

Staff Report to the Zoning Administrator

Application Number:

02-0432

Applicant: Wayne Miller **Agenda Date:** January 5,2007

Owner: Val Vaden and Lilli Rey Agenda Item #. 4 _ APN: 028-232-16 and 15 Time: After 9:00 a.m.

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

Location: end of 23rd Avenue, about 170-feet south of east Cliff Drive, Live *Oak* Area

Supervisorial District: First District (District Supervisor: Janet K. Beautz)

Permits Required: Coastal Development Permit

Staff Recommendation:

- Certification that the proposal is exempt from further Environmental Review under the California Environmental Quality Act.
- e Approval of Application 02-0432, based on the attached findings and conditions.

Exhibits

- A. Project plans
- B. Findings
- C. Conditions
- D. Categorical Exemption (CEQA determination)
- E. Location map
- F. General Plan map
- G. Zoning map
- H. Discretionary Application comments
- I. Urban Designer's memorandum
- J. Gross Building Area calculations
- K. Geotech. investigation prepared by Haro,Kasunich & Associates, dated June 1999
- L. Update letter prepared by Haro, Kasunich & Associates, dated 15 August 2003
- M. Geologic report prepared by Neilsen and Associates, dated July 2003
- N. Letter from Neilsen and Associates to Joe S.

- Hannah, County Geologist, dated May 16, 2005
- O. Review of Geotechnical Investigation and Review of Geologic Investigation, prepared by Joe Hannah, dated July1, 2005
- P. Drainage letter and calculations prepared by Mid Coast Engineers, dated July 17, 2005
- Q. Redevelopment Agency comments, prepared by Melissa Allen, dated September 24,2002
- R. Central Fire Protection District memo, prepared by Eric Sitzenstratter, dated 3 September 2002
- S. Central Fire Protection District letter,

Application# 02-0432 APN: 028-232-16 owner: Val Vsden

- prepared by Jeanette Lambert, dated **21** October **2003**
- T. Central Fire Protection District memo, prepared by Jeanette Lambert, dated February **9,2004**
- U. Central Fire Protection District memo, prepared by Jeanette Lambert, dated August **19,2004**
- V. Santa Cruz County Sanitation District memo prepared by Diane Romero, dated September 11,2002
- W. Inter-office Correspondence from Supervisor Jan Beautz, dated September 12,2002
- X. California Coastal Commission letter prepared by Dan Carl, dated September 23,2002
- Y. California Coastal Comm. letter prepared by Dan Carl, dated October **1,2002**
- **Z.** Letter from Borelli Investment Company, dated September **19,2002**
- AA. Letter from Bolton Hill Company, prepared by Todd Graff, dated September 27,2002

- BB. Letter from Bolton Hill Company, prepared by Todd Graff, dated June **9.2003**
- CC. Letter from Wittwer and Parkin, LLP, prepared by Jonathon Wittwer, dated November **14,2003**
- DD. Letter from Wittwer and Parkin LLP (to Central Fire District), prepared by Jonathon Wittwer, dated November **24**, **2003**
- EE. Letter from Wittwer and Parkin, LLP to Central Fire Protection District), prepared by Jonathon Wittwer, dated December 8, 2003
- FF. Letter from Wittwer and Parkin, LLP, prepared by Jonathon Wittwer, dated November **26,2003**
- GG. Letter from Wittwer and Parkin, LLP, prepared by Jonathon Wittwer, dated May **14,2004**
- HH. Letter from Wittwer and Parkin, LLP, prepared by Jonathon Wittwer, dated September **1,2005**

Parcel Information

Parcel Size:

Existing Land Use - Parcel:

Existing Land Use - Surrounding:

Project Access:

Planning Area:

Land Use Designation:

3,568 sq. ft.

vacant

residential

23rd Avenue

Live Oak

R-UM

Zone District: R-1-4 (4,000 sq. ft. min. parcel size)

Coastal Zone: X Inside Outside
Appealable to Calif. Coastal Comm. X Yes No

Application#: 02-0432
APN: 028-232-16
Owner: Val Vaden

Environmental Information

Geologic Hazards: Geological report submitted

Soils: N/A

Fire Hazard: Not a mapped constraint

Slopes: 5-10%

Env. Sen. Habitat: Not mapped/no physical evidence on site

Grading: 137 cu. yds. proposed

Tree Removal: No **trees** proposed to be removed

scenic: Not a mapped resource
Drainage: Existing drainage adequate

Traffic: N/A

Roads: Existing roads adequate

Parks: Existing park facilities adequate

Archeology: Not mapped/no physical evidence on site

Services Information

Urban/Rural Services Line: X Inside Outside

Water Supply: City of Santa Cruz Water Department Sewage Disposal: Santa Cruz County Sanitation District

Fire District: Central Fire Protection District

Drainage District: Zone **5**

Project Setting

The project site is located on 23^{rd} Avenue, south of East Cliff Drive. 23^{rd} Avenue is a narrow paved roadway that currently serves four homes on the east side of the right-of-way. The paved roadway does not extend beyond the developed properties. The subject property is one of three undeveloped parcels beyond the end of the road. To the west of these parcels is a bluff that descends to a sandy beach area at the rear of Santa Maria beach. Monterey Bay is located to the south.

History

This application was before the Zoning Administrator on December 2,2005 and was recommended for denial at that time (see attached Exhibit). The recommendation was based on incomplete drainage plans. This issue has subsequently been addressed and the application returned to the Zoning Administrator for reconsideration on June 21,2006. At that meeting, staff recommended that the application be referred to the Planning Commission for a review of the policies related to the placement of utilities and roadways adjacent to coastal bluffs, and the Zoning Administrator agreed. Since then, staff has reevaluated the application and has determined that the matter may proceed without the policy interpretation by the Planning Commission.

Project Description

The proposal is to construct a two-story **3-bedroom** single-family dwelling with a basement. Access

Application#: OM432 APN: 028-232-16 Owner: Val Vadeo

would be an extension of the existing paved roadway (23rd Avenue) extending to the south end of the property to a hammerhead fire department turn-around. All utilities would be installed underground and would extend from the existing improved roadway to the property (within the 23rd Avenue ROW).

Analysis and Discussion - Local Coastal Program

<u>Land Use Designation</u> – The property is zoned R-1-4, consistent with the underlying land use designation of Residential Urban Medium Density. The parcel size of 3,568 sf is less than the minimum parcel size for the zone district but development on existing parcels is not constrained by insufficient parcel area. The proposed use is a Principal Permitted **use** in the R-1-4 zone district. The Coastal Development Permit for this development is appealable to the California Coastal Commission.

<u>Design Issues</u> - The proposed single family residence and improvements are in conformance with the County's certified Local Coastal Program Land Use Plan, in that the structure is sited and designed to be visually compatible, in scale with, and integrated with the character of the surrounding neighborhood. Developed parcels in the area contain two-story single-family dwellings, many with basements or excavated garages (including the adjacent residence at 90-23rd Avenue). Size and architectural styles vary widely in the area, and the design submitted is not inconsistent with the existing range.

<u>Public Access Issues</u> - The project site is located between the shoreline and the first public road, however it is not identified **as** a priority acquisition site in the County's Local Coastal Program. Furthermore, direct coastal access exists from East Cliff Drive to Santa Maria beach with a variety of parking opportunities in the area. Consequently, the proposed project will not interfere with public access to the beach, ocean, or other nearby body of water.

23rd Avenue is a privately maintained roadway serving **4** existing residences. This proposal will extend the roadway about 50-feet and provide additional access to a vacant parcel to the south. Although 23rd Avenue is identified as a neighborhood public access point, the roadway itself will end at the southern property line of the project site with no other improved access to the beach along the roadway or at the end of the ROW. Given the proximity of direct public access points from East Cliff Drive to the beach immediately to the west of this site, it does not appear to be necessary to provide additional access where there is no need nor where vertical access does not exist.

Access Road/Utility Installation Issues • There has been concern that the proposed extension of the roadway and utilities currently serving four existing residences to serve the proposed residence and, in the future, one additional residence is inconsistent with policies and ordinances regarding development within the coastal bluff setback area. These policies and ordinances are discussed below.

An access road is required for access by safety vehicles per General Plan/LCP Policy, 6.5.1:

[&]quot;All new structures, including additions of more than 500 square feet, to single family dwellings on existing parcels of record, to provide an adequate road for fire protection ..."

Application # **02-0432**APN: **028-232-16**owner: Val Vsden

As is demonstrated in Exhibit E, the subject property has no other access other than from 23rd Avenue. Approximately one-half of the ROW serving the property is below the top of the coastal bluff (to the west). As the other residences on 23* have done, the proposed access road will be constructed on the eastern edge of the ROW, as far from the coastal bluff as is possible. Utilities will be extended under **this** roadway from the existing services for the four existing residences to the new residence.

The General Plan/LCP, under Policy 6.2.11, does not allow *development* in the coastal bluff setback:

"All development, including cantileveredportions of a structure, shall be set back a minimum of **25** feet from the top edge of a bluff."

This Policy is implemented in Chapter 16.10 (Geologic Hazards) of the County Code. Section 16.10.070(h) contains the regulations concerning development adjacent **to** coastal bluffs. Subsections (i) and (ii) of **this** section require that all development maintain a minimum setback from the top of the coastal bluff of 25-feet for all development, including all non-habitable structures and cantilevered portions of a building (or a greater distance as warranted on the particular site).

The proposed residence, including almost all of the parking and landscaping areas, lies outside the 25-foot coastal bluff setback. However, the extension of 23^{rd} Avenue lies entirely within the coastal bluff setback. While Section 16.10.040 (s)(11) defines the construction of a roadway and utilities as "Development', Section 16.10.070 (2) allows an exemption for:

(i) 'Xnyprojectwhich does not specifically require a building permit pursuant to Section 12.10.070(b) is exempt from Section 16.10.070(h) I, with the exception of: non-habitable accessory structures that are located within the minimum 25 foot setback from the coastal bluffwhere there is space on the parcel to accommodate the structure outside of the setback, above-groundpools, water tanks, projects (including landscaping) which would unfavorably alter drainage pattern, and projects involving grading.

For the purposes of this Section, the unfavorable alteration of drainage is defined as a change that would significantly increase or concentrate runoff over the bluff edge or significantly increase infiltration into the bluff Grading is defined as any earthwork other than minor leveling, of the scale typically accomplished by hand, necessary to create beneficial drainage patterns or to install an allowed structure that does not excavate into the face or base of the bluff."

Because the construction of the roadway (23rd Avenue extension) and the utilities would <u>not</u> require a building permit, these facilities are exempt from the restrictions discussed above just as they have been for the development of the other four residences located on 23rd Avenue, north of the project site.

Fire Access

The project requires a fire turnaround, which has been equally divided at the shared property line of the two undeveloped properties (see Exhibit A). Each parcel is separately owned and each owner has provided owner agent forms and there will be reciprocal easements granted for the fire turnaround. Staff is treating the turnaround easement as a "right-of-way" and has requested that setbacks be maintained from its boundaries. The turn around will be striped and posted as a fire

Application#: 02-0432 APN: 028-232-16 Owner: Val Video

turnaround (*No* Parking Area • see Conditions of Approval).

Zoning Standards Conformance

The subject property is a **3,568** square foot lot, located in the R-1-4 (4,000 sq. ft. min. parcel size) zone district, a designation that allows residential uses. The proposed single family residence is a principal permitted use within the zone district and the project is consistent with the site's (R-UM) R-UM General Plan designation. The residence has been re-sited following the addition of the fire turnaround to meet the required setbacks.

The basement level is shown in the section (Sheet 3, Detail 4 in Exhibit A) as 7-feet in height. This area cannot be designated as one of the parking spaces because there is insufficient height to meet the minimum height for a garage (7'6" is required). The 7-foot height also means that the basement is not considered a 'story' and the area is excluded from the Floor Area Ratio calculations. The height of the large volume in the Living Room must be less than sixteen feet in height for it to not count twice in F.A.R. calculations. A Condition of Approval has been added for the building permit plans to reflect this.

The space in front of the garage door is only eighteen feet, at its narrowest, from the property line. While the plans provide the required parking outside of the structure, staff is requesting a twenty feet long setback in front of the garage door, and movement of the residence back two feet on the property. These have also been added **as** Conditions of Approval.

The design of the basement and the calculation of the perimeter have been reviewed by the Project Planner and the Principal Planner. The plans indicate a wing wall, which supports the upper floor. This wall does not enclose any interior basement space and will not be counted **as** perimeter for the definition of the basement.

SITE DEVELOPMENT STANDARDS TABLE

	R-1-4 Standards	Proposed Residence
Front yard setback:	15 feet	15'-0"
Side yard setback (North side):	5 feet	5'-0"
Street side yard (South side):	10 feet at fire turn around 5 feet beyond	11'-0" 5'-0"
Rear yard setback:	15 feet	19'-10"
Lot Coverage:	40 % maximum	39 %
Building Height:	28 feet maximum	28'-0"
Floor Area Ratio (F.A.R.):	0.5:1 maximum (50 %)	49.6 %
Parking	3 bedrooms – 3 (18' x 8.5')	three uncovered

Application# 02-0432 APN: 028-232-16 Owner: Val Vaden

Front Yard Coverage

The parcel width is 40-feet. The fire turn-around effectively reduces this by 6-feet. To comply with the 50% limitation on parking occupancy within the front yard setback area, no more than 17-feet of parking area can be constructed. The plans depict 20-feet of parking area, but the parking spaces only occupy 17-feet of that area. Therefore, the building plans must limit the parking area to 17-feet in width for the two parking spaces. A Condition of Approval has been added for the building permit plans to reflect this.

Design Review

The proposed single family residence was reviewed by the Urban Designer (see Exhibit I) and complies with the requirements of the County Design Review Ordinance (Section 13.11) and the Local Coastal Program (Section 13.20)

Chapter 13.20 of the Zoning Ordinance requires that projects in the Coastal Zone be visually compatible with the neighborhood. This is a subjective criterion that is reviewed by the County Urban Designer. The Urban Designer has visited the site, reviewed the plans (see memo dated September 24,2002) and believes that the proposed residence is compatible with the variety of residential design along 23rd Avenue and is a pleasing design within itself.

Landscape plans are not required for single-family residence applications. A Condition of Approval will require a planting and irrigation plan be provided by a licensed Landscape Architect that addresses visual mitigation, selects appropriate plants for a coastal bluff and uses drip irrigation.

Environmental Review

Environmental review has not been required for the proposed project in that the project, as proposed, qualifies for an exemption to the California Environmental Quality Act (CEQA). The project qualifies for an exemption because the property is located with the Urban Services line and will be served by existing water and sewer utilities (See CEQA Exemption for additional information – Exhibit D).

Review by the County of Santa Cruz Environmental Planning Division indicates that this site is well over 100 feet from any standing water (the minimum for a riparian setback).

