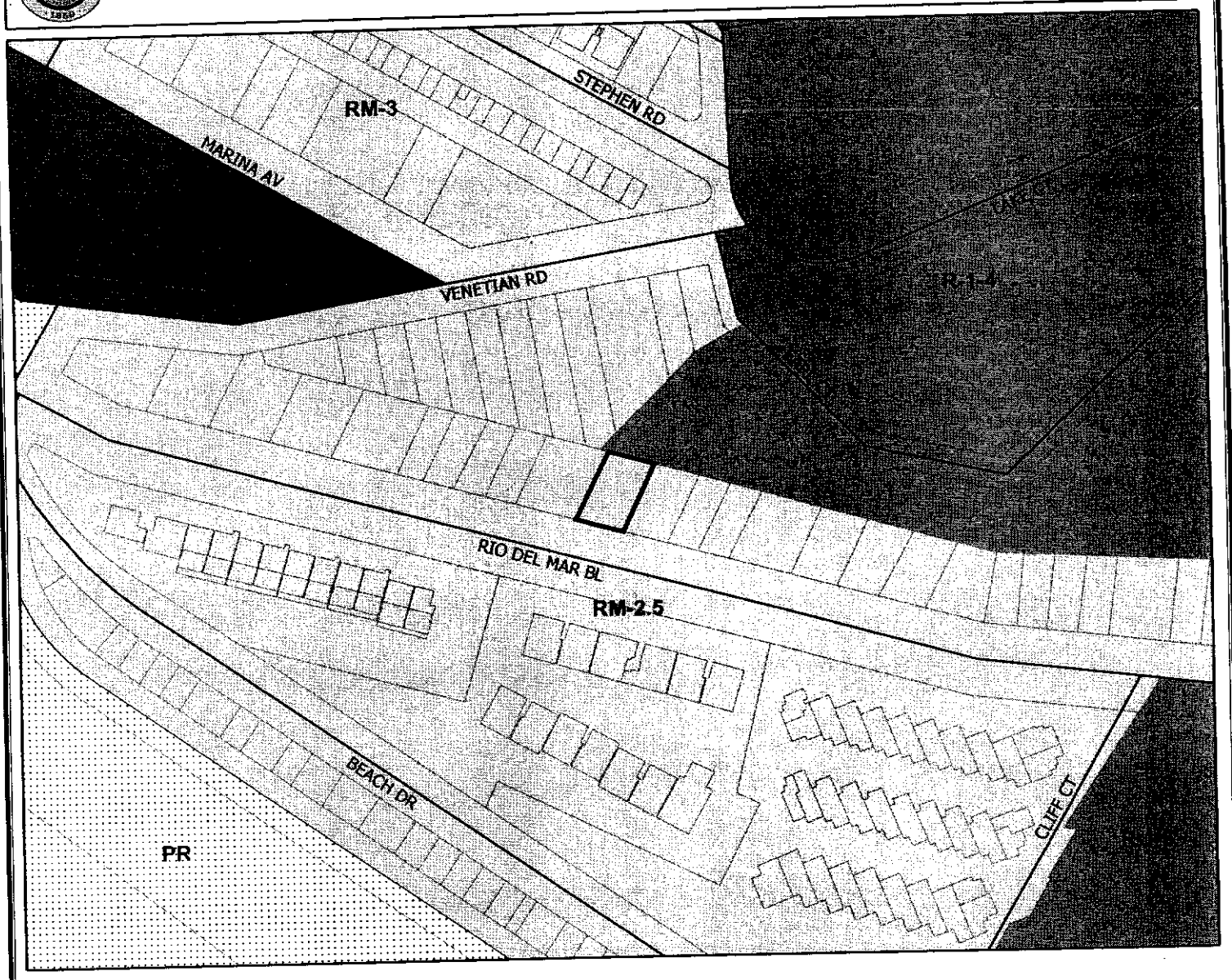
Note - Assessor's Parcel & Block Numbers Shown In Circles.

Assessor's Map No. 42-21
County of Santa Cruz, Calif.
Apri. 1951

Electronically drawn 8/22/95 KSA
Rev. 5/14/98 CTCA CONSOLIDATION re
Rev. 5/17/01 mvn (changed page refs)

EXHIBIT F

Zoning Map



0 105 210 420 630 840 Feet

Legend

- APN 042-211-28
- Streets
- Assessors Parcels
- RESIDENTIAL-MULTI FAMILY (RM)
- RESIDENTIAL-SINGLE FAMILY (R-1
- COMMERCIAL-NEIGHBORHOOD (C-1)
- PARK (PR)