Drainage

Increased bluff top erosion has been curtailed by the project drainage design. The driveway will include an asphalt concrete curb on the bluff side, which will direct water to the existing roadway of 23rd Avenue. The existing roadway already has a curb and the water flows back toward East Cliff Drive. All downspouts **from** the residence will be directed to splash blocks, which will divert the rainwater into grassy swales. The swales then bring the water to the driveway and fire turnaround.

The existing drainage on 23rd Avenue flows to an area drain on East Cliff Drive. The property owner involved in this application will be required to maintain this area drain and submit a maintenance

Application # 02-0432 APN: 028-232-16 Owner: Val Vndeo

agreement to the Department of Public Works.

The edge of 23rd Avenue along the bluff side shows some evidence of failure to the asphalt. This *can* be caused by a number of factors. It should be noted that the neighbors have installed spray irrigation adjacent to the road and the top of the bluff and planted non-native vegetation. **This** application will be conditioned to not imgate in the **area** between the proposed driveway and the top of the bluff.

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

- Certification that the proposal is exempt from further Environmental Review under the California Environmental Quality Act.
- **APPROVAL** of Application Number **02-0432**, based on the attached findings and conditions.

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: Lawrence Kasparowitz

Santa Cruz County Planning Department

701 Ocean Street, 4th Floor Santa Cruz CA 95060

Phone Number: **(831)** 454-2676 E-mail: pln795@co.santa-cruz.ca.us

Report Reviewed By:		
-	Mark M. Deming	
	Development Review	

Application # 02-0432 APN: 028-232-16 Owner: Val Vaden

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-1-4 (4,000 sq. ft. min. parcel size), a designation that allows residential uses. The proposed single family residence is a principal permitted use within the zone district, consistent with the site's (R-UM) R-UM 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 architectural style; lots developed to an urban density surround the site; the colors shall be natural in appearance and complementary to the site.

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, located between the shoreline and the first public road, however, the single family residence 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.

Although 23* Avenue is identified as a neighborhood public access point, the roadway itself will end at the southern property line of the project site with no other improved access to the beach along the roadway or at the end of the ROW. Given the proximity of direct public access points from East Cliff Drive to the beach immediately to the west of this site, it does not appear to be necessary to provide additional access where there is no need nor where vertical access does not exist.

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

Application # 02-0432 APN: 028-232-16 Owner: Val Vadeo

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-1-4 (4,000 sq. ft. min. parcel size) 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.

Construction of the roadway and underground utilities within the coastal bluff setback are exempt from the setback requirement pursuant to the provisions in the implementing ordinances and to past practice with neighboring properties.

23rd Avenue is a privately maintained roadway serving 4 existing residences. **This** proposal will extend the roadway about 50-feet and provide additional access to a vacant parcel to the south. Although 23rd Avenue is identified as a neighborhood public access point, the roadway itself will end at the southern property line of the project site with no other improved access to the beach along the roadway or at the end of the ROW. Given the proximity of direct public access points from East Cliff Drive to the beach immediately to the west of this site, it does not appear to be necessary to provide additional access where there is no need nor where vertical access does not exist.

Application #: **02-0432**APN: **028-232-16**Owner: Val Vadeo

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 residence 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.

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 residence 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-1-4 (4,000 sq. ft. min. parcel size) zone district in that the primary use of the property will be one single family residence 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 Urban Medium Residential (R-UM) land use designation in the County General Plan.

The proposed single family residence 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 residence 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 residence 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 residence will comply with the site standards for the R-1-4 zone district (including setbacks, lot coverage, floor area ratio, height, and number of stories) and will result in a structure consistent with a

Application # 02-0432 APN: 028-232-16 Owner: Val Vadeo

design that could be approved on any similarly sized lot in the vicinity.

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 residence is to be constructed on an existing undeveloped lot. The expected level of traffic generated by the proposed project is anticipated to be only 1 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 residence 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 13.11.070 through 13.11.076), and any other applicable requirements of this chapter.

This finding can be made, in that the proposed single family residence 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 in the surrounding area.

Application#: **02-0432**APN: **028-232-16**Owner: Val Vaden

Conditions of Approval

Exhibit **A:** Building plans prepared by Wayne Miller, dated 10/10/04 Civil engineering plans prepared by Mid Coast Engineers, dated March 2006.

- I. This permit authorizes the construction of one single family residence with driveway and fire turn around. 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, if required.
 - **D.** Obtain an Encroachment Permit from the Department of Public Works for all offsite 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. **A** planting and irrigation plan shall be designed by a licensed Landscape Architect that addresses visual mitigation, selects appropriate plants for a coastal bluff and uses drip impation.
 - **Section** showing that the height of the large volume in the Living Room is less than sixteen feet in height.

Application#: 02-0432 APN: 028-232-16 Owner: Val Vaden

- 6. 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 that clearly depict the total height of the proposed structure.
- 7. The site plan shall indicate the following:
 - a. The space in front of the garage shall be a minimum of twenty feet from the garage door to the front property line.
 - b. The residence shall meet a fifteen feet setback from the rear of the fire turn around and a ten feet setback from the side of the fire turn around.
 - b. The utilities to the structure shall enter the lot from the comer furthest away from the bluff.
 - c. The turn around shall be striped and posted **as** a **fire** turn around.
 - **No** irrigation shall be allowed in the area between the proposed driveway and the top of the bluff.
 - e. The height of the large volume in the Living Room must be less than sixteen feet high.
 - f. The parking spaces shall be no greater than 17 feet in width for the paved area.
- C. Meet all requirements of and pay Zone **5** drainage fees to the County Department of Public Works, Drainage. Drainage fees will be assessed on the net increase in impervious area.
- D. Meet all requirements and pay any applicable plan check fee of the Central Fire Protection District.
- E. Submit 3 copies of a soils report prepared and stamped by a licensed Geotechnical Engineer.
- Pay the current fees for Parks and Child Care mitigation for three bedrooms. Currently, these fees are, respectively, \$1,000 per bedroom and \$109 per bedroom (respectively), but are subject to change.

Application #:
APN;
Owner:

02-0432 028-232-16 Val Vsden

- G. Pay the current fees for Roadside and Transportation improvements for one unit. Currently, these fees are, respectively, \$2,080 per unit and \$2,080 per unit (respectively), but are subject to change.
- H. 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.
- I. 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.
- J. 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:
 - 1. All site improvements shown on the final approved Building Permit plans shall be installed.
 - 2. All inspections required by the building permit shall be completed to the satisfaction of the County Building Official,
 - **3.** The project must comply with all recommendations of the approved soils reports.
 - **4. A** deed restriction shall be filed with the County Recorders Office in which the applicant shall indicate:
 - a. The potential geological hazards on the site and the level of prior investigation conducted,
 - b. The owner of parcels **028-232-16** and 15 shall be responsible for the maintenance of the existing and proposed drainage facilities along the non-county maintained road sections.
- K. 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-Coronerif 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.

Application#: 02-0432 APN: 028-232-16 owner: Val Vadeo

IV. Operational Conditions

In the event that future County inspections of the subject property disclose non-compliance 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.

- 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. <u>Settlement</u>. 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. <u>Successors Bound</u>. "Development Approval Holder" shall include the applicant and the successor'(s) in interest, transferee(s), and assign(s) of the applicant.

Mirror 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.

Application# **02-0432**APN; **028-232-16**Owner: Val Vaden

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

Assistant Planning Director	Project Planner	
Mark M. Deming	Lawrence Kasparowitz	
Expiration Date:		
Effective Date:		
Approval Date:		

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

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: 02-0432 Assessor Parcel Number: 028-232-16 and 15 **Project Location:** 23rd Avenue, Santa Cruz **Project Description:** Proposal to construct a two-story, single family dwelling with a basement. Includes construction of a driveway, and utilities within the existing right-of-way for 23rd Avenue and located in the coastal bluff setback, and a fire turnaround serving the subject parcel and an adjacent parcel. Person Proposing Project: Wayne Miller Contact Phone Number: (831) 724-1332 The proposed activity is not a project under CEQA Guidelines Section 15378. В. ____ The proposed activity is not subject to CEQA as specified under CEQA Guidelines Section 15060(c). C. ____ Ministerial Project involving only the use of fixed standards or objective measurements without personal judgment. Statutory Exemption other than a Ministerial Project (CEQA Guidelines Section 15260 D. _____ to 15285). Specify type: E. __x__ **Categorical Exemption** 15303 New construction of small structure

Chapter 3 (CEQA), Article 19 (Categorical Exemptions) of Title 14 of the California Code describes the exemptions to CEQA under 15303 New Construction or Conversion of Small Structures:

Reasons why the project is exempt:

F.

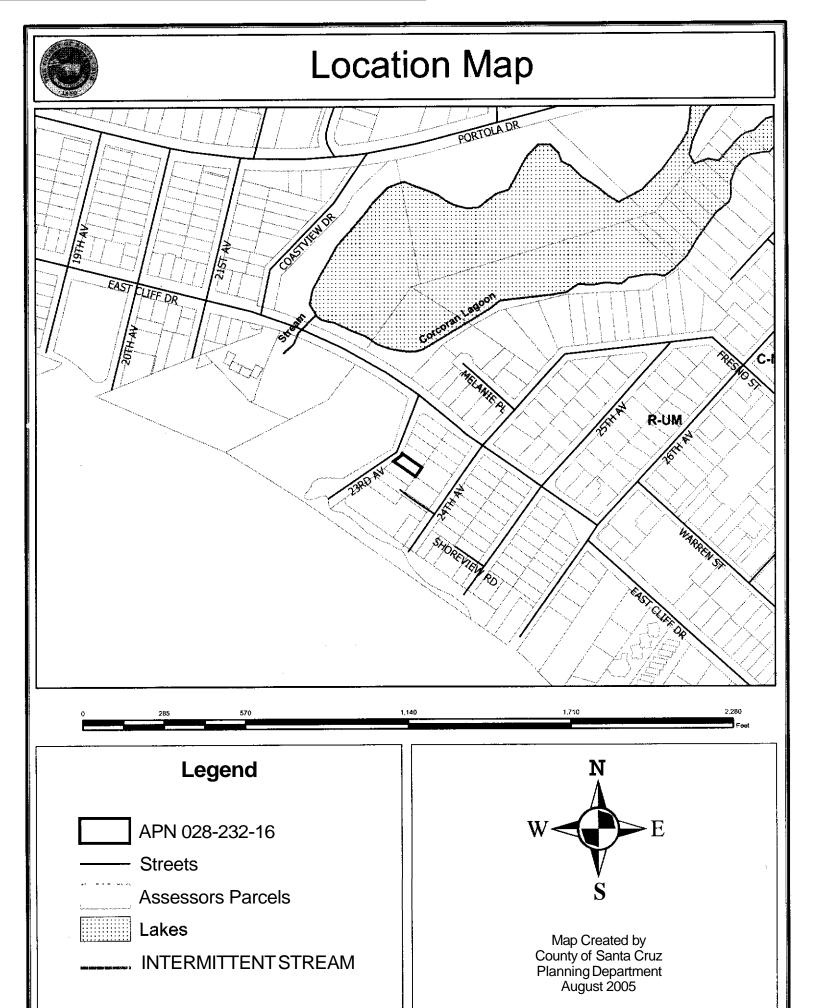
Class 3 consists of construction and location of limited numbers of new, small facilities or structures; installation of small new equipment and facilities in **small** structures; and the conversion of existing small structures from one use to another where **only** minor modifications are made in the exterior of the structure. The numbers of structures described in this section are the maximum allowable on any legal parcel. **Examples** of this exemption include, but **are** not limited to:

- (a) One single-family residence, or a second dwelling unit in a residential zone. In urbanized areas, up to three single-family residences may be constructed or converted under this exemption.
- (d) Water main, sewage, electrical, gas, and other utility extensions, including street improvements, of reasonable length to serve such construction.

Staff believes that the construction of this single-family residence and the utilities to serve such construction qualifies for this exemption.

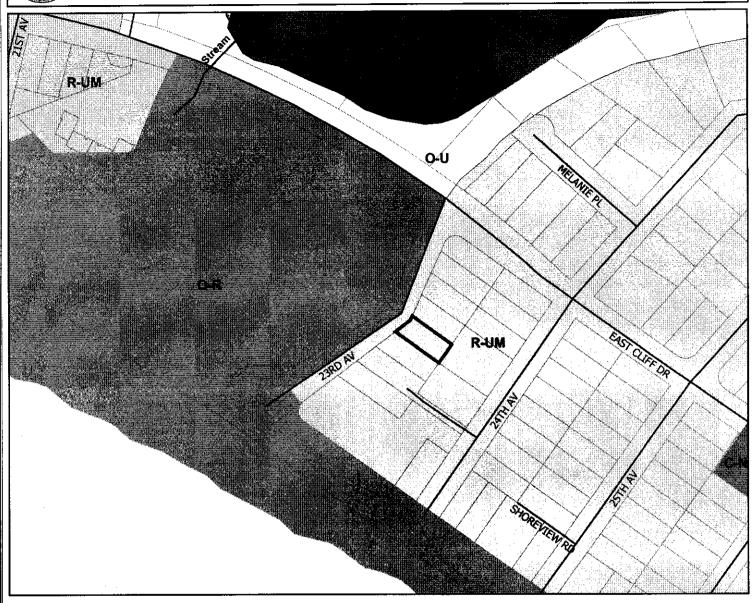
Further, staff believes that the minor trenching and placement of the utilities within the bluff setback does not rise to a "significant impact to a particularly sensitive environment" nor would the extension of the utilities to the adjacent lot be a "cumulative impact of successive projects" which would make the exemption inapplicable.

In addition, none of the conditions described	in Section 15300.2 apply to this project.
	Date:
Lawrence Kasparowitz, Project Planner	





General Plan Designation Map





Legend APN 028-232-16 Streets Assessors Parcels Lakes PERENNIAL STREAM Residential Urban Medium Density (R-UM) Urban Open Space (O-U) Parks and Recreation (O-R)

Commercial-Neighborhood(C-N)

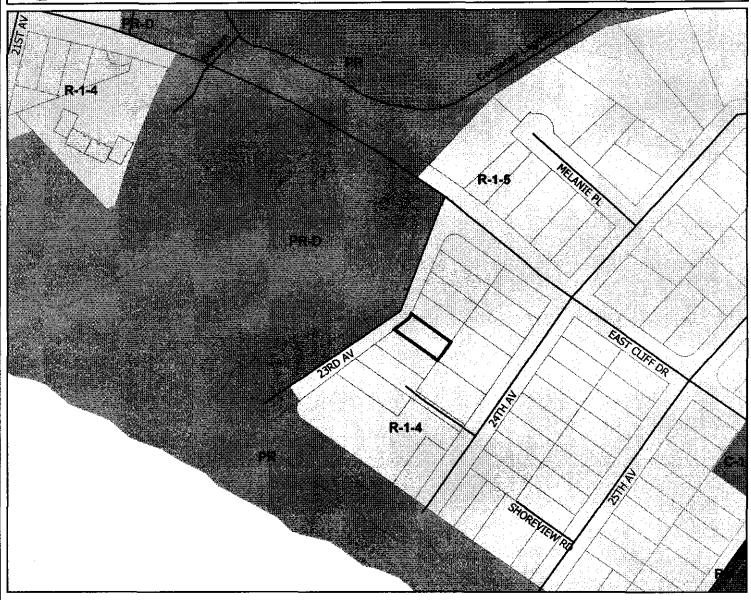
Lake(O-L)



Map Created by County of Santa Cruz Planning Department August 2005

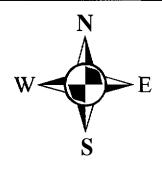


Zoning Map





Legend APN 028-232-16 Streets Assessors Parcels Lakes PERENNIAL STREAM RESIDENTIAL-SINGLE FAMILY (R-1) PARK (PR) COMMERCIAL-NEIGHBORHOOD (C-1) RESIDENTIAL-MULTI FAMILY (RM)



Map Created by County **of** Santa Cruz Planning Department August 2005

COUNTY OF SANTA CRUZ DISCRETIONARY APPLICATION COMMENTS

Project Planner: Larry Kasparowitz

Application No.: 02-0432

Time: 10:53:04

APN: 028-232-16 Page: 1

Envi	ironmental	. P.	lanning	Comp.	leteness	Comment	ts

	REVIEW	ON	SEPTEMBER	25,	2002	BY	ROBERT	S	LOVELAND	========
--	--------	----	-----------	-----	------	----	--------	---	----------	----------

The Pre-Development Site Review completed for this parcel(Application 96-0814 required the following items which are still relevant to this project:

- 1. Obtain a Geologic Hazards Assessment. This can be completed by the County. Please submit your plans to the Zoning Counter of the Planning Department and pay the required fees. An option would be to provide a completed geologic report from a California licensed geologist and a completed geotechnical report from a California licensed geotechnical engineer. If this option is selected, please forward 3 copies of each report to the Zoning Counter of the Planning Department and pay the required fees.
- 2. Please provide an engineered drainage plan for the building site and access road.
- 3. Please provide a surveyed topographic map for the building site and the access road. ======== UPDATED ON APRIL 18, 2003 BY ROBERT S LOVELAND =========
- 1. I received a soils report completed by Haro. Kasunich & Associates (dated June 1999). I will need an update letter from the project geotechnical engineer since the report is almost 3 years old.
- A full geologic report will be required for this project. There is clear reference by the geotechnical engineer, on page 7 of the report, that a geologist or hydrogeologist be consulted. Once the report has been completed, please provide 3 copies to the Zoning Counter of the Planning Department and pay the required review fee(s).
- 2. Item 2 above still needs to be provided.
- 3. Item 3 above has been provided. ———— UPDATED ON SEPTEMBER 23, 2003 BY JOSEPH L HANNA =======

- 1. Item 1 above has been addressed
- 2. I received a preliminary drainage plan from Mid Coast Engineers (Sheet C-01, dated 4/22/04). This plan must be stamped by the civil engineer. Please add the following information to this sheet: provide two grading cross sections for the locations shown on the attached sheet.

Discretionary Comments - Continued

Project Planner: Larry Kasparowitz Application No.: 02-0432 APN: 028-232-16	Date: May 8, 2006 Time: 10:53:04 Page: 2
3. Please address the County Geologist comments from FEBRUARY 22. 2005 BY ROBERT S LOVELAND	9/23/03. ===== UPDATED ON
1. Comment 3 above from the County Geologist (9/23/03 apply for a Geological/Soils Report Review (EH3) at the ning Department. Please submit the following items: Soils Report. ====================================	ne Zoning Counter of the Plan- tite Plan, Geology Report and
Submitted geologic and geotechnical report to the Coureview. ————— UPDATED ON MAY 10. 2005 BY ROBERT S	unty Geologist for formal LOVELAND =======
The County Geologist is currently waiting for the prohis comments.	ject geologist to respond to
Environmental Planning Miscellaneous Comments	
REVIEW ON SEPTEMBER 25, 2002 BY ROBERT S LC	WELAND =====
1. Please provide a detailed erosion control plan for erosion control practices will be utilized, where the construction details for each practice.	review. Detail what type of y will be placed and provide
2. Further comments may be required depending on the comments UPDATED ON SEPTEMBER 23, 2003 BY An engineered drainage and access plan are required f	results of the completeness JOSEPH L HANNA or this project.
Dpw Drainage Completeness Comments	
LATEST COMMENTS HAVE NOT YET BEEN SENT TO PLANNER FOR	THIS AGENCY
REVIEW ON SEPTEMBER 24, 2002 BY Please have the following concerns addressed by a civ	ril engineer:
1) 23rd Avenue is a private road. What is the condition from downspouts is being directed to?	on of the gutter that runoff
2) What is the safe point of release for runoff direc road: i.e., where does the runoff from 23rd Avenue go properties be adversely affected (through erosion, flo	? Would any downstream
3) \mbox{Will} runoff from this development encourage any er the proposed home?	osion to the bluff in front of
A drainage impact fee will be assessed on the net inc fees are currently \$0.80 per square foot. Further dra tained from the County of Santa Cruz Planning website cruz.ca.us/planning/drain.htm	inage plan guidance may be ob-

Please call the Dept. of Public Works, drainage division. from 8:00 am to 12:00 pm fyou have any questions. UPDATED ON FEBRUARY 7. 2005 BY ALYSON B TOM Application with civil plan sheet dated 1/5/05 has been received. Please

Discretionary Coments - Continued

Project Planner: Larry Kasparowitz

Date: May 8, 2006

Application No.: 02-0432 Time: 10:53:04

APN: 028-232-16 Page: 3

address the following:

1) Please show the floodplain limits on the site plan. Development should be outside of the floodplain.

- 2) The existing topography indicates that this site naturally drains down the bluff to the beach. The proposed drainge plan describes diverting all of the site runoff down 23rd Avenue, a private road. to a storm drain system in East Cliff Drive. Please submit an analysis of the entire diversion path demonstrating that the path is adequate to handle the diverted runoff. The path should be analyzed for adequate design capacity, and overflow as described in the County Design Criteria. Who maintains the drainage facilities on 23rd Avenue?
- 3) This project should minimize proposed impervious areas and mitigate for storm water quantity and quality impacts on site.
- 4) What is the extent of the upstream area draining to this site? The drainage plan should accommodate upstream runoff.

Additional site specific comments may be required in the building application stage.

All submittals for this project should be made through the Planning Department. Public Works storm water managment staff is available from 8-12 Monday through Friday for questions regarding this review.

- 1) Comment No. 2 from 2/7/05 has not been addressed. The capacity and safe overflow of the berm along 23rd Avenue and storm drain system from 23rd to the lagoon should be analyzed and submitted. Depending on the results of the analysis, this project may be required to upgrade the downstream system. Describe the gutter spread required to handle the existing and proposed flows in 23rd Avenue for design and overflow conditions.
- 2) The letter does indicate that the existing berm and downstream inlet are in need of repair/maintenance. Per conversation with the County road maintenance. the inlet and storm drain system from 23rd Ave. to the lagoon/beach is private. This project should be required to complete the required repair/maintenance. Please provide a detailed description of the work needed. The applicant will be responsible for obtaining any necessary easements to complete this work. Provide a clear plan that
- 3) Provide a clear plan that shows all of the exising and proposed facilities

Discretionary Comments - Continued

Project Pla Application	n No. :					Date: Time: Page:	May 8, 2006 10:53:04 4
reference on the p		the letter	and analy	sis. Show	the extent of t	he disp	ersion trench(s)
for this ture. P areas. A analysis analysis through ter and complete note the	s proje Please a As a no s. Why s? It w the pr UPDA analys e With at plan	ect? If so, also see thote, requir was the erwould be imposed site. ATED ON APPosis dated 3 regards to aner will i	please de e County de ed return patire 23rd / possible and / / / / / / / / / / / / / / / / / / /	scribe the esign critoperiod and Ave. water and not according BY ALYSC plans dated to the ditions of the estimated and t	e system, includeria for bypass disafety factors shed used in orceptable to send the March 2006 hent for the discontinuous to er	ding the require were not all of Applements been cretional	ention proposed release struc- ements for offsite ot included in the f the detention this runoff lication with letreceived and is ry stage. Please e long term main-
					rivate road.		· ·
Please s mit issu		scellaneous	comments	for issues	to be addresse	ed prior	to building per-
Dpw Draina	ge Misc	ellaneous	Coments				
LATEST (COMMENT	rs have not	YET BEEN	SENT TO PL	ANNER FOR THIS	AGENCY	
No commo	ent. ==	UP	EMBER 24. 2 PDATED ON Al please ad	JGUST 17,	2005 BY ALYSON	B TOM =	====== Prior to
1) Sumb plans.	it a le	tter from	the geotec	hnical enç	gineer approving	g of the	final dated
2) Prov	vide doc	cumentation	of any ne	cessary ea	asements.		
3) Prov of 23rd drainage	vide det I. The p e.	tailed grad plans dated	ling and ele 1 4/21/05 a	evations f re not su	or the proposed fficient in show	d turn a wing ade	round at the end equate grade for
4) Prov	vide ful	lly detaile	d drainage	plan for	all proposed w	ork.	
Addition following issuance	ng in a	ments/deta \TED ON APF addition to	ils may be NL 13, 200 previous	required 6 BY ALYSC miscellane	at the building N B TOM ====== ous comments p	g permit === Plea rior to	stage. se address the building permit
existing	g and p	proposed dr	ainage fac	ilities (d	ll be responsib curb, etc.) alor recorded mainter	ng the n	naintenance of the on county main-reement(s).
Dpw Drivewa	ay/Encr	oachment (ompletenes:	s Comments	;		
					USSELL M ALBRECH maintained roa		

Discretionary Comnents - Continued

Project Planner: Larry Kaşoarowitz Application No.: 02-0432 APN: 028-232-16	Date: May 8, 2006 Time: 10:53:04 Page: 5
UPDATED ON FEBRUARY 3, 2005 BY DEBBIE F No Comment, project adjacent to a non-County main	LOCATELLI ======= ntained road.
Dpw Driveway/Encroachment Miscellaneous Coments	
No comment.	
Dpw Road Engineering Completeness Coments	
is a privately maintained roadway. The plans must road. The local street standard is 36 feet of pays sidewalks on both sides. with a four foot landscatraffic will be able to turn around at the end of last lot to be served from this street? Indicate tion of 23rd Avenue and East Cliff Drive. If suff able (250 feet minimum) a sight distance analysis engineer. NO COMMENT	show the existing width of the ement with four foot separated uping strip. Indicate how public the street. Will this lot be the the sight distance at the intersecticient sight distance is not availmust be performed by a qualified
Dpw Road Engineering Miscellaneous Comnents	
REVIEW ON OCTOBER 2. 2002 BY RODOLFO N NO COMMENT UPDATED ON APRIL 10, 2003 BY RODOLFO N NO COMMENT UPDATED ON FEBRUARY 18, 2005 BY TIM N NO COMMENT	RIVAS

COUNTY OF SANTA CRUZ

Planning Department

INTEROFFICE MEMO

APPLICATION NO: 02-0432

September 24,2002 Date:

Project Planner To:

Larry Kasparowitz, Urban Designer From:

Design Review for a new residence at 23" Avenue, Santa Cruz (Vaden, owner / Miller, applicant) Re:

COMPLETENESS ISSUES

The plans as submitted are complete enough for Design Review.

GENERAL PLAN! ZONING CODE ISSUES

Desian Review Authority

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

Evaluation Criteria	Meets criteria In code	Does not meet criteria	Urban Designer's Evaluation
All new development shall be sited, designed and landscaped to be visually compatible and integrated with the character of surrounding neighborhoods or areas	, 3		
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			N/A

site, dead or diseased trees, or			
Special landscape features (rock			NIA
outcroppings, prominent natural			
landforms, tree groupings) shall be			
retained.			
Structures located near ridges shall be			N/A
sited and designed not to project			
above the ridgeline or tree canopy at			
-			
Land divisions which would create			N/A
parcels whose only building site would			
be exposed on a ridgetop shall not be			
permitted			
Landscaping	V		
New or replacement vegetation shall			
be compatible with surrounding	•		
vegetation and shall be suitable to the			
climate, soil, and ecological			
characteristics of the area			
S. IGI GOLO I GUOG			
Developmentshall be located, if			
	•		
possible, on of the site not visible or least visible from the public view.			
Development shall not block views of			
Development small flot block views of			
			I
		!	
Developmentshall be sited and	y		
designed to tit the physical setting	•		
carefully so that its presence is			
subordinate to the natural character of			
the site, maintainingthe natural			
features (streams, major drainage,			
mature trees, dominant vegetative			
communities)			
Screening and landscaping suitable to			All planting should
the site shall be used to soften the			be native and
visual impact of development in the			include larger
viewshed			species
Building design			Special Specia
Structures shall be designed to fit the		. 4	
topography of the site with minimal			
cutting, grading, or filling for			
construction			
Pitched, rather than flat roofs, which	4		
	~		
are surfaced with non-reflective			
materials except for solar energy			
devices shall be encouraged			

National protestal assessment of the			
Natural materials and colors which	✓		
blend with the vegetative cover of the		ļ	
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			NIA
structures shall be minimized by			
locating the structure within or near an			
existing group of buildings			
The visual impact of large agricultural			NIA
structures shall be minimized by using			INIA
materials and colors which blend with			
the building cluster or the natural			
vegetative cover of the site (except for			
greenhouses).			NII A
The visual impact of large agricultural			NIA
structures shall be minimized by using			
landscapingto screen or soften the			
appearance of the structure			
Restoration			
Feasible elimination or mitigation of			NIA
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			
The requirement for restoration of			N/A
visually blighted areas shall be in			1 478 4
scale with the sue of the proposed			
project			
Signs			
			NII A
Materials, scale, location and			NIA
orientation of signs shall harmonize			
with surrounding elements			A P . A
Directly lighted, brightly colored,			NIA
rotating, reflective, blinking, flashing or			
moving signs are prohibited			
Illumination of signs shall be permitted			NIA
only for state and county directional			
and informational signs, except in			
designated commercial and visitor	Į,		
serving zone districts			
In the Highway 1 viewshed, except			N/A
within the Davenport commercial area,			
only CALTRANS standard signs and			
public parks, or parking lot			
identificationsigns, shall be permitted			
to be visible from the highway. These			
signs shall be of natural unobtrusive			
materials and colors		'	
matchaisand colors		I	

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
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
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	•	



CONSULTING GEOTECHNICAL & COASTAL ENGINEERS

Project No. SC8356 15 August 2003

MR. VAL VADEN % Robert Tomaselli 402 Grand Avenue Capitola, California 95010

Subject: Geotechnical Update

Reference: Single Family Residence

23rd Avenue (APN 028-232-15,16)

Santa Cruz. Santa Cruz County, California

Dear Mr. Vaden:

At your request, we have recently visited the referenced site. Based on our reconnaissance, the site conditions have not changed since our geotechnical report was published on 10 June 1999 (H.K.A. Job # SC 6536) and the data and criteria are still applicable.