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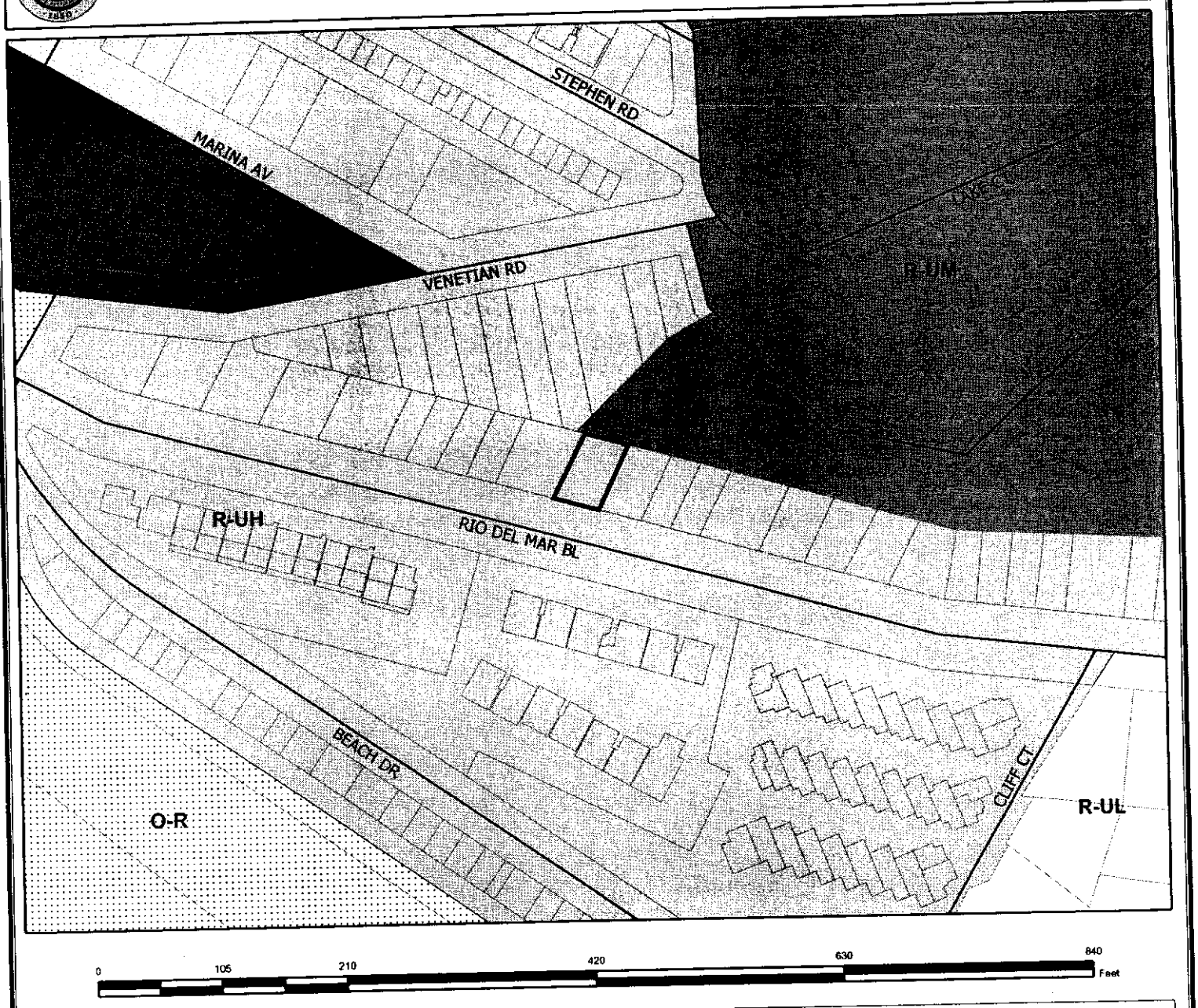
Map Created by
County of Santa Cruz
Planning Department
May 2006

EXHIBIT F

General Plan Designation Map



Legend

- APN 042-211-28
- Streets
- Assessors Parcels
- Residential - Urban High Density (R-UH)
- Residential - Urban Low Density (R-UL)
- Parks and Recreation (O-R)
- Residential - Urban Medium Density (R-UM)
- Commercial-Neighborhood (C-N)

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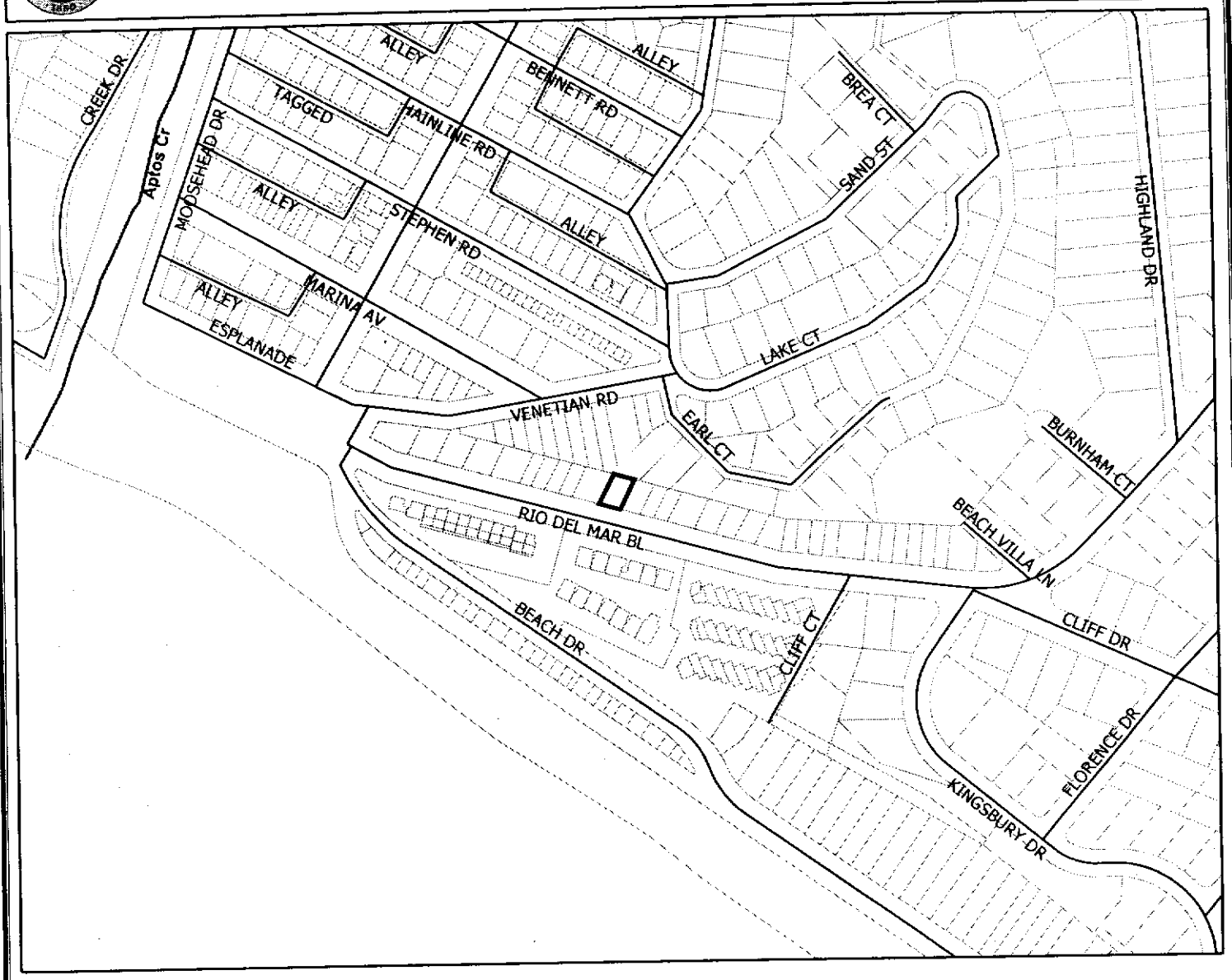
Map Created by
County of Santa Cruz
Planning Department
May 2006

EXHIBIT F

Location Map



0 240 480 960 1,440 1,920 Feet

Legend

- APN 042-211-28
- Streets
- Assessors Parcels
- PERENNIAL STREAM

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Map Created by
County of Santa Cruz
Planning Department
May *2006*

EXHIBIT F

COUNTY OF SANTA CRUZ

PLANNING DEPARTMENT.
701 OCEAN STREET, 4TH FLOOR, SANTA CRUZ, CA 95060
(831) 454-2580 FAX: (831) 454-2131 TOO: (831) 454-2123
TOM BURNS, PLANNING DIRECTOR

August 11,2005

Roy and Edith Godfrey
17336 Grand Island Road
walnut Grove, CA 95690

Subject: **Review of Engineeirng Geology,** zinn Geology, Proj. # 2005019, 7-13-2005; and, **Ceotechnical Engineering Report,** Haro, Kasunich and Associates, Proj. # SC8895 July 2005
APN 042-211-28, Application #: 05-0489

Dear Roy and Edith Codfrey,

The purpose of this'letter is to inform you that the Planning Department has accepted the subject report and the following items shall be required:

1. All construction shall comply with the recommendations of the report

2. Final plans shall reference the report and include a statement that the project shall conform to the report's recommendations.

3. Before building permit issuance a plan review letter shall be submitted to Environmental Planning. The author of the report shall write the plan review letter. The letter shall state that the project plans conform to the report's recommendations.

After building permit issuance the soils engineer must remain involved with the project during construction. Please review the Notice to Permits Holders (attached).

Our acceptance of the report is limited to its technical content. other project issues such as zoning, fire safety, septic or sewer approval, etc. may require resolution by other agencies. Please submit two copies of the report at the time of building permit application.

Please call the undersigned at (831) 454-3175 (email: pln829@co.santa-cruz.ca.us) if we can be of any further assistance.

Sincerely,

Joe Hanna CEG 1313
County Geologist
Cc: Andrea Koch, Environmental Planning
zinn Geology, 3085 Carriker Lane, Suite B, Soquel, CA 95073
Haro, Kasunich, and Associates, 116 East Lake Avenue, Watsonville, CA 95076

(over)

EXHIRIT G

NOTICE TO PERMIT HOLDERS WHEN A SOILS REPORT HAS BEEN PREPARED, REVIEWED AND ACCEPTED FOR THE PROJECT

After issuance of the building permit, the County reauires your soils enaineer to be involved during construction. Several letters or reports are required to be submitted to the County at various times during construction. They are as follows:

- **when a project has engineered fills and / or grading,** a letter from your soils engineer must be submitted to the Environmental Planning section. of the Planning Department prior to foundations being excavated. This letter must state that the grading has been completed in conformance with the recommendations of the soils report. Compaction reports or a summary thereof must be submitted.

2. **Prior to placing concrete for foundations,** a letter from the soils engineer must be submitted to the building inspector and to Environmental Planning stating that the soils engineer has observed the foundation excavation and that it meets the recommendations of the soils report.

3. **At the completion of construction,** a *final* letter from your soils engineer is required to be submitted to Environmental Planning that summarizes the observations and the tests the soils engineer has made during construction. The final letter must also state the following: "Based upon our observations and tests, the project has been completed in conformance with our aeotechnical recommendations."

   If the *final soils* ***letter*** identifies any items of work remaining to be completed or that any portions of the project were not observed by the soils engineer, you will be required to complete the remaining items of work and may be required to perform destructive testing in order for your permit to obtain a final inspection.

EXHIBIT G

be about **38** seconds. Considering the recurrence intervals of the San Andreas and Zayante (-Vergeles) faults, the proposed residence is much more likely to experience the characteristic event on the San Andreas, with lower peak accelerations than the design earthquake on the Zayante (-Vergeles) but lasting more than two times as long (see Table **2).** Bear in mind that the duration of strong seismic shaking may be even more critical as a design parameter than the peak acceleration itself.

Soil Creep

The relatively fine grained soils "daylighting" upon the slope on the subject property, taken into consideration with relatively thick veneer of colluvium encountered by HKA warrants concern regarding the long-term impact that soil creep might have on any foundation placed upon the slope. We discussed the matter with the project Geotechnical Engineer, Chris George of HKA, and concluded that upper six feet of soil is creeping (based upon standard penetration blow counts, grain size and slope gradient) on the subject property. We therefore recommend that any foundation placed upon the slope should take this conclusion into consideration.

CONCLUSIONS

Based on the information gathered and analyzed, it is our opinion that the residential development on the subject property is geologically suitable, provided our recommendations are followed. Development anywhere on the subject property will be subject to "ordinary" risks as defined in Appendix B, once the hazard of soil creep in the upper six feet of soil is adequately mitigated and surface drainage is adequately disposed. Appendix B should be reviewed in detail by the developer and all property owners to determine whether an "ordinary" **risk** as defined in the appendix is acceptable. If this level of risk is unacceptable to the developer and the property owners, then the geologic hazards in question should be mitigated to reduce the corresponding risks to an acceptable level.

In our opinion, the potential is low for landsliding to impact development on the subject property within the lifetime of residential development, **through** undermining of any structures located upon property. Additionally, it is our opinion that the potential is low over the lifetime of residential development for the slope **on** the property to fail. Hence, there is no reason to recommend a quantitative slope stability analysis be performed by the project geotechnical engineer.