If you have any questions, please call our office.

Very truly yours,

HARO, KASUNICH & ASSOCIATES, INC.

Greg Bloom C.E. 58819

GB/dk

Copies: 2 to Addressee

b **Geotechnical Investigation** for PROPOSED RESIDENTIAL STRUCTURE APN 028-232-015,16 23rd Avenue Santa Cruz County, California **Prepared For** Dr. Herb Gunderson **Prepared By** HARO, KASUNICH & ASSOCIATES, INC. Geotechnical & Coastal Engineers
Project No. SC6536 June 1999

Project No. SC6536 10 June 1999

DR. HERB GUNDERSON % American Dream Realty Capitola, California 95010

Subject:

Geotechnical Investigation

Reference:

Residential Construction

APN 028-232-015,16

23rd Avenue

Santa Cruz County, California

Dear Dr. Gunderson:

In accordance with your authorization, we have performed a Geotechnical Investigation for the proposed residential construction located on 23rd Avenue in Santa Cruz County, California.

The accompanying report presents our conclusions and recommendations, and the results of the geotechnical investigation on which they are based.

If you have any questions concerning this report, please call our office.

Very truly yours,

E. 28506

HARO KASUNICH 81ASSOCIATES, INC.

不

Greg B oom C.E. 58819

GB/dk

Copies:

4 to Addressee

Project **No.** SC6536 10 **June 1999**

TABLE OF CONTENTS

<u>Pa</u>	aae No₌
LETTER OF TRANSMITTAL	
GEOTECHNICAL INVESTIGATION	. 1
Introduction Purpose and Scope Project Description Field Exploration Laboratory Testing Subsurface Conditions Seismicity Slope Stability	. 1 . 2 . 2 . 3 . 4
DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS	7
Site Grading Foundations-Spread Footings Slabs-on-Grade Retaining Walls and Lateral Pressures Table 1 -Active and At-Rest Pressures Site Drainage Flexible Pavements Plan Review, Construction Observation and Testing	- 8 10 11 12 13 14 15
LIMITATIONS AND UNIFORMITY OF CONDITIONS	18
APPENDIX A	19
Vicinity Map Boring Site Plan Logs of Test Borings Laboratory Test Results Slope Stability Results	20 21 22 29 32

Project No. SC6536 10 June 1999

GEOTECHNICAL INVESTIGATION

<u>Introduction</u>

This report presents the results of our Geotechnical Investigation for the proposed residential construction to be located at APN 028-232-015,16 on 23" Avenue in Santa Cruz County, California.

Purpose and Scope

The purpose of our investigation was to explore surface and subsurface soil conditions at the site and provide geotechnical criteria for design and construction of the project.

The specific scope of our services was as follows:

- Site reconnaissance and review of available proprietary data in our files pertinent to the site.
- 2. Explore the subsurface conditions at the site with four exploratory borings which were advanced to a maximum depth of approximately 55 feet.
- 3. Test selected soil samples to determine their pertinent engineering and index properties.
- 4. Evaluate the field and laboratory data to develop geotechnical criteria for general site grading, building foundations, retaining walls, site drainage, and bluff stability from a geotechnical standpoint.

5. Present the results of our investigation in this report.

Project Description

The combined parcels lie on a coastal bluff that faces the terminus of Rodeo Gulch (Corcoron Lagoon). The parcels are rectangular and total approximately 7,500 square feet. Current plans call for building a two-story residential structure with attached garage on lot 14, (APN 028-232-016) and a detached garage structure with deck and emergency vehicle turnaround area on lot 12 (APN 028-232-015). To service the lots it will be required to extend 23rd Avenue beyond its current terminus. This will require a variance to construct the roadway continuation closer than 25 feet of the top of the coastal bluff.

Both lots are located on a coastal bluff approximately 30 feet above the beach. The lots slope mildly towards the west (in the direction of Corcoron Lagoon) before dropping off towards the beach at a grade of approximately 1:1 (H:V). The lots are currently vegetated with grass.

Field Exploration

Subsurface conditions for the structures were investigated on 1 April **1999.** A total of 4 borings were drilled to a maximum depth of 55 feet. The approximate locations of the test borings are indicated on the Boring Site Plan, Figure 2. The borings were advanced with either 6-inch diameter truck-mounted continuous flight auger equipment. The soils encountered were continuously logged in the field and described in accordance with the

Unified Soil Classification System (ASTM D2486). The Logs of Test Borings are included in the Appendix of this report.

Representative soil samples were obtained from the exploratory borings at selected depths. These samples were recovered using the 3.0 inch O.D. Modified California Sampler (L) or the Standard Terzaghi Sampler (T).

The penetration resistance blow counts noted on the boring logs were obtained as the sampler was dynamically driven into the in situ soil. The process was performed by dropping a 140-pound hammer 30 vertical inches, driving the sampler 6 to 18 inches and recording the number of blows for each 6-inch penetration interval. The blows recorded on the boring logs represent the accumulated number of blows required to drive the last 12 inches or as indicated on the **logs.** The boring logs denote subsurface conditions at the locations and time observed and it is not warranted that they are representative **c** subsurface conditions at other locations or times.

Laboratow Testing

Laboratory testing was performed to determine the physical and engineering properties of the soil underlying the site. Moisture content and dry density tests were performed on representative undisturbed **soil** samples to determine the consistency and moisture throughout the explored soil profiles.

Characteristics **d** a soil give a good indication of the soil's compressibility and expansion potential.

The strength parameters of the subgrade soils were determined from in-situ Standard penetration tests and unconfined compression testing.

The results d the field and laboratory testing appear on the Logs of Test Boring opposite the sample tested.

Subsurface Conditions

Based on our **field** investigation, the site is underlain by terrace deposits in the upper 10 to 12 feet. These deposits consist **d** clayey sand, sandy clay, and fat clay. The clayey deposits are generally medium stiff to stiff in consistency. Below this layer, dense well and poorly graded sand was encountered to the maximum depth drilled of 55 feet.

Groundwater was encountered in boring B-1 at a depth of 27 feet. It is expected that groundwater levels will fluctuate based on seasonal rainfall and other factors not readily apparent.

4

Seismicity

The following is a general discussion of seismicity related to the project.

The proposed project lies about **11** miles southwest of the San Andreas Fault zone. This major fault zone of active displacement extends from the Gulf of California to the vicinity of Point Arena, where the fault leaves the California coastline. Between these points, the fault is about 700 miles long. The fault zone is a break or series of breaks along the earth's crust, where shearing movement has occurred. This fault movement is primarily horizontal.

Historically, the San Andreas Fault has been the site of large earthquakes and consequently, large earthquakes can be expected in the future. The largest of the historic quakes in northern California occurred on 18 April 1906 (mag. 8.3+). The Zayante Fault, about 7¹/₂ mile northeast **of** the site, is considered to be associated with the San Andreas Fault, and is potentially active.

More than ninety years have passed since the last great earthquake on the San Andreas Fault zone, and it is highly probable that a major earthquake in Northern California will occur during the next 50 years. During a major earthquake in the vicinity of the site, ground shaking would probably be severe. The effects of severe ground shaking on the proposed structure(s) can be reduced by earthquake resistance design in accordance with the latest edition of the Uniform Building Code.

The likelihood of surface rupture of the site appears remote, as no known faults cross the site. The potential for liquefaction to occur at the site is considered low.

Slope Stability

Slope stability analysis for the static and seismic condition was performed using the soil strength parameters from the direct shear test and the SPT blow counts. The slope profile was modeled using the topographic map provided by Ward Surveying dated 16 April 1999 and our boring logs. Calculations were performed using the computer program PCSTABL, developed by Purdue University. PCSTABL is a computer program for analysis of slope stability by limit equilibrium methods. The program analyzes circular slip surfaces and is able to search for the critical seismic coefficient utilizing a pseudostatic seismic analysis. A seismic coefficient of 0.24 was chosen based on a peak ground acceleration of 0.48g. The peak ground acceleration was calculated based on a type B soil (Boor, Joyner, and Fumal (1993)).

The following table summarizes the results of the analysis.

Condition	Factor of Safety
Static	2.1
Seismic (seismic coefficient=0.27)	1.4

DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

Based on the results of our investigation, the proposed improvements to the property appear compatible with the site from a geotechnical standpoint, provided the following recommendations are incorporated into the design and construction of the proposed project. Proposed grading for the project should be evaluated by the geotechnical engineer when grading plans are completed.

Expansive soil was found at the site. This will affect improvements done at the site. At this time it is unclear how the site will be graded. Therefore, decisions on how to best mitigate the expansive soil will need to be made once a grading plan is developed. This report does give recommendations on how to deal with expansive soil if encountered.

It is apparent that the stability of the coastal bluff subadjacent to the properties has the potential to be affected by both the flow of Rodeo Gulch and wave action from the ocean during extreme conditions. A detailed coastal evaluation analyzing potential erosion from wave action and stream erosion is needed along with protection requirements for the bluff. This analysis will need to be coordinated between our firm and a qualified engineering geologist or hydrogeologist.

Based on the existing 23rd Avenue setback to the top of coastal bluff of approximately 3 to 4 ft., it is our opinion that a 5 foot setback for the new driveway to the top of bluff is acceptable from a geotechnical perspective. Erosion control measures should be implemented on the outboard side of the proposed driveway.

Site Grading

- 1. The geotechnical engineer should be notified at least four (4) working days prior to any site clearing or grading so that the work in the field can be coordinated with the grading contractor, and arrangements for testing and observation services can be made. The recommendations of this report are based on the assumption that the geotechnical engineer will perform the required geotechnical related earthwork testing and observation services 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 D1557-91.
- 3. Areas to be graded should be cleared of 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 is typically from 2 to 6 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. Any **fill** areas required within the building pad should have the exposed surface soils scarified and recompacted prior to the placement of structural **fill**. The exposed surface **soils** should be scarified 6 inches, conditioned with water (or allowed to dry, as necessary) and compacted to at least 90 percent relative compaction.
- 6. Engineered fill should be placed in thin lifts not to exceed 8 inches in loose thickness, moisture conditioned, and compacted to at least 90 percent relative compaction. The final 8 inches should be compacted to at least 95 percent relative compaction.
- 7. The majority of on-site soils generally appear suitable for use as engineered fill as long as they are processed to remove any organic material. Materials for engineered fill should be essentially free of organic materials. and contain no rocks or clods greater than 6 inches in diameter, with no more than 15 percent larger than 4 inches. Expansive (fat) clay should not be used for engineered fill.

- 8. Any imported fill should meet the following criteria:
 - a. Be free of wood, brush, roots, grass, debris and other deleterious materials,
 - b. Not contain rocks or clods greater than 2.5 inches in diameter.
 - c. Not more than 20 percent passing the #200 sieve.
 - d. Have a plasticity index less than 12.

Foundations - Spread Footings

- 9. The proposed structures for the project site may be supported on conventional isolated and continuous spread footings. These footings should bear on firm native soil, or engineered fill, placed in accordance with the recommendations outlined within the Site Grading section & this report. The footings should be a minimum of 12 inches deep below the lowest adjacent grade, and a minimum of 15 inches wide. The footings should be reinforced as required by the structural designer based on the actual loads transmitted to the foundation.
- 10. The foundation trenches should be kept moist and be thoroughly cleaned of slough or loose materials prior to pouring concrete. In addition, footings located adjacent to other footings or utility trenches should have their bearing surfaces founded below an imaginary 1.5:1 (horizontal to vertical) plane projected upward from the bottom edge of the adjacent footings or utility trenches.

11. Foundations designed in accordance with the above may be designed for an allowable soil bearing pressure of 1,750 psf for dead plus live loads. This value may be increased by one third to include short-term seismic and wind loads.

12. Lateral load resistance for the buildings supported on footings may be developed in friction between the foundation bottom and the supporting subgrade. A friction coefficient of 0.35 is considered applicable.

13. If the building pad is graded such that the foundation trenches reveal underlying fat (expansive) clay, the foundation trenches should *be* overexcavated 24 inches and replaced with non-expansive engineered fill compacted to 95 percent relative compaction. A control fill density material (one-sack cement mix) can be used in lieu of compacted engineered fill material (soil).

Slabs-on-Grade

14. Concrete slabs-on-grade planned for the site should be constructed on engineered fill as outlined in the Site Grading and Excavation section of this report. If expansive soil is found to be underlying the slabs, 12 inches of soil should be removed and replaced with non-expansive engineered fill. Prior to construction of the slab, the subgrade surface should be proof-rolled to provide a smooth, firm. uniform surface for slab support. Slab reinforcement should be provided in accordance with the anticipated use and loading of

the slab. As a minimum, we recommend the use of number 3 bars placed within the slab at 18 inches on center. Slab joints should be spaced no more than 8 feet on center to minimize random cracking. While some movement of slabs is likely, a well-prepared subgrade including pre-moistening prior to pouring concrete, adequately spaced expansion joints, and good workmanship should minimize cracking and movement.

15. In areas where floor wetness would be undesirable, a blanket of 4 inches of freedraining gravel should be placed beneath the floor slab to act as a capillary break. In order to minimize vapor transmission, an impermeable membrane should be placed over the gravel. The membrane should be covered with 2 inches of sand or rounded gravel to protect it during construction. As an alternative to the sand, native soil or engineered fill having a sand equivalent greater than 20 may be used. The sand or gravel should be lightly moistened just prior to placing the concrete to aid in curing the concrete. If moisture is expected a surface treatment or moisture retardant should be added to the concrete.

Retainina Walls and Lateral Pressures

- **16.** Retaining walls should be designed to resist the lateral earth pressures listed in Table
- 1. The values listed in Table 1 are for non-seismic conditions and are based on the assumption that walls will be adequately drained.

Backslope Gradient	Active Pressure (pcf)	At-Rest Pressure (pcf)
Level	45	65
21	60	80

- 17. Active pressures should be used for walls where horizontal movement at the top of the wall is not restricted. At-rest pressures should be used to design walls with movement restrained at the top, such as basement walls and walls structurally connected at the top. The walls should also be designed to resist one half of any surcharge loads imposed on the backfill behind the walls. The designer should account for the surcharge loading created during backfill operations.
- 18. To account for seismic loading, a horizontal line load surcharge equal to 10H² 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.)
- 19. The above lateral pressures assume the walls are fully drained to prevent hydrostatic pressure behind the walls. Drainage materials behind the wall should consist of Class 2 permeable material complying with Section 68 of CalTrans Standard Specifications, latest edition, or 3/4 inch permeable drainrock. Drainage material should be wrapped in Mirafi 140 N or equivalent. The drainage material should be at least 12 inches thick. The drains

should extend from the base of the walls to within 12 inches of the top of the backfill. A perforated pipe should be placed (holes down) about 4 inches above the bottom of the wall and discharge at a suitable location. Wall backdrains should be plugged at the surface with clayey material to prevent infiltration of surface runoff into the backdrains.