We would like to add a cautionary note regarding the disposal of surface drainage on the property. Because slope below and off of the property is steep and is predisposed to shallow failures, concentrated disposal of storm water runoff on the property may trigger the initiation **of** debris flows if allowed to flow below the property. Although this will not impact development on the subject property, the owners, builders and project design professionals will likely be held liable for damages if such an event occurs. Hence, we do not recommend that drainage collected on the property be allowed to flow to the north and downslope of the property.

The subject property is located in an area of high seismic activity and will be subject to strong seismic shaking in the future. Modified Mercalli Intensities of VIII are possible. The controlling seismogenic source for the subject property is the Zayante fault, *6* ½ kilometers to the northeast. The design earthquake on this fault should be a M_w 7.0. Expected duration of strong shaking for this event is about **15** ½ seconds. Although it yields lower seismic shaking values, the expected duration of strong shaking for a M_w 7.9 earthquake on the San Andreas fault is about **38** seconds. Deterministic analysis for the site yields a mean peak ground acceleration of *0.67* g with an associated effective peak acceleration of 0.50, and a mean peak ground acceleration plus one dispersion of 0.89 g.

Foundation design for any structures located upon the sloping portions of the property maybe impacted by soil creep if they are not adequately designed. After discussing the matter with the project geotechnical engineer, Chris George of HKA, we have concluded that upper six feet of soil is creeping.

RECOMMENDATIONS

1. The project designers and engineers should consider our deterministic seismic analysis for the site, yielding an effective peak acceleration **(EPA)** of 0.50 g, a mean peak ground acceleration of 0.67 g, and a mean peak ground acceleration plus one dispersion of 0.89 g.

2. We recommend that all drainage from improved surfaces such as walkways, patios, roofs, and driveways be collected and dispersed on Rio Del Mar Boulevard. No drainage should be allowed to pond on the ground adjacent to a structure or spill directly onto the steep slope below the subject property. Gutters should be utilized on rooftops, channeling drainage to the existing storm drainage on Rio Del Mar Boulevard.

3. Any foundation designed for the sloping portions of the property should take into account that the upper six feet of soil is slowly creeping downslope. Failure **to** take this into account may result in long-term damage *to the* foundation.

4. We recommend that our **firm** be provided the opportunity for a general review of the final design and specifications in order that our recommendations may be properly interpreted and implemented in the design and specification. If our firm is not accorded the privilege of making the recommended review we can assume no responsibility for misinterpretation of our recommendations.

5. For **further** information about what you can do to protect yourself from earthquakes and their associated hazards, read ***Peace of Mind in Earthquake County,*** by P. Yanev (1991).

Project No. SC8895
21 July2005

DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

Based on the results of our investigation, the proposed development appears compatible with the site conditions from a geotechnical standpoint, provided our recommendations are closely followed during the design and construction phases of the project.

Primary geotechnical concerns at the site include the loose condition of the near surface soil, providing uniform bearing support for foundations on the sloping site, potential for soil creep in the surficial soils, strong seismic shaking, and site drainage.

We recommend a pier and grade beam foundation for the new single family dwelling on the gently sloping site. The piers should be designed for skin friction only, neglecting soil along the top 6 feet of the piers. The piers should also be designed to resist a potential creep force in the top 6 feet of the piers.

Roof and surface runoff at the site should be collected and conveyed to Rio Del Mar Boulevard. Concentrated runoff from impermeable surfaces should not be allowed to flow on the slope north of the site.

EXHIBIT I

The site will most likely experience strong seismic shaking during the design life of the residence. The structures should be designed in accordance with the most current UBC seismic design considerations.

The following recommendations should be used as guidelines for preparing project plans and specifications, and assume that **Haro, Kasunich &Associates** will be commissioned to review project grading and foundation plans before construction and to observe, test and advise during earthwork and foundation construction. This additional opportunity to examine the site will allow us to compare subsurface conditions exposed during construction with those inferred from this investigation. Unusual or unforeseen soil conditions may require supplemental evaluation by the geotechnical engineer.

General Site Grading

1. The geotechnical engineer should be notified **at least four (4) working days prior to any grading or foundation excavating** so the work in the field can be coordinated with the grading contractor, and arrangements for testing and observation can be made. The recommendations of this report are based on the assumption that the geotechnical engineer will perform the required testing and observation during grading and construction. It is the owner's responsibility *to* make the necessary arrangements for these required services.

2. Where referenced in this report, Percent Relative Compaction and Optimum Moisture Content shall be based on ASTM Test Designation D1557.

3. Areas to be graded should be cleared of all obstructions including loose fill, trees not designated to remain and other unsuitable material. Existing depressions or voids created during site clearing should be backfilled with engineered fill.

4. Cleared areas should then be stripped of organic-laden topsoil. Stripping depth should be from 2 to 4 inches. Actual depth of stripping should be determined in the field by the geotechnical engineer. Strippings should be wasted off-site or stockpiled for use in landscaped areas if desired.

5. Areas to receive engineered fill and/or the subgrade beneath all interior slabs should be scarified *to* a depth of 6 inches, moisture conditioned, and compacted to at least 90 percent relative compaction. The on-site soil may need to be moisture conditioned to achieve suitable moisture content for compaction based on ASTM Test DI 557. These areas may then be brought to design grade with engineered fill.

EXHIBIT

6. Engineered fill should be placed in thin lifts not exceeding 8 inches in loose thickness, moisture conditioned, and compacted to at least 90 percent relative compaction. The upper 6 inches of pavement and slab subgrades should be compacted to at least 95 percent relative compaction. The aggregate base below pavements should likewise be compacted *to* at least 95 percent relative compaction.

7. If grading is performed during or shortly after the rainy season, the grading contractor may encounter compaction difficulty, such as pumping or bringing free water to the surface, in the upper surface clayey and silty sands. If compaction cannot be achieved after adjusting the soil moisture content, it may be necessary to overexcavate the subgrade soil and replace it with angular crushed rock to stabilize the subgrade. The need for ground stabilization measures to complete grading effectively should be determined in the field at the time of grading, based on exposed soil conditions.

a. Fills should be keyed and benched into firm soil or bedrock in areas where existing slope gradients exceed 6:1 (horizontal to vertical). Subdrains will be required in areas where keyways or benches expose potential seepage zones.

EXHIBIT 1

9. The on-site soils generally appear suitable for use as engineered fill. Materials used for engineered fill should be free of organic material, and contain no rocks or clods greater than 6 inches in diameter, with no more than 15 percent larger than **4** inches.

10. We estimate shrinkage factors of 15 to 25 percent for the on-site materials when used in engineered fills.

11. All permanent cut and fill slopes should be inclined no steeper than 2:1 (horizontal to vertical). Temporary cuts should be evaluated by the geotechnical engineer prior to construction.

12. Following grading, exposed slopes should be planted as soon as possible with erosion-resistant vegetation.

13. After the earthwork operations have been completed and the geotechnical engineer has finished his observation of the work, no further earthwork operations shall be performed except with the approval of and under the observation of the geotechnical engineer.

EXHIBIT T

Utility Trenches

14. Trenches must be properly shored and braced during construction or laid back at an appropriate angle to prevent sloughing and caving at sidewalls. The project plans and specifications should direct the attention of the contractor to all CAL OSHA and local safety requirements and codes dealing with excavations and trenches.

15. Utility trenches that are parallel to the sides of buildings should be placed so that they do not extend below an imaginary line sloping down and away at a 2:1 (horizontal to vertical) slope from the bottom outside edge of all footings. The structural design professional should coordinate this requirement with the utility layout plans for the project

16. Trenches should be backfilled with granular-type material and uniformly compacted by mechanical means to the relative compaction as required by county specifications, but not less than 95 percent under paved areas and 90 percent elsewhere. The relative compaction will be based on the maximum dry density obtained from a laboratory compaction curve run in accordance with ASTM Procedure #D1557-91.

17. We strongly recommend placing a 3 foot concrete plug in each trench where it passes under the exterior foundations. Care should be taken not to damage utility lines.

18. Trenches should be capped with of relatively impermeable soil.

EXHIBIT I

UBC Design Criteria

19. The 1997 UBC should be utilized for structural design of the proposed construction. Our subsurface exploratory borings indicate that the predominant soil profile under the residence is "Soil Type So". The following seismic factors and coefficients from Chapter 16, Volume 2 of the 1997 Uniform Building Code should be used. These are minimum values. The structural designer may utilize more conservative values at his or her discretion.

FAULT NAME	DISTANCE TO SITE	R.I. (yr)	Mmax	SLIP RATE (mm/yr)	UBC FAULT TYPE	Na	Nv	Ca	CV
San Andreas	12.2 km 7.6 miles	210	7.9	24.0	A	1.0	1.1	0.44	0.70
Zayante-Vergeles	6.4 km 4.0 mi	8821	6.8	0.1	B	1.0	1.2	0.44	0.77

Pier and Grade Beam Foundation

20. The proposed residential dwelling should be founded on a reinforced concrete pier and grade beam foundation. The piers should be designed for skin friction only. The piers should be structurally tied together by horizontally reinforced concrete grade beams. The top 6 feet soil should be neglected when calculating skin friction.

EXHIBIT I

21. Piers designed in accordance with the above may bedesigned for an allowable skin friction of 300 psf plus a 1/3 increase for short term wind and seismic loads. The reinforced concrete piers for the residence should be a minimum of 15 feet deep and 18 inches in diameter.

22. Piers should be designed to resist a soil creep force of 60 pcf (EFW) acting from the surface to a depth of 6 feet against the top of the piers. The creep force should be assumed to act against **1%** pier diameters.

23. For passive lateral resistance an equivalent fluid weight (EFW) of 300 pcf may be used in the clayey sand and silt below a depth of 6 feet from the surface of the slope, and may be assumed to act against 1½ pier diameters.

24. As a minimum, the piers should be vertically reinforced the full length with at least four Number **4** bars. The vertical reinforcement should be horizontally lapped with the upper grade beam reinforcement. Actual reinforcement requirements should be determined by the structural designer.

25. The geotechnical engineer should observe the pier excavations during initial pier drilling and prior to placing steel reinforcement to verify subsurface soil conditions are consistent with the anticipated soil conditions. Prior to placing concrete, and reinforcement

foundation excavations should be thoroughly cleaned of loose soil and debris and observed by the geotechnical engineer. The completed pier excavations should be observed by the geotechnical engineer or his representative to confirm design pier depths and diameters.

Retaining Walls

26. Retaining walls will be necessary to support the lower floor building pad cui at the sloping site. The wall should be founded on spread footings with reinforced concrete piers. The piers should be a minimum of 18 inch in diameter and 8 feet deep. For fully drained walls up to 8 feet high, the following design criteria should be used:

A. Active earth pressure for walls allowed to yield (up to 2 percent of wall height) is that exerted by an equivalent fluid weight of 40 pcf for a level backslope and 60 pcf for a 2:1 backslope.

B. Where walls are not allowed to yield (restrained condition), the walls should be designed to resist a uniformly distributed load (rectangular distribution) of 25H psf per foot for a level backslope and 40H psf per foot for a 2:1 backslope, where H is the total height of the wall.

C. An allowable bearing capacity of 1250 psf plus one-third increase for wind and seismic loads may be used for retaining wall footing design. The pier criteria provided for the residence pier and grade beam foundation may be used for the retaining wall.

D For seismic design, a horizontal line load surcharge equal to $15H^2$ lbs/horizontal foot of wall may be assumed to act at 0.6H above the heel of the wall base (where H is the height of the wall).

E. In addition, the walls must be designed for any adjacent live or dead loads which will exert a force on the wall (structures or traffic).

F. Retaining walls which act as interior building walls should be thoroughly waterproofed.

G. The above lateral pressures are provided assuming the walls are fully drained to prevent development of hydrostatic pressure behind the walls. Drainage materials behind the wall should consist of Class 2 permeable material (Caltrans Specification 68-1.025) or an approved equivalent. The drainage material should be at least 12 inches thick. The drain material should extend from the base of the walls to within **12** inches of the top of the backfill. The top 12 inches of backfill behind the wall should be relatively impermeable native soil compacted in place. A perforated pipe should be placed (holes down) about **4** inches above the bottom of the wall and be tied to a suitable drain outlet.