Site Drainaae

- 20. Proper control **d** drainage will be essential to the project. Where exterior walls are anticipated to be constructed below final grade elevations, the interception **d** subsurface seepage will be important. The interception of subsurface seepage **should** be planned in accordance with the recommendations for retaining wall backdrains outlined within the retaining wall section of this report. Backdrains for exterior walls should extend to depths below the bottom of foundation-elements, and discharge water at a suitable location.
- 21. Runoff must not be allowed to sheet over graded slopes or the adjacent coastal bluff. Where uncontrolled runoff flows over the slopes or concentrated runoff is directed onto slopes, the potential for erosion or shallow debris flows is greatly increased. Asphalt or earthen berms, or lined V-ditches should be planned, as determined by the project Civil Engineer, to adequately control surface runoff.

22. Surface drainage should include positive gradients so that surface runoff is not permitted to pond adjacent to foundations, slabs or retaining walls. Surface drainage should be directed away from building foundations. The slope from the foundation elements should be 5 percent to at least 5 feet from the footings. Overall runoff must be intercepted and diverted away from planned structures with lined Vditches or other means.

23. **Full** roof gutters and downspouts should be placed around eaves. Discharge from the roof gutters should **be** conveyed away from both the building site and the adjacent coastal bluff.

24. 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.

Flexible Pavements

Because of the presence of near surface moderate to expansive soil in the areas *a* the roadway extension and driveways, it is suggested that the designer place a minimum of 12 inches of non-expansive engineered fill underneath the pavement section and driveways. Our firm was not contracted to perform a pavement design for the roadway extension. R-value testing and design should be undertaken in order to properly design the roadway.

- 25. Asphaltic concrete, aggregate base, and subbase, and preparation of the subgrade should conform to and be placed in accordance with the Caltrans Standard Specifications, latest edition, except that the test method for compaction should be determined by ASTM D1557-91.
- 26. **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 relative compaction of at least 95 percent, 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. Base rock should meet Caltrans Standard Specifications for Class II Aggregate Base, and be angular in shape.
 - **D.** Compact the base rock to a relative dry density of **95** percent.
 - **E.** Place the asphaltic concrete during periods of fair weather when the free air temperature is within prescribed limits per Caltrans Specifications.
 - F. Provide a routine maintenance program

Plan Review. Construction Observation and Testing

27. Our firm should be provided the opportunity for a general review of the final project plans prior to construction so that our geotechnical recommendations may be properly

interpreted and implemented. **If**our firm is not accorded the opportunity of making the recommended review, we can assume no responsibility for misinterpretation of our recommendations. We recommend that our office review the project plans prior to submittal to public agencies, to expedite project review. The recommendations presented in this report require our review of final plans and specifications prior to construction and upon our observation and, where necessary, testing of the earthwork and foundation excavations. Observation of grading and foundation excavations allows anticipated soil conditions to be correlated to those actually encountered in the field during construction.

LIMITATIONS AND UNIFORMITY OF CONDITIONS

- The recommendations of this report are based upon the assumption that the soil conditions do not deviate from those disclosed in the borings. If any variations or undesirable conditions are encountered during construction, or if the proposed construction will differ from that planned at the time, our firm should be notified so that supplemental recommendations can be given.
- 2. This report is issued with the understanding that it is the responsibility of the owner, or his representative, to ensure that the information and recommendations contained herein are called to the attention of the Architects and Engineers for the project and incorporated into the plans, and that the necessary steps are taken to ensure that the Contractors and Subcontractors carry out such recommendations in the field. The conclusions and recommendations contained herein are professional opinions derived in accordance with current standards of professional practice. No other warranty expressed or implied is made.
- 3. The findings of this report are valid as of the present date. However, changes in the conditions of a properly can occur with the passage of time, whether they be due to natural processes or to the works of man, on this or adjacent properties. In addition, changes in applicable or appropriate standards occur whether they result from legislation or the broadening of knowledge. Accordingly, the findings of this report may be invalidated, wholly or partially, by changes outside our control. Therefore, this report should not be relied upon after a period of three years without being reviewed by a geotechnical engineer.

Project No. SC6536 20 May 1999

APPENDIX A

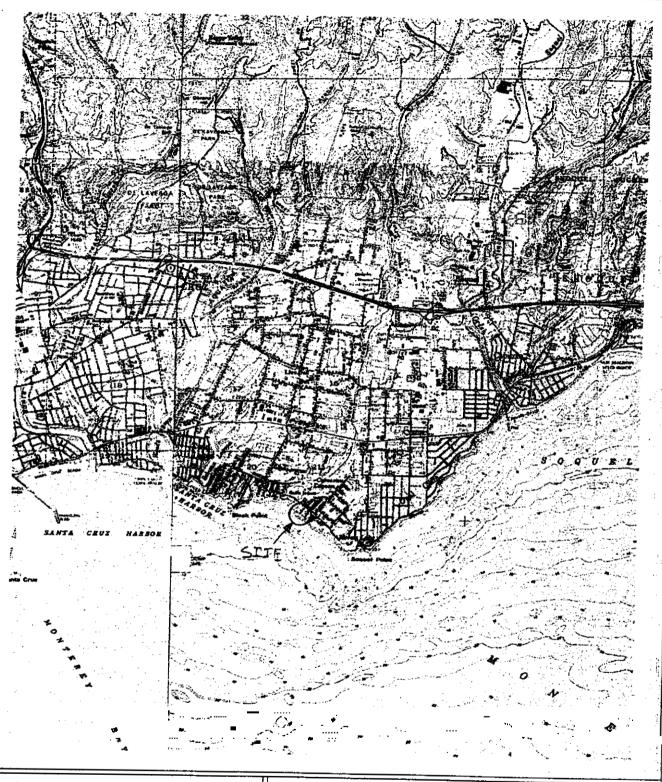
Vicinity Map

PI n

Logs of Test Borinas

Laboratory Test Results

Slope Stability Results



PROJECT No: SC 6536

DATE: 5-25-99

SCALE: N.T.

DRAWN BY: 👙 🐧

JAM YTEINED IV

APN 028-222-015,15

CHAPTE COURTY, CALIFORNIES

IARO, KASUNICH & ASSOCIATES

FIGURE No.

BORE LOG REPORT

PROJECT NO. SC6536

for

Haro, Kasunich & Associates, Inc.

C::\Program Files\GSS\Bor eLog\Sc6536.BLF



LEGEND

. Visible water level description

Footnoted water level description

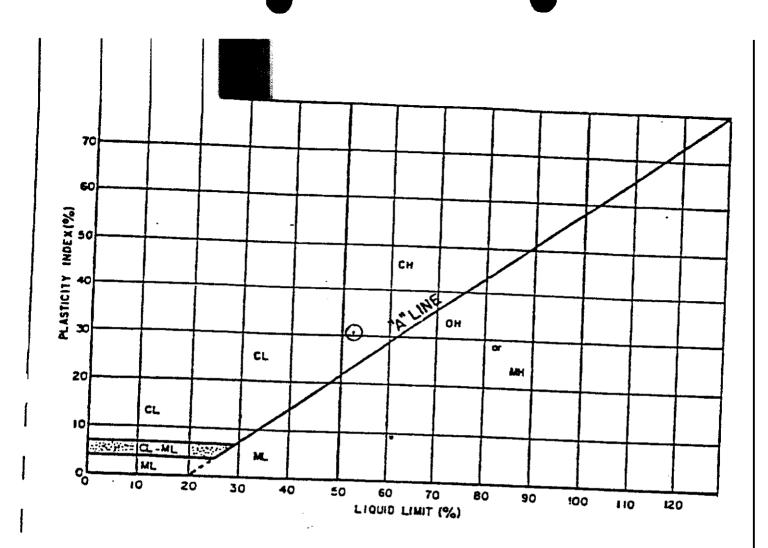
Visible soil data

- Footnoted soil data
- Visible sample data
- Footnoted sample data

LOGGED BY		DATE DRILLED	April 1, 1999	BORING		OJECT	ν ΓΝΟ 6" S			20010	
Sample No.	Symbol	SOIL DESCRIPTION			Unified Soil Classification		Qu - t. s. t. Penetrometer		Moisture % dry wt.	ORING NO.	ISC. LAB SULTS
- 1		Orange gray fat CLA moist, very stiff Brown Silty SAND, medium grained		~		51		100	24.5	Qu = 6.	onfined ,390 psf
- 7 - 8 - 9 - 10 1 - 3 - 11 T		Dense Gravels starting at 12	, 			13			8.2		
13 14 15 16 T 17 IS		Well graded SAND w	ith Silt and gravel,	dense	4	0		8	3.2		
19 20 21 22 23 24											
/ Haro, Kasun	ich &	Associates, Inc.	FIGURE	ENO. LO	OG OF	TEST B	ORIN	G			1-

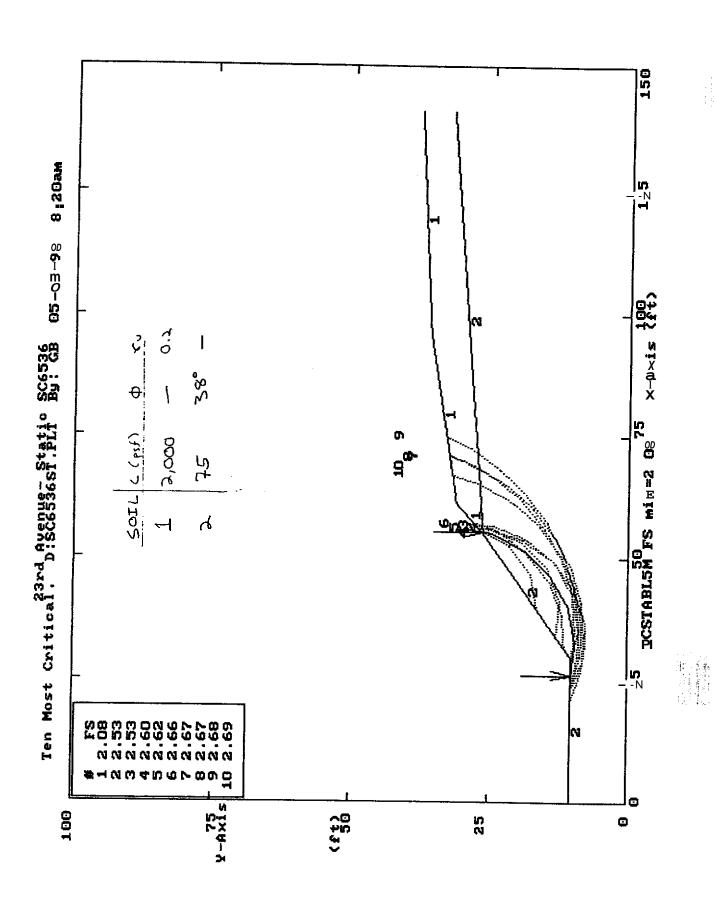
S page 4	og File	PROJECT NO. SC6536								
LOGGED BY GB	DATE DRILLED April 1, 1999	BORIN	G DIAM	ŒTER	6" S	S	BC	RING NO.	2	<u> </u>
Depth, ft. Sample No. and type Symbol	SOIL DESCRIPTION		Unified Soil Classification	Blows/foot 350 ft - lbs.	Qu - t. s. t. Penetrometer	Dry Density p.c.f.	Moisture % dry wt.	M I RES	ISC. AB SULTS	
$\frac{1}{2}$ L	Brown lean CLAY w/fine Sand, Clayey SAND, very moist, stiff			23 8			20.2 24.0	Unc ==	onfined	1
T 2 - 3 1 L 2 - 3	Brown gray Clayey SAND , very	moist, loos		3			21.7			A Company of the Comp
- 8 - 9 - 10	Orange gray fat CLAY									
- 11 L L	Brown Clayey SAND, medium d			9						
- 13 - 14 - 15 - 16										
- 17 - 18 - 19										
- 20 - 21 - 22										
- 23										

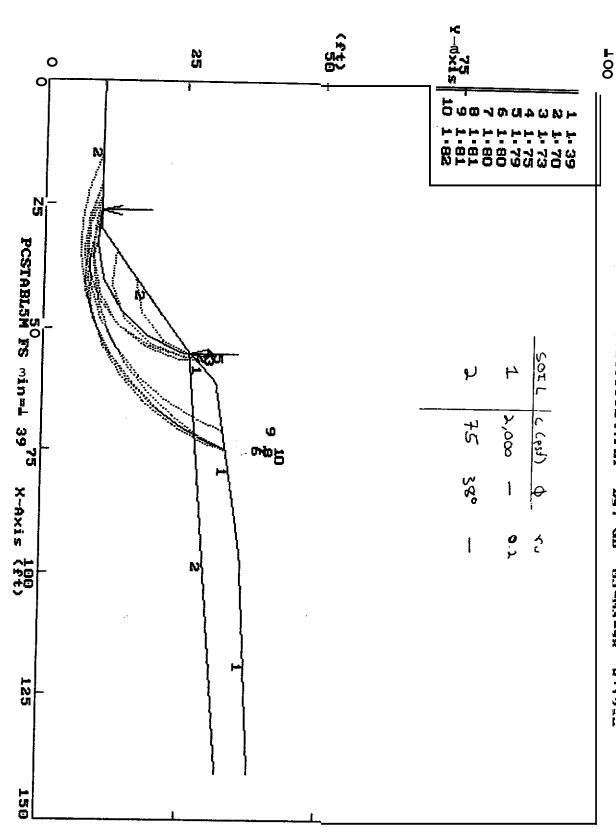
	Bore Lag File S page 6 PROJECT NO. SC6536								
LOGGED BY GB DATE DRILLED April 1, 1999	BORING DIAM	ETER	6" SS	3	ВС	RING NO. 4	1 1		
Soil Description Somple No. Symbol Symbol	Unified Soil Classification	Blows/foot 350 ft - lbs.	Qu - t. s. t. Penetrometer	Dry Density p.c.f.	Moisture % dry wt.	MISC. LAB RESULTS			
Orange/gray fat CLAY, moist, stiff 4B 1						Atterberg Limits	S		
BORING TERMINATED AT 4.0 ft. BORING TERMINATED AT 4.0 ft. BORING TERMINATED AT 4.0 ft.						PI = 21	「「「「「「」」」」、「「」」、「」「」、「」、「」、「」、「」、「」、「」、「		
- 14 - 15 - 16 - 17 - 18 - 19 - 20 - 21 - 22 - 23 - 24							1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1		
B Y Haro, Kasunich & Associates, Inc. FIGUR	ENO. LOG (OF TEST	Γ BORI	NG			7		



PLASTICITY DATA

				STICHY	UATA			
KEY STMBOL	HOLE NUMBER	DEPTH {feet}	NATURAL WATER CONTENT W(%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	INDEX (W-PL)	UNIFIED SOIL CLASSIFICATION
0	B-4	ጉ 1 1.		25	53	2-1	LL-PL	CH SYMBOL
					·	·		





Ten Most Critical. D:SC6536EQ.PLT By: GB 65-03-98

NIELSEN and ASSOCIATES

ENGINEERING GEOLOGYAND COASTAL CONSULTING

GEOLOGIC REPORT for TWO PROPERTIES ONE OF WHICH IS PROPOSED for a NEW SINGLE FAMILY HOME

23rd Avenue Santa Cruz County, California APN 028-232-15 and 16

Job No. SCr-1138-C

July 2003

NIELSEN and ASSOCIATES

ENGINEERING GEOLOGYAND COASTAL CONSULTING

30 July 2003

Job No. SCr-1138-C

Val and Lilli Rey Vaden c/o Robert Tomaselli 402 Grand Avenue Capitola, CA 95010

SUBJECT Geologic Investigation, with emphasis on an evaluation of bluff recession

rates, of two properties, one of which is proposed for a new single family

home.