H. Retaining wall backfill material should be compacted to a minimum of 90 percent relative compaction.

EXHIBIT: I

Slabs-on-Grade

27. Building floor slabs and exterior slabs should be constructed on properly water conditioned and compacted soil subgrades. Soil subgrades should be prepared and compacted as recommended in the section entitled "General Site Grading".

28. The project design professional should determine the appropriate slab reinforcing and thickness, in accordance with the anticipated use and loading of the slab. However, we recommend that consideration be given to a minimum slab thickness of 5 inches and steel reinforcement necessary to address temperature and shrinkage considerations. It is recommended that rebar in lieu of wire mesh be used for slab reinforcement. The steel reinforcement should be held firmly in the vertical center of the slab during placement and finishing of the concrete with pre-cast concrete dobies.

29. Where floor dampness must be minimized or where floor coverings will be installed, concrete slabs-on-grade should be constructed on a capillary break layer at least 4 inches thick, covered with a membrane vapor retarder. Capillary break material should be free-draining, clean ravel or rock, such as %-inch gravel. The gravel should be washed *to* remove fines and dust prior to placement on the slab subgrade. The vapor retarder should be a high quality membrane, at least 10 mil thick, and puncture resistant (MoistStop or equivalent). **A** layer of sand about 2 inches thick should be placed between the vapor

EXHIBIT I

retarder and the floor slab to protect the membrane and to aid in curing concrete. The sand should be lightly moistened prior to placing concrete.

30. It should be clearly understood that concrete slabs are not waterproof, nor are they vapor-proof. The aforementioned moisture retardant system will help to minimize water and water vapor transmission through the slab, however moisture sensitive floor coverings require additional protective measures. Floor coverings must be installed according to the manufacturer's specifications, including appropriate waterproofing applications and/or any recommended slab and/or subgrade preparation. Consideration should also be given to recommending a topical waterproofing application over the slab.

31. Exterior concrete slabs-on-grade should be founded on firm, well-compacted ground. Reinforcing should be provided in accordance with the anticipated use and loading of the slab. The reinforcement should not be tied to the building foundations. These exterior slabs can be expected to suffer some cracking and movement. However, thickened exterior edges, a well-prepared subgrade including premoistening prior to pouring concrete, adequately spaced expansion joints, and good workmanship should minimize cracking and movement.

Flexible Pavements

32. Pavement design was beyond the scope *of* our work. However, to have the selected sections perform to their greatest efficiency, it is important that the following items be considered:

A. Moisture condition the subgrade and compact to a minimum of 95 percent relative compaction, at about 2 percent over optimum moisture content.

B. Provide sufficient gradient to prevent ponding of water.

C. Use only quality materials of the type and thickness (minimum) specified. Baserock should meet CalTrans Standard Specifications for Class II Aggregate Base, and be angular in shape.

D. Compact the aggregate base to a minimum of 95 percent relative compaction.

E. Place the asphaltic concrete or portland cement concrete during periods of fair weather when the free air temperature is within prescribed limits per CalTrans specifications.

F. Provide a routine maintenance program.

Site Drainage

33. Thorough control of runoff is critical to the peiformance *of* the project. Runoff from impermeable surfaces (roof and driveway) should be collected and conveyed to Rio Del Mar Boulevard. Concentrated runoff should not be allowed to flow on the slope below the site.

EXHIBIT I

34. Surface drainage facilities should be designed to provide rapid removal of roof and surface runoff water from the building area and particularly away from structural foundations and pavements. No ponding of water should be permitted adjacent to the foundations. Rain gutters with downspouts should be installed on roof eaves to provide rapid removal of rain water from the building area. Roof runoff should be conveyed to Rio Del Mar Boulevard. Off-site drainage should not be allowed *to* sheet flow over the sloped site

35. Surface drainage should include provisions for positive gradients so that surface runoff is not permitted to pond adjacent to foundations and pavements. Surface drainage should be directed away from the building foundations.

36. The migration of water or spread *of* extensive root systems below foundations, slabs, or pavements may cause undesirable differential movements and subsequent damage to these structures. Landscaping should be planned accordingly.

Plan Review, Construction Observation. and Testing

37. Haro, Kasunich and Associates should be provided an opportunity to review project plans prior to construction to evaluate if our recommendations have been properly

EXHIBIT I

interpreted and implemented. We should also provide foundation excavation observations and earthwork observations and testing during construction. This allows us to confirm anticipated soil conditions and evaluate conformance with our recommendations and project plans. If we do not review the plans and provide observation and testing services during the earthwork phase of the project, we assume no responsibility for misinterpretation of our recommendations.

EXHIBIT I

COUNTY OF SANTA CRUZ | Planning Department

MEMORANDUM

Application No: **OW242**

Date: May 22,2006

To: David Keyon, Project Planner

From: Lawrence Kasparowitz, Urban Designer

Re: Design Review for a new residence at 233 Rio Del Mar Boulevard, Rio Del Mar

GENERAL PLAN / ZONING CODE ISSUES

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 criteria for coastal zone developments

Evaluation Criteria	Meets criteria In code (✔)	Does not meet criteria (✔)	Urban Designer's Evaluation
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	✔		
Special landscape features (rock outcmppings, prominent natural landforms, tree groupings) shall be retained.	✔		

EXHIBIT J

Ridgeline Development			
Structures located near ridges shall be sited and designed not to project above the ridgeline or tree canopy at the ridgeline			**NIA**
Land divisions which would create parcels whose only building site would be exposed on a ridgetop shall not be permitted			**N/A**
New or replacement vegetation shall be compatible with surrounding vegetation and shall be suitable to the climate, soil, and ecological characteristics of the area			**N/A**
tural Scenic Aesources			
Location of development			
Develooment 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			**N/A**
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)			**NIA**
Screening and landscaping suitable to the site shall be used to soften the visual impact of development in the viewshed			**N/A**
Building design			
Structures shall be designed to fit the topography of the site with minimal cutting, grading, or filling for construction			**N/A**
Pitched, rather than flat roofs, which are surfaced with non-reflective materials except for solar energy devices shall be encouraged			**N/A**
Natural materials and colors which Mend 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			**NIA**