REFERENCE: APN 028-232-15 & 16, 23rd Avenue, Santa Cruz County, California

Dear Mr. and Mrs. Vaden:

The following report presents the results of **or** geologic investigation of the properties described above where we understand a new single family home is proposed on one of them. The purpose of this study was twofold: to evaluate the geologic conditions at the property, and to evaluate coastal bluff recession rates in order to establish a building setback From the top of the bluff.

One of the primary elements of our study was to delineate a building setback since the home is located above a beach and a coastal bluff. The Santa Cruz County Planning Department requires that new construction on coastal bluffs be located a minimum of 25 feet from the bluff edge or landward of an estimated bluff top location which would result from 100 years of bluff retreat. Our analysis indicates that essentially there has been no bluffretreat at the property in the past 70 years. Therefore, the minimum building setback of 25 feet applies to the property.

It was a pleasure working with you on this project. We look forward to seeing your "new"home. If we *can* be of further assistance or if you have any questions, please do not he sitate to call.

Sincerely,

Hans Nielsen

Certified Engineering Geologist 1390

July 2003 Santa Cruz County California

TABLE OF CONTENTS

INTRODUCTION	4
SITE CONDITIONS and GEOLOGY	. 4
HISTORIC CONDITIONS	7
COASTAL EROSION PROCESSES and RATES Erosion Processes Rates of Erosion and Bluff Retreat	9
CONCLUSIONS	10
RECOMMENDATIONS	11
INVESTIGATION LIMITATIONS	12
REFERENCES	13
APPENDIX A - Logs of Exploratory Borings by Haro, Kasunich and Associates	16
APPENDIX B - Site Geologic/Topographic Map and Geologic Cross Section	17

-3-

July 2003 Santa Cruz County California

LIST OF ILLUSTRATIONS

FIGURES

- 1. General Location Map
- 2. Aerial Photo & Geologic Section Along Coast

PLATES (in Appendix B)

Plate 1. Geologic Site-Topographic Map and Geologic Cross Section

Vaden Report 23rd Avenue APN 028-232-15 and 16

July 2003 Santa Cruz County California

WTRODUCTION

This report presents the results of our geologic investigation of two adjacent properties located on 23rd Avenue on the west or ocean side of East Cliff Drive in Santa Cruz County (Figures 1 and 2). The parcels are located at the mouth of Corcoran Lagoon on an uplifted marine terrace above a sand beach. The chief purpose of our study was to evaluate coastal erosion rates at the property in order to define building setbacks according to existing ordinances. A geotechnical investigation was conducted at the property in 1999 by Haro, Kasunich and Associates who drilled three exploratory borings. We reviewed their report as part of our work.

Our investigation consisted *of* 1) a review of select pertinent published and unpublished geologic information including the 1999HKA report, 2) a field examination and mapping at the property, 3) stereoscope analysis of 11 sets of historic aerial photographs taken between 1931 and 2001, 5) discussions with: the project geotechnical engineers - Haro, Kasunich and Associates and the project architect, Wayne Miller, and 7) preparation of this report.

SITE CONDITIONS and GEOLOGY

The subject properties are situated on the south side of 23rd Avenue which is a short road extending west off East Cliff Drive (see Plate 1, Appendix B). The road forms the northern boundary of the parcels which are 3600 and 4300 square feet in area. Both properties are essentially level but with a very slight slope to the north or towards the road and the beach. They were both completely undeveloped at the time of our study.

Although having existed as a graded road since 1948, the existing paved section of 23rd Avenue currently terminates just before or east of the properties. However, there is excellent access to the properties off the end of the paved road.

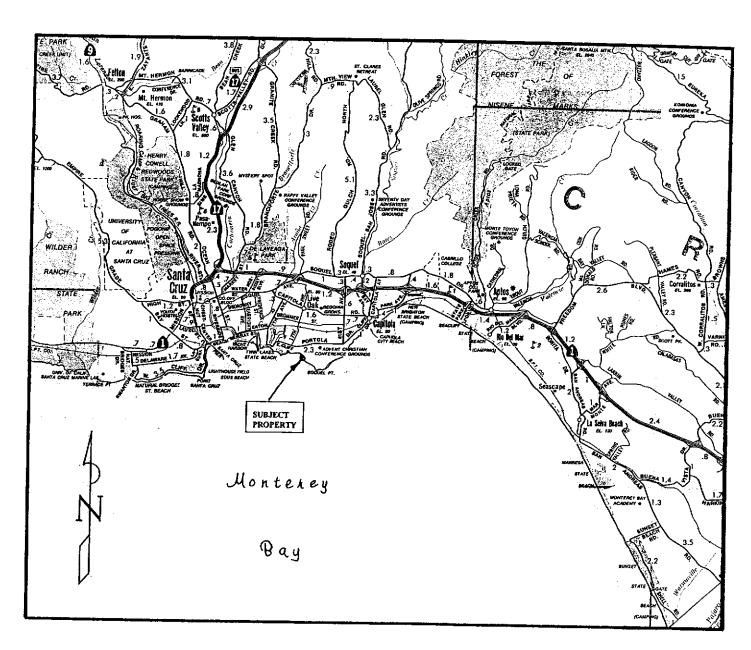
The elevation of the properties varies from 32 to 38 feet according to a site topographic map produced by Mid Coast Engineers in March 2003.

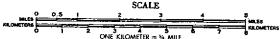
A short coastal bluff occurs below 23rd Avenue at the properties. The crest of this moderately steep sloping bluff is situated on the north side of and essentially coincident with the boundary of the right-of-way of 23rd Avenue. The bluff drops about 20 feet vertically over a horizontal distance of about 30 feet. It is densely vegetated with berry bushes, poison oak, and other short brush.

The property is underlain by two types of earth materials - marine terrace deposits and Purisima Formation bedrock. Although there are no good exposures of either of these units at the property, they are well exposed in the sea cliffs a short distance to the north between Corcoran Lagoon and Black's Point. The exploratory borings drilled by Haro, Kasunich and Associates provided information on the makeup of the earth materials beneath the property; their descriptive

LOCATION MAP

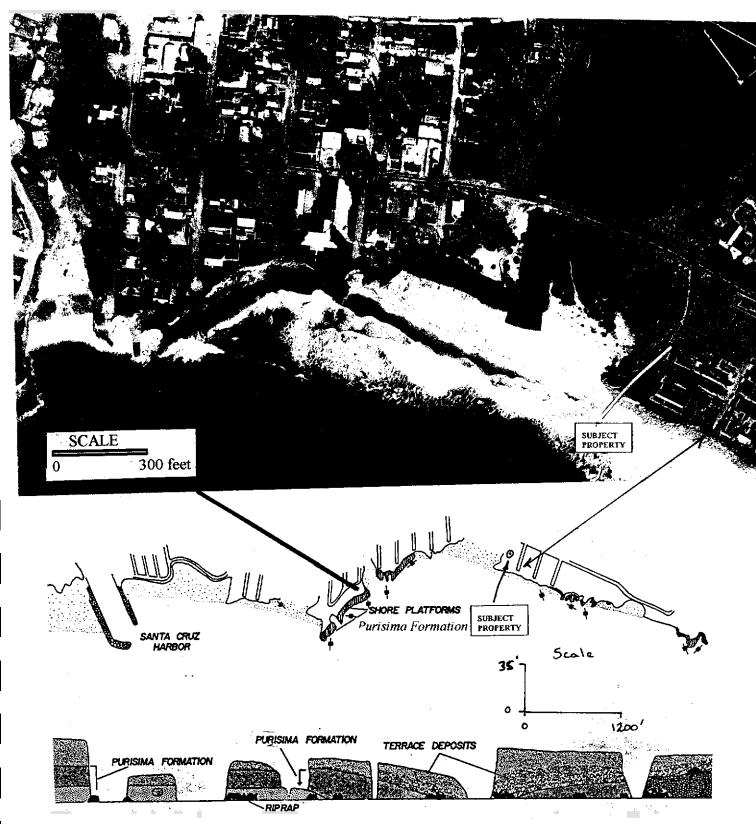
Figure 1.





1965 AERIAL PHOTO and GEOLOGIC SECTION ALONG THE COAST

Figure 2.



Section from Griggs and Johnson, 1979

-7-

July 2003 Santa Cruz County California

logs are presented in Appendix A of this report. Additionally, geologic information was obtained from a paper by Griggs and Johnson (1979).

Terrace deposits immediately underlie the properties. They consist of a near-surface clay to clayey silt varying in thickness from 4 to 10 feet which grades to a gravelly sand beneath. It appears from HKA's descriptions that the contact with the underlying Purisima occurs at about 27 feet beneath the property. We base this on a change from gravelly sand to a slightly cemented, well sorted, fine-grained silty sand, the latter of which is a typical description of the Purisima in the area. A thin perched groundwater zone at this elevation also is indicative of the occurrence of the Purisima since it is significantly less permeable than the overlying gravelly terrace deposits. We have shown out interpretation of the geologic conditions on Plate 1, Appendix B.

The Purisima Formation in the area is composed of a partially cemented very fine-grained sandstone to siltstone. The bedrock is well exposed along the coastline a short distance north of the property where it forms bedrock platforms rising up to 23 feet above the beach. Figure 2 is an aerial photograph of the area around the property combined with an along-shore profile constructed by Griggs and Johnson (1979). The profile shows a down warp or fold in the bedrock at the mouth of Corcoran Lagoon such that the Purisima is not exposed in the coastal bluff at the property. Further obscuring outcrops near the property is a riprap seawall that extends south from Corcoran Lagoon to beyond 26th Avenue. Their profile shows bedrock platforms short distances to the north and south of the property indicating that the down warp is probably slight.

The geologic conditions indicate that the coastal bluff fronting 23" Avenue at the properties is entirely composed of terrace deposits. These deposits are typically highly susceptible to erosion from ocean waves. However as we discuss later in this report, there has been no erosion of these deposits at the property over the past 70+ years.

The geologic conditions appear quite favorable for the intended development of one of the properties with a single family home.

HISTORIC CONDITIONS

The history of the properties and the surrounding area was generated from our analysis of time sequential stereo aerial photographs taken between 1931 and 2001, a list of which is included in the References at the end of this report. The photos were taken in 1931, 1948, 1956, 1963, 1965,1975,1980 1982,1985,1994, and 2001.

The properties and beach area are clearly visible in all of the photographs. And even in the 1931 photos, several roads were present that exist today. These roads were used to determine the scale of the photos in the immediate area of the properties, and the scale was used to evaluate the position of the bluff top at the properties over time. We have evaluated bluff recession rates along many sections of the Monterey Bay shoreline using aerial photographs, and we were struck by the

Vaden Report 23rd Avenue APN 028-232-15 and 16 July 2003 Santa Cruz County California

complete absence of evidence of erosion or bluff retreat in the bluff at the property in all of the aerial photographs that we examined.

In the earliest photographs (1931), East Cliff Drive was not situated where it is today. From north to south, it swung out onto the beach and crossed the mouth of the lagoon near the ocean. The road appeared to traverse a man-made sand dune on the beach. There was very little development in the vicinity of the property, and no homes existed between 23rd and 24th Avenues on the west side of the present day East Cliff Drive.

By 1948, East Cliff Drive had been constructed in its current location. A fill was constructed across the mouth of Corcoran Lagoon upon which the road was built. The outlet for the lagoon was situated in the location it exists today, at the north end of the mouth through a sluice gate controlled culvert. 23" Avenue had also been graded in by this time when it appears as a narrow dirt road skirting the top of the coastal bluff in the location where it exists today. It was graded all the way to the bluff fronting the ocean.

Development slowly took place on the land around the property from 1948 until the early 1960's when significant development occured, probably coincident with construction of the Santa Cruz Yacht Harbor. By 1965, the riprap seawall fronting the ocean bluff at the end of 23rd Avenue was installed to protect the new home there. By 1975, two of the currently existing four houses on 23rd Avenue east of the subject properties had been built, the two closest to East Cliff Drive. The next or third house was built just after 1975 since the excavation for the home is visible in the 1975 photos. The last or fourth house that lies adjacent to the eastern of the subject parcels was built between 1985 and 1994.

The aerial photos provided important observations about the beach area at the mouth of Corcoran Lagoon, the beach at the toe of the bluff fronting the subject properties. The man-made "sand dune" at the mouth of the lagoon constructed for ancestral East Cliff Drive acted to protect the entire beach area between this dune and the current East Cliff Drive from 1931 through 1982. This approximate 300 foot wide area was covered in vegetation and small ponds for much of this time span. The ponds grew and shrunk in size over time and appear to be affected by outflow from Corcoran Lagoon rather than ocean waves overtopping the dune. The evidence against overtopping of the dune by waves was persistent vegetation on the crest of the dune and in the back beach area, both of which would have been washed away by overtopping waves. Eventually, the "sand dune" at the mouth of the lagoon was obliterated by the intense storm waves and ensuing coastal erosion in the winter of 1982-83. The 1985 photos show the sand beach present today at the mouth of the lagoon oceanward of East Cliff Drive.

Of great significance to the subject properties, there was no evidence in any of the aerial photographs of erosion of the coastal bluff fronting the subject properties, not even during the severe **1982-1983** winter nor during the more recent El Niño event of **1997.** The latter of these events was particularly important for evaluating the erosion susceptibility of the bluff fronting the properties since it occurred when there was essentially no protection for the back beach area as

Vaden Report 23rd Avenue APN 028-232-15 and 16 July 2003 Santa Cruz County California

existed prior to 1983 in the form of the sand dune. And the position of the bluff top and toe remain consistent over time. This was not unexpected given the relative protected nature of this section of the bluff. It is oriented perpendicular to the trend of the shoreline, and therefore, not subjected to direct wave attack. Furthermore, it is setback quite a ways from the wave zone such that an extensive amount of sand would have to be removed from the beach before ocean waves could wash against the base of the bluff below the properties.