EXHIBIT J

Large agricultural structures			
The visual impact of large agricultural structures shall be minimized by locating the structure within or near an			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			NIA
The visual impact of large agricultural structures shall be minimized by using landscaping to screen or soften the appearance of the structure			N/A
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			N/A
The requirement for restoration of visually blighted areas shall be in scale with the size of the proposed project			NIA
Signs			
Materials, scale, location and orientation of signs shall harmonize with surrounding elements			NIA
Directly lighted, brightly colored, rotating, reflective, blinking, flashing or moving signs are prohibited			NIA
Illumination of signs shall be permitted only for state and county directional and informational signs, except in designated commercial and visitor serving zone districts			N/A
In the Highway 1 viewshed, except within the Davenport commercial area, only CALTRANS standard signs and public parks, or parking lot identicatin signs, shall be permitted to be visible from the highway. These signs shall be of natural unobtrusive materials and colors			NIA
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			NIA

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No new permanent structures on open beaches shall be allowed, except where permitted pursuant to Chapter 16.10 (Geologic Hazards) or Chapter 16 .2 (Grading Regulations)			NIA
The design of permitted structures shall minimize visual intrusion, and shall incorporate materials and finishes which harmonize with the character of the area. Natural materials are preferred			NIA

EXHIRIT J

COUNTY OF SANTA CRUZ
Discretionary Application Comments

Project planner: David Keyon
Application No.: 06-0242
APN: 042-211-28

Date: January 16. 2007
Time: 17:11:15

Environmental Planning Completeness Comments

========== REVIEW ON MAY 17. 2006 BY ROBERT S LOVELAND ==========

1. Please clearly identify on "Sheet C2 (section B-B)" if any fill is to be placed under the garage or residence. If so, add those quantities to the overall grading calculations. If no fill is to be placed under the residence or garage please state that on the plans. ========== UPDATED ON JUNE 1, 2006 BY ANDREA M KOCH ==========
========== UPDATED ON AUGUST 23. 2006 BY ANDREA M KOCH ==========

1) Comment satisfied.

Application complete as far as Environmental Planning requirements.

Environmental Planning Miscellaneous Comments

========== REVIEW ON MAY 17. 2006 BY ROBERT S LOVELAND ==========

Conditions of Approval:

1. Submit a "Plan Review" letter from the project geologist upon building permit submittal

2. Submit a "Plan Review" letter from the project geotechnical engineer upon building permit submittal.

3. Obtain a grading permit if required. ========== UPDATED ON JUNE 1. 2006 BY ANDREA M KOCH ==========

Dpw Drainage Completeness Comments

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

========== REVIEW ON MAY 30. 2006 BY DAVID W SIMS ==========
It is recommended that the project engineer discuss this project with the stormwater management reviewer before addressing the items below.

General Plan policies: http://www.sccoplanning.com/pdf/generalplan/toc.pdf 7.23.1 New Development 7.23.2 Minimizing Impervious Surfaces 7.23.4 Downstream Impact Assessments 7.23.5 Control Surface Runoff

The submitted drainage plan was reviewed for completeness and compliance with stormwater management controls provided by County policies listed above. The plan needs the following additional information and revisions prior to approving discretionary stage Stormwater Management review. 1) The project proposes: localized diversion of all runoff from the developing area: a detention system as the primary mitigation method: use of a pump to discharge the primary low flows from the detention system. None of these features are typically allowed. The proposal will need to be modified to provide more substantial primary mitigation measures before the reliance on detention. Since the site frontage has approximately 4 feet of fall from east side

EXHIBIT K

to west side it appears feasible to design the site to gravity drain. Any detention approved for use may not use a pump to discharge the primary low flows. The level of pre-development release for any detention system used will be set at a 5-year release rate for the County standard 10-year storm. Tentatively, the County will allow the development to pursue a design which diverts runoff towards the street frontage. If the County is not satisfied with the proposed design, the allowance for diversion may be reversed.

2) The project proposes to grade and remove material from the County right-of-way, lowering elevations that will affect the manner in which street runoff is presently controlled. Driveway profile A-A and County topographic mapping both indicate that the flowline for street runoff occurs at the existing edge of pavement in front of this parcel controlled by a defined swale. This land and drainage configuration in the County right-of-way is to be retained, and may not be lowered. The proposed frontage configuration shall continue swale topography similar to that occurring in front of the homes immediately upstream of this parcel. Existing street runoff may not be directed to the outside of the County right-of-way toward this parcel or neighboring parcels.

3) The extent of new paving proposed is excessive. specifically that amount shown in the County right-of-way. Impervious surfacing is to be minimized to the maximum extent possible due to the very chronic flooding problems occurring in the Rio Del Mar Flats neighborhood. It is recommended that the frontage width be paved no wider than the minimum driveway width needed and that the remaining areas remain as landscape, as presently occurs for some other homes on this street. Any proposed new pavement in the County right-of-way must be included in the calculated mitigation requirements and is also subject to impact fee assessment.

4) It is unclear what the proposed extents of the "ACO Raindrain" will be or what purpose the end cap with 1.5" orifice serves near the SW property corner. Where will this below grade trench drain discharge: above or below A.C. berm: through the retaining wall? Please provide notations and draw flow arrows to clarify the routing.

5) Please provide a section view across the front edge of the lot that details the retaining walls and all surrounding changes between existing and proposed grades.

6) Please provide topographic detail along the frontages of the neighboring parcels, starting 50 feet upstream of the subject parcel frontage and extending downstream approximately 235 feet total (7 parcels). for approximately a 30 foot width from street centerline to the face of each building. In other areas, County policy requires topography be shown a minimum of 50 feet beyond the project work limits. Please provide this extent elsewhere. The topographic survey will need to be stamped, dated and signed prior to discretionary approval by this review section.