COASTAL EROSION PROCESSES and RATES

Erosion Processes

Coastal erosion is an episodic process that is typically associated with large ocean storms but may also be associated with landsliding that occurs during periods of intense and/or prolonged rainfall. Severe winter storms generate large ocean waves that when combined with high tides act to erode coastal bluffs. The susceptibility of a coastal bluff to erosion is dependent on several factors. Two of the more important are the type of earth materials composing the bluff and exposure to ocean waves. Uncemented terrace deposits tend to be more susceptible to erosion than resistent, cemented bedrock such as the Purisima Formation. And coastal bluffs directly facing the ocean and exposed to direct wave attack are much more susceptible to erosion than bluffs that are setback from the wave zone or oriented away from direct wave attack.

A secondary mechanism of cliff retreat involves sloughing or landsliding of the terrace deposits due to local ground saturation. This typically occurs when the terrace deposits are oversteepened by erosion or failure of bedrock cliffs underlying them. Neither of these conditions occur or have occurred in the past on the bluff below the properties. Furthermore, Haro, Kasunich and Associates conducted a slope stability analysis with the results showing stability even under worst-case conditions of strong ground shaking and moderate saturation.

Rates of Erosion and Bluff Retreat

Rates of coastal erosion vary considerably in the Santa Cruz area; this is due to both natural and man-made factors. Natural factors include: the presence or absence of a protective beach, resistance to erosion of material being attacked, exposure to wave attack, and offshore bathymetry. Protective beaches absorb wave energy and reduce the size of waves impacting sea cliffs. The depth of near-shore water also affects the energy of the waves approaching the shore The orientation of the coastline determines the exposure to wave attack.

The coastal bluff at the subject properties is protected from wave attack by several factors even though it is fronted by a large **sand** beach. The bluff runs perpendicular to the shoreline since it is the extension of the lateral margin of Corcoran Lagoon. The bluff at the properties is also setback more than 200 feet from the typical wave zone at the mouth of the lagoon. These two factors serve to insulate the bluff from all but the worst periods of erosion.

Our analysis of 11 sets of stereo aerial photographs taken between 1931 and 2001 indicated that no erosion or recession of the bluff fronting the properties **has** occurred during the last 72 years. In general, the photographs are of excellent quality and scale. They show no signs of missing vegetation as would occur if erosion had taken place. In addition, the bluff maintains its position throughout the time span covered by the photographs. And during this span of time, there were at least two periods during with severe coastal erosion took place around the Monterey Bay, in 1982-83 and again in 1997-98. In neither of these periods did erosion occur to the bluff fronting the properties. The evidence strongly suggests that the coastal bluff at the properties is not particularly susceptible to erosion from ocean processes.

In light of this information, we recommend the minimum 25-foot building setback. The setback should be measured from the top of the bluff which lies on the north side of the right-of-way corridor of 23rd Avenue.

CONCLUSIONS

- 1. The properties are **located** on roughly level ground above the **beach** at the mouth of Corcoran Lagoon on the **east** side of Santa Cruz. The elevation of the properties ranges from 32 to 38 feet with the majority of the properties being about 36 feet. They were both completely undeveloped at the time of our study.
- The properties are underlain by two geologic units. Immediately underlying the property is an approximate 27-foot thick section of marine terrace deposit consisting of clay to silty clay in the top 10 feet which grades to a gravelly sand in the lower 17 feet. Purisima Formation bedrock underlies the terrace deposits. The **Purisima** consists of partially cemented very fine-grained sandstone to siltstone that is typically much less permeable **than** the overlying terrace deposits. A thin perched groundwater **zone** at 27 feet was **an** indicator of the top of the **Purisima**.
- A short, moderately steep slope or coastal bluff borders the north side of 23rd Avenue at the properties. This bluff is very densely covered in berries, poison oak, and other short brush. The toe of the bluff is presently at about elevation 10 feet above Mean Sea Level and the top is at 30 feet.
- 4. Historical aerial photographs extending back to 1931 provide evidence that there has been no apparent erosion of the **coastal** bluff at the property in the last 72 years. Even during the severe Winters of 1982-83 and 1997-98, when many portions of the coast in Monterey Bay experienced significant erosion, no erosion occurred in the bluff fronting the properties.

RECOMMENDATIONS

- I. New construction at the property should adhere to the designated building setback line delineated on Plate 1 of this report. The setback is the minimum required, 25 feet. measured from the top of the bluff
- 2. A drainage plan should be developed for the properties. The plan should show how surface runoff from impereable surfaces will the controlled and where it will discharge. We recommend that no runoff be allowed to flow in a concentrated manner over and down the coastal bluff.
- 3. If any unexpected variations in soil conditions, or if any unanticipated geologic conditions are encountered during construction, or if the proposed project will differ from that discussed or illustrated in this report, we require to be notified so supplemental recommendations can be given.
- 4. We shall be provided the opportunity for a general review of final design plans and specifications. If we are not accorded the privilege of making the recommended reviews, we *can* assume no responsibility for misinterpretation of our recommendations.

INVESTIGATION LIMITATIONS

- 1. This report presents the results of our Geologic Investigation which addresses the geologic conditions, evaluates rates of coastal erosion, and makes a recommendation for a building setback at the subject property.
- 2. This written report comprises all of our professional opinions, conclusions and recommendations. This report supersedes any oral communications concerning our opinions, conclusions and recommendations.
- 3. The conclusions and recommendation noted in this report are based on probability and in no way imply the site will not possibly be subjected to ground failure or seismic shaking so intense that structures will be severely damaged or destroyed. The report does suggest that the existing and proposed portions of the dwelling should not be damaged by retreat of the coastal bluff if the recommendations noted in this report are adhered to over the life of the residence.
- 4. This report is issued with the understanding that it is the duty and responsibility of the owner, or of their representative or agent, to ensure that the recommendations contained in this report are brought to the attention of the architect and engineer €or the project, incorporated into the plans and specifications, and that the necessary steps are taken to see that the contractor and subcontractors carry out such recommendations in the field.
- 5. The findings of this report are valid **as** of the present date. However, changes in the conditions of a property **can** occur with the passage of time, whether they be due to natural processes or to the works of **man**, on this or adjacent properties. In addition, changes in applicable or appropriate standards occur whether they result from legislation or the broadening of knowledge. Accordingly, the findings of this report may be invalidated, wholly or partially, by changes outside our control. Therefore, this report should not be relied upon **after** a period of three years without being reviewed by an engineering geologist.

NIELSEN AND ASSOCIATES MANS MELSES

Hans Nielsen C.E.G. 1390 CEOPO

No. 1390 CERTAPIEU

REFERENCES

Aerial Photographs

- 1931; Frames B30 and B31;; black and white; **nominal** scale **1:12,000**; flown for the City of Santa Cruz; flown by Fairchild Aerial Surveys; on file at **the** University of California Map Library at U.C. Santa Cruz, photos 1931-B.
- 1948: Frames CDF 5-4-60,61; black and white; nominal scale 1:10,000; flown for and by U.S. Forest Service; on file at the University of California Map Library at U.C. Santa Cruz, photos 1948.
- 1956: Frames CJA-2R-85,86; black and white; nominal scale 1:12,000; flown for U.S. Dept. Of Agriculture; flown by Aero Services Corp, PA; on file at the University of California Map Library at U.C. Santa Cruz, photos 1956-B.
- 1963: Frames **CJA-1DD-114,115**; black and white; nominal scale 1:10,000; **on** file at the University of California Map Library at U.C. Santa Cruz, photos 1963•E.
- 1965: Frames SC-1-20,21; black and white; nominal scale 1:3,600; flown **by** and for the U.S. Army **Corp** of **Engineers; on file** at the University of California Santa Cruz Map Library, photos 1965-F.
- 1975: Frames SCZCO-1-40,41; Black and White; nominal scale 1:12,000; for **Santa** Cruz County; By American Aerial **Surveys**, Inc.; on file at the University of California Map Library at U.C. Santa Cruz, photos 1975.
- 1980: Frames USDA-179-54,55; black **and** white; nominal scale 1:40,000; flown for U.S. Agricultural Stabilization and Conservation Service; **flownby** WAC, Eugene, Oregon; on file at the University of California Map Library at U.C. Santa Cruz, photos 1980D.
- 1982: Frames USGS-JSC-9-1,2; black and white; **nominal** scale 1:12,000; flown for US. Geological **Survey**; flown by ?; on file at the University of **California** Map Library at U.C. **Santa** Cruz, photos 1982-C.
- 1985: Frames **WAC-85CA-13-138,139,140**; black and while; **nominal** scale **1:31,680**; flownby Western Aerial **Survey,** Inc.; on file **at the** University of California Map Library at U.C. **Santa Cruz**, photos 1985-D.
- 1994: Frames Big Creek Lumber-13-1,2; black and white; **nominal** scale 1:15,840; on file at the University of California Map Library at U.C. Santa Cruz, photos 1994.
- 2001: **Frames** CCC-BQK-C-123-2,3; color; **nominal** scale 1:12,000; on file at **the** University of California Map Library at U.C. Santa Cruz, photos **2001**.

Literature

- Abrahamson, N.A. and Silva, W.J., 1997, Empirical Response Spectral Attenuation Relations for Shallow Crustal Earthquakes, Seismological Research Letters, vol. 68, Number 1, pp. 94-127.
- Atwater, T., 1970, Implications of Plate Tectonics for the Cenozoic Tectonic Evolution of Western North America, Geological Society of America Bulletin, v. 81, No. 12, pp 3513-3536.

- Buchanan-Banks, J.M., **Pampeyan**, E.H., Wagner, H.C., and McCulloch, D.S., **1978**, Preliminary map showing recency of faulting in *coastal* south-central California, **U.S.** Geological Survey Miscellaneous Field Map MF-910, 3 plates and text, 1:250,000 scale.
- Coppersmith, K.J., 1985, Evaluation of seismic design criteria New San Clemente Dam, by Geomatrix Consultants, San Francisco, California
- Coppersmith, K.J., 1979, Activity Assessment of the Zayante-Vergeles fault, Central San Andreas fault system, California, unpublished Ph.D. thesis, University of California, Santa Cruz.
- Dupré, William R, July 1975, Quaternary history of the Watsonville lowlands, **north-central** Monterey Bay **region**, California, a Ph.D. **dissertation**, Stanford University.
- Dupré, William R, 1975, Maps *showing* geology and liquefaction potential of Quaternary deposits in Santa Cruz County, California: U.S. Geological *Survey Miscellaneous* Field *Studies* Map MF-648.
- Frankel, A.D., Petersen, M.D., Bryant, W.A., Cramers, C.H., Cao, T., Reichle, M.S., Lienkaemper, J.J., McCrory, P.A., and Schwartz, D.P., 1996, probabilistic Seismic Hazard Assessment for the State of California, Calif. Div. of Mines and Geology Open-File Report 96–08, U.S. Geological Survey OFR 96-706;33 pp, Appendix, and Map.
- Graham, S.A., 1978, Role of Salinian Bl∞k in Evolution of San Andreas Fault System, California, Amer. Assoc. of Petroleum Geologists Bulletin, Vol. 62, No. 11, pp. 2214-2231.
- Graham, S.A. and Dickenson, W.R., 1978, Evidence of 115km right-slip on the San Gregorio-Hosgrifault trend: Science, v. 199, pp. 179-181.
- Greene, H.G., 1977, Geology of the Monterey Bay Region, California. USGS Open-File Report 77-718, 9 plates, 1:200,000 scale.
- Griggs, G.B., 1973, Earthquake activity between Monterey and Half Moon Bays, California, <u>in</u> California Geology: California Division of Mines and Geology, v. 26, no. 5, pp. 103-110.
- Griggs, G.B. and Johnson, RE., 1979. Coastal Erosion, Santa Cruz County, California Geology, V. 32, No. 4, pp. 67-76.
- Hall, N.T. Şarna-Wojcicki, AM., and Dupré, W.R., 1974, Faults and Their Potential Hazards in Santa Cruz County, California. USGS Miscellaneous Field Studies Map MF-626, 3 sheets, 1:62,500 scale.
- Hamilton, D.H. Fisher, D.L., and **Jahns**, R.H., **1979**, Evidence of Late Quaternary right slip and other deformation along the San Gregorio fault, California: Another view: **Geological** Society **of** America **Abstracts** with *programs*, v. 11, p. 437.
- Haro, Kasunich and Associates, June 1999, GEOTECHNICAL INVESTIGATION FOR PROPOSED RESIDENTIAL STRUCTURE, APN 028-232-15,16, 23rd Avenue, Santa Cruz County, California
- Haro, Kasunich and Associates and Foxx, Nielsen and Associates, 1990, GEOTECHNICAL & GEOLOGIC INVESTIGATION FOR 100 AND 110 GEOFFROY DRIVE, SANTA CRUZ, CALIFORNIA, for Norman and Doris Landess and Robert and Helen Wade, unpublished consulting report.

- Jennings, C.W. and others, 1975, Fault *map* of California, California Division of Mines and Geology, California Geologic Data Map Series, Map #1.
- Lawson, AC., 1908, editor, California Earthquake of April 18, 1906, report of the State Earthquake Investigation Commission, Camegie Institute of Washington, Pub. no. 87, v. I and II, 600p.
- Lindh, AG., 1983, Preliminary assessment of long-term probabilities for large earthquakes along selected fault segments of the San Andreas fault system in California, U.S. Geological Survey, Open-File Report 83-63, 15p.
- McCrory, P.A., Greene, H.G. and LaJoie, K.R., 1977, Earthquake Intensity Zonation and Quaternary Deposits, San Mateo, Santa Cruz, and Monterey Counties, California, USGS Misc. Field Studies Map MF-903.
- Mitchell, **G.D.** 1928, Santa Cruz earthquake of October 1926, Seismological Society of America Bulletin, v. 18, no. 13, pp. 153-213.
- Oakeshott, G.B., 1975, editor, San Fernando, California Earthquake of 9 February, 1971. California Division of Mines and Geology Bulletin 196, Resources Building, Sacramento, California, 463 p.
- Page, B.M., 1970, Sur-Nacimiento Fault Zone of California, Geologic Society of America Bulletin, v. 81, no. 3.
- Pflaker, George and Galloway, John P., editors, 1989, Lessons learned from the Loma Prieta, California, Earthquake of October 17, 1989, U.S. Geological Survey Circular 1045.
- Plant, N. and **Griggs**, G.B., April **1990**, Coastal Landslides caused by October **17**, **1989** earthquake, *Santa* Cruz County, **California**, in California Geology, v. **43**, no. **4**.
- Picessel, M.R and Slossen, J.E., 1974, Repeatable high ground accelerations from earthquakes: California Geology, v. 27, no. 9, pp. 195-199.
- United States Geological Survey, Working Group of California Earthquake Probabilities, 1990, Probabilities of large earthquakes occurring in California on the San Andreas fault, U.S. Geological Survey Circular 1053.
- **United States** Geological Survey, the Working Group on California Earthquake probabilities, **1988**, **probabilities** of large earthquakes occurring in California on the *San* Andreas fault, open-file report **88-398**, **62 pp**.
- Ward, P.L. and Page, R.A., 1989, The Loma Prieta Earthquake of October 17, 1989, U.S. Geological Survey, U.S. Government Printing Office.
- Weber, G.E. and LaJoie, K.R., 1974, Evidence of Holocene displacement on the San Gregorio fault, San Mateo County, California (Abstract): Geological Society of America, v. 6, no. 3, pp. 373-374; Cordilleran Section, 70th Annual Meeting, Las Vegas, Nevada.
- Weber, G.E. and Cotton, W.R., 1981, Geologic Investigation of Recurrence Intervals and Recency of Faulting Along the San Gregorio Fault Zone, San Mateo County, California: U.S. Geological Survey Open-File Report 81-263
- Weber, G.E. and others, 1979, Recurrence intervals for major earthquakes and **surface rupture** along the San **Gregorio** fault zone, field trip guide, Geological Society of America.