7) It appears that the road drainage swale becomes undefined downstream *of* this parcel for a length of several property frontages. This project will be required to provide, on the civil plans, downstream drainage improvements to establish a defined conveyance (e.g. swale) that keeps runoff properly controlled in the same manner as the route established upstream. The improvements provided shall be capable of carrying runoff from an upstream watershed area defined by the assumptions that all such

EXHIBIT K

waters will be conducted into adjacent road right-of-ways, will not be allowed to drain over the face of any bluff. and will route to the bottom of Rio Del Mar Blvd
========== UPDATED ON AUGUST 23. 2006 BY DAVID W SIMS ==========
2nd Review Summary Statement:

The present development proposal is not approvable by Stormwater Management review because it fails to adequately control stormwater impacts. The proposal is out of compliance with multiple County General Plan drainage policies and the County Design Criteria (CDC) Part 3, Stormwater Management, June 2006 edition.

Reference for County Design Criteria: http://www.dpw.co.santa-cruz.ca.us/DESIGNCRITERIA.PDF

Comment Update:

Prior item 1) Incomplete. While the site mitigations are now designed to partially gravity drain to the street frontage, the facility that was designed and the calculations presented still represent primarily a structural pipe detention system that will not adequately control smaller storm flows. Even superficial clogging of the limited number of pipe perforations would significantly reduce entry of flows into the gravel beds. These flows could also pass the control orifice unimpeded. An effective hydraulic discontinuity is needed in the system that will force and assure that flows must pass through the provided gravel bed prior to flow reaching the control orifice.

Prior item 2) Incomplete. The proposal is improved but not adequate. The rise in grade along the county shoulder has still been cut down slightly. This rise in grade should be designed to be more pronounced along the full width of the parcel frontage, including depressing it along the flow line and raising it if necessary across the midline of the driveways to assure containment of street side design storm flows. Addressing item 7 would facilitate providing what is required for item 2

Prior item 3) Incomplete. The applicant is no longer proposing 100% paving of the County right-of-way. However, the amount of paving now proposed has not been minimized and should still be considered excessive in light of the significant downstream routing and chronic flood problems. and overall limitations of proposed mitigations. It is unreasonable that a parcel of 37 foot width needs to have two independent driveways. It is possible to configure the driveway and structure such that only one minimum width driveway is needed and still provide for the needed three parking spaces entirely within the parcel boundaries.

Prior item 4) Complete. Eliminated from proposal.

Prior item 5) Complete. Sheet C2, Storm Drain Profile is sufficient to meet this item. It may need to be revised or replaced if changes are made.

Prior item 6) Complete. Extent is sufficient to demonstrate local drainage characteristics, but may need to be extended further downstream for purposes of designing the offsite improvements required in item 7

Prior item 7) Incomplete. This item has not been addressed and is a specific requirement for acceptance of diversion of runoff to the property frontage. Three County policies, 7.23.1, 7.23.4and 7.23.5require offsite improvements to correct flow path deficiencies. This location has such deficiencies and the creation of additional diversion makes it worse and places significant new liability on the County. The County will not accept this liability without improvements being made to our satisfaction. If the applicant is unwilling to provide the required improvements, then they need to pursue a proposal that drains the parcel in its natural direction. If this item remains unaddressed in the next proposal the Stormwater Management section will reverse its position on the allowance for diversion, as was previously stated. ========= UPDATED ON NOVEMBER 22. 2006 BY DAVID W SIMS ========= 3rd Review Summary Statement:

The applicant has not addressed most of the prior comments and the application remains unapproved by Stormwater Management. A meeting is required prior to the next submittal. Additional comment may be posted following the meeting.

Dpw Drainage Miscellaneous Comments

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

========= REVIEW ON MAY 30, 2006 BY DAVID W SIMS ==========
A recorded maintenance agreement may be required for certain stormwater facilities

A drainage impact fee will be assessed on the net increase in impervious area. The fees are currently $0.90per square foot. and are assessed upon permit issuance. Reduced fees are assessed for semi-pervious surfacing to offset costs and encourage more extensive use of these materials.

Because this application is incomplete in addressing County requirements, resulting revisions and additions will necessitate further review comment and possibly dif-

d) The silt and grease trap proposed does not fully protect the mitigation facility from silt and debris. There is a requirement to adeqquately protect the mitigation measure from clogging. Refer to CDC, Part 3: pg 72.5, a & b. The trap(s) should be located at all hydraulically upstream end(s) of the facility and should not be co-located with the orifice control.

e) The discharge pipe from the control box could be slightly lowered such that the entire gravel bed will gravity drain and is not dependent on infiltration through the silt trap floor. Is infiltration of more than just the trap volume acceptable to the geotechnical engineer? Is this infiltration feasible?

f) Some type of liner over the top of the gravel bed is needed to prevent landscape soils from intruding. ========== UPDATED ON NOVEMBER 22. 2006 BY DAVID W SIMS ==========
NO COMMENT
========== UPDATED ON NOVEMBER 27, 2006 BY DAVID W SIMS ==========
Application is to be converted to at cost. The applicant will need to bring in an additional $500 to Public Works prior to the next review submittal to cover on-going review costs.

Dpw Driveway/Encroachment Completeness Comments

========== REVIEW ON MAY 10, 2006 BY RUTH L ZADESKY ==========
========== UPDATED ON MAY 19, 2006 BY RUTH L ZADESKY ==========
Show driveway plan view and centerline profile.
========== UPDATED ON AUGUST 7, 2006 BY RUTH L ZADESKY ==========

Dpw Driveway/Encroachment Miscellaneous Comments

========== REVIEW ON MAY 10, 2006 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.
========== UPDATED ON MAY 19. 2006 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.
========== UPDATED ON AUGUST 7, 2006 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.

Dpw Road Engineering Completeness Comments

========== REVIEW ON MAY 17. 2006 BY TIM N NYUGEN ==========
NO COMMENT
========== UPDATED ON AUGUST 24. 2006 BY TIM N NYUGEN ==========
NO COMMENT

Dpw Road Engineering Miscellaneous Comments

========== REVIEW ON MAY 17, 2006 BY TIM N NYUGEN ==========
NO COMMENT
========== UPDATED ON AUGUST 24. 2006 BY TIM N NYUGEN ==========

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 MAY 25, 2006 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 MAY 25. 2006 BY ERIN K STOW ==========
NO COMMENT

EXHIBIT K