Vaden Report 23rd Avenue APN 028-232-15 and 16

July 2003 Santa Cruz County California

APPENDIX A

Logs of Exploratory Borings by Haro, Kasunich and Associates April 1999

Bore Log File PROJECT NO. SC6536								
LOGGED BY GB DA	TE DRILLED April 1, 199	9 BORIN			6" S			PRING NO. 1
Sample No. Symbol	IL DESCRIPTION	·	Unified Soil Classification	Blows/foot 350 ft - 1bs.	Qu - t. s. t. Penetrometer	Dry Density p.c.f.	Moisture % dry wt.	MISC. LAB RESULTS
5 , 2	gray fat CLAY w/trace very stiff Silty SAND, damp, den			51		100	24.5 13.6	Unconfined Qu = 6,390 psf
- 8 - 9 - 10 - 11 - 12 - 13	starting at 12'		4	13		8	3.2	
T 14 Well gra	ded SAND with Silt and	l gravel, dense	4	0		8	.2	
- 20 - 21 - 22 - 23 - 24								ができます。 のでは、 ので
BY: Haro, Kasunich & Associates	i, Inc.	FIGURE NO. L	OG OF	TEST B	ORIN	G		

PROJECTNO. SC6536

DATE DRILLED April 1, 1999 BORNO DIAMETER 6° SS BORNO NO. 2 SOIL DESCRIPTION SOI	S Page 4				JECI	-10.	000.	750		į
2 - 1 Brown lean CLAY w/fine Sand, moist, stiff 2 - 2 Unconfined Qu = 2,736 psf Clayey SAND, very moist, stiff 7 2 - 3 Ercwn gray Clayey SAND, very moist, loose 1 10 21.7 Brown Clayey SAND, medium dense 19 BORING TERMINATED AT 11.5 ft. BORING TERMINATED AT 11.5 ft. 18 19 2 2 2 2 2 2 2 2 2	ŁOGGED BY GB	DATE DRILLED April I, 1999	BORING D	IAME	TER	6" S	S	ВО	RING NO.	2
L 2-2 Clayey SAND, very moist, stiff 23 107 20.2 Unconfined Qu = 2,730 psf 24.0	Depth, ft. Sample No. and type Symbol	SOIL DESCRIPTION	Unified Soil	Classification	Blows/foot 350 ft - lbs.	Qu - t. s. t. Penetrometer	Dry Density p.c.f.	Moisture % dry wt.	M I RES	ISC. AB SULTS
T	ı ı ı		moist, stiff	2	23		107	20.2		
Orange gray fat CLAY Orange gray fat CLAY Brown Clayey SAND, medium dense 19 BORING TERMINATED AT 11.5 ft. 18 19 20 21 21 22 23 24	T		moist, loose							
10	7 8	Orange gray fat CLAY			3		104	61./		
13	9 -4 -4		nse	19	9					
- 16 - 17 - 18 - 19 - 20 - 21 - 22 - 23 - 24 - 24 - 10 -	13	BORING TERMINATED AT 11	.5 ft.							
18							i			
— 21 — 22 — 23 — 24	_ 18									
	— — 21									
BY: Haro LOG OF TEST BORING	23									
	BY: Haro		LOG	OF T	EST BO	 ORIN	G L			

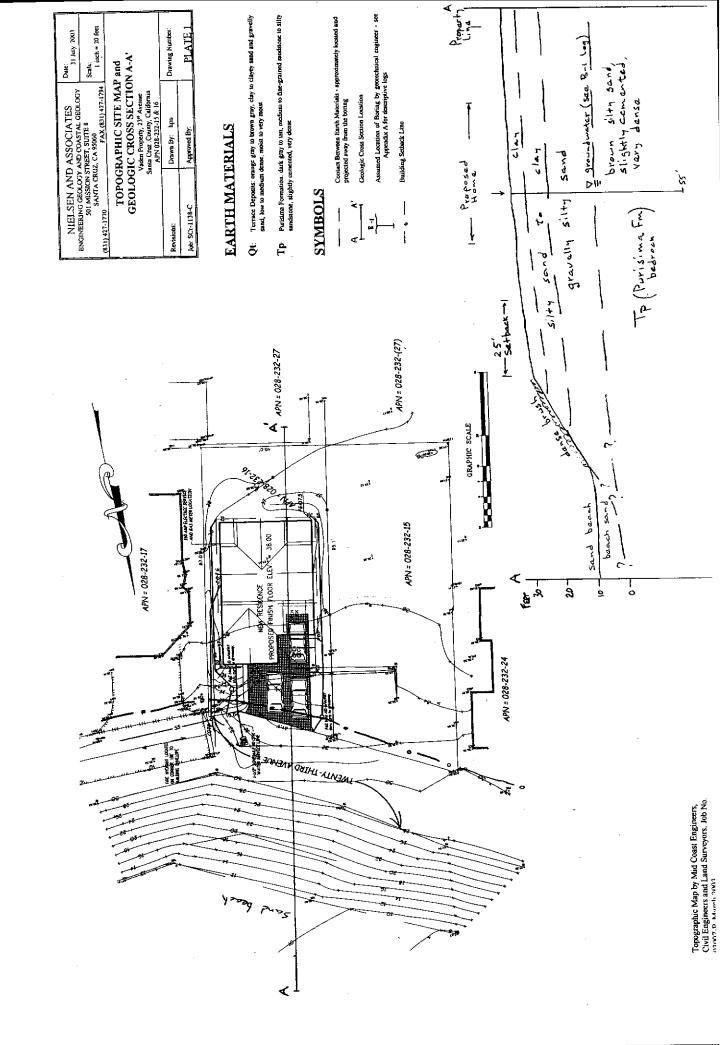
	S page 5 GED BY C	DATE DRIVE			ECT N	O. SC	6536	
-	Tara	B DATE DRILLED April 1,	999 BORII	NG DIAME	TER 6	SS	·Bo	ORING NO. 3
Depth, ft.	Sample No. and type	SOIL DESCRIPTION		Unified Soil Classification Blows/foot	350 ft - 1bs, Qu - t. s. t.	Penetrometer Dry Density D.c. f.	Moisture % dry wt.	MISC. LAB RESULTS
1 2	3 - 1 3 L 3 - 2 2	Brown lean CLAY w/Sand,	noist, stiff	16		98	20.1	Unconfined Qu = 2,400 psf
- 4 	T	Very moist, medium stiff		7			23.7	
- 5 - 6 - 7	3 - 3 T	Clayey SAND, loose		16		101	20.8	
— — 8 — 9 —		Orange gray fat CLAY, stiff		 				
<u> </u>	3 - 4 X	Brown Clayey SAND, mediu		29		83	23.1	
- 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 20 - 21 22 23 24		BORING TERMINATED A	Γ 11.5 ft.					
Y: Haro,	Kasunich	& Associates, Inc.	FIGURE NO. L	OG OF TES	T BORIN	√G		

Vaden Report 23rd Avenue APN 028-232-15 and 16

July 2003 Santa Cruz County California

APPENDIX B

Site Geologic/Topographic Map and Geologic Cross Section



16 May 2005

Job No. SCr-1138-C

Val and Lilli Rey Vaden c/o Robert Tomaselli 402 Grand Avenue Capitola, CA 95010

SUBJECT Response to County Geologist's request for clarification of issues

addressed in our geologic report for a proposed single family home

REFERENCE APN 028-232-15 & 16,23rd Avenue, Santa Cruz County, California

Dear Mr. and Mrs. Vaden:

The County Geologist, Joe Hanna, has requested that we provide clarification on two issues associated with our geologic report of 30 July 2003 for the properties. The first issue involves the origin of the recommended 25-foot building setback, and the second involves the position of the driveway relative to the building setback.

The 25-foot building setback recommended in **our** report is the **minimum** required under County Code Section 16.10.070.h. Our analysis of bluff recession rates revealed no evidence that the bluff at the property has receded over the past 76 **years** (1931 to the present). Since no bluff recession has occurred at the property in historical time, the building setback was established by the **minimum** setback required by county code.

In regards to the driveways and parking areas to and for the properties, the setback requirement was not intended to apply from a geologic standpoint since code section 16.10.070.h.ii speaks to a "stable building site over a 100-year lifetime of the *structure* (italics and bolding added for emphasis). We viewed the term "structure" as being specific to the home. *Our* analysis provided evidence that the bluff at the property has not receded over the past 76 years, and the orientation and position of the bluff strongly suggest that it will not be subjected to significant oceanic erosional processes during the lifetime of the proposed homes. Additionally, it is our opinion that the driveway will not exacerbate erosion or instability in the bluff since we recommended development of an engineered drainage plan that will most certainly not allow the discharge of concentrated surface runoff from impermeable surfaces, such as the driveway, down the bluff face. Therefore, it is reasonable to assume that the driveway will be stable for the design lifetime of the homes where the surface is stipulated by County ordinances and code.

Sincerely,

Hans Nielsen C.E.G. 1390



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

July 1, 2005

Val and Lilli Rey Vaden C/o Robert Tomaseli 402 Grand Avenue Capitola, CA 95010

Subject: Review of Geotechnical Investigation by Haro, Kasunich, and Associates

Dated: June 1999; Project No. SC6536 And

Review of Geologic Investigation by Nielsen and Associates Dated: July 2003, and May 16, 2005; Project No. SCr1138-C

APN: **028-232-15816**, Application **No**: 02-0432

Dear Val and Lilli Rey Vaden:

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

- 1. All construction shall comply with the recommendations of the reports.
- 2. Final plans shall reference the reports and include a statement that the project shall conform to the report's recommendations.
- 3. Prior to building permit issuance, *plan* review *letters* shall be submitted to Environmental Planning. The authors \mathbf{d} these reports shall write these letters and shall state that the project plans conform to the report's recommendations.
- **4.** The attached declaration of geologic hazard must be recorded with the County Recorders Office before building permit issuance.

After building permit issuance, the geotechnical engineer and engineering geologist must remain involved with the project during construction. Please review the Notice to *Permits* Holders (attached).

Our acceptance of the reports is limited to their technical content. Other project issues such as zoning, fire safety, septic or sewer approval, etc. may require resolution by other agencies.

Review of Geotechnical Investigation and Engineering Geology Report

APN: 028-232-15&16

Page 2 of 5

Please call the undersigned at 454-3175 if we can be of any further assistance.

Sincerely,

J**og∕H**anna

County Geologist

Nielsen and Associates, 501 Mission Street, Avenue 8, Santa Cruz, CA 95060 Haro. Kasunich, and Associates, 116 East Lake Avenue, Watsonville, CA 95076 Robert Loveland. Resource Planner

GROSS BUILDING AR SUPPLEMENTS AL APPLICATION SUBMITTAL REQUIRENTS

spe	The following floor area calculations help staff to process your, approped and efficiency. Please include the index on the cover sheet of submit a separate set of calculations for each proposed and existing	f your plans, and
	BUILDING PROPOSED (Indicate which building on the plot plexisting PROPOSED (Check one.)	an.)
LOT	LOT COVERAGE CALCULATIONS	
2. 3. 4. 5.	1. Zone District: P-1-4 2. Parcel Area: 3568 sq. ft. UH acres 3. Area of Rights-of-way: UA sq. ft. 4. Net Parcel-Area'(2 - 3): 3568 sq. ft. 5. Coverage by Structures: 1380 sq. ft. (Total footprint of all structures over 18" in height.) 6. Percentage of Parcel Coverage (5 + 4 x 100): 33,7 x	
HEA	HEATED SPACE CALCULATION	
1. 2.	1. Total Heated Space: 1770 sq. ft. 2. Total Unheated Space: 1215 sq. ft. * NON HABITABLE	(LESS THAN 7-6
FLO	FLOOR AREA CALCULATIONS BY TYPE OF SPACE	
NOTE	NOTES: (e) = existing square footege (p) = proposed square footage See accompanying definitions for an explanation of each of the following categories. INCLUDE ONLY THOSE CATEGORIES THAT APPLY TO THE BUILDING.	
1.	1. BASEMENT/UNDERFLOOR	_
	If any part of the basement or underfloor is 7'6" or higher (& for underfloor, there is an interior stair & flooring): a TOTAL BASEMENT/UNDERFLOOR AREA GREATER THAN 5' IN HEIGHT	р. ф <i>Ф.ф</i>
	EXISTING PRO	POSED TOTAL FT. SQ. FT.
2.	2. FIRST FLOOR a Area w/ ceilings less than 16' in height b. Area w/ ceilings 16' - 24' (X 2) c. Area w/ ceilings >24' (X3) (e) (p) 4.4 (p) 4.4 (p) 4.4 (p) 4.4	by. F1.
	EXISTING PRO	172 1272 POSED TOTAL : FT. SQ. 81.

3.	SECOND FLOOR a. Area w/ ceilings less than 16' in height b. Area w/ceilings 16' - 24' (x 2) c. Area w/ceilings >24' (x3) (e) (p) 498 (p) 498
	d. TOTAL SECOND FLOOR AREA (a + b + c) EXISTING SQ. FT. SQ. FT. SQ. FT. SQ. FT.
4.	MEZZANINE a. TOTAL MEZZANINE AREA EXISTING SQ. FT. SQ. FT. SQ. FT.
5.	ATTIC If any part of the attic is 7'6" or higher: a. TOTAL ATTIC AREA GREATER THAN 5' IN HEIGHT EXISTING SQ. FT. SQ. FT. SQ. FT. SQ. FT.
6.	GARAGE a. Total Garage Area b. Credit c. TOTAL GARAGE AREA. (a - b) (a - b) (b) (c) (c) (d) (e) (e) (e) (e) (e) (e) (e
7.	TRELLIS AND ARBOR If the top of the trellis or arbor is solid: a. TOTAL AREA UNDERNEATH TRELLIS OR ARBOR EXISTING PR POS D SQ. FT. SQ. FT. SQ. FT.
8.	UNENCLOSED, COVERED AREAS If there are covered areas on more than one side of the building, submit items a - d for each side on a separate sheet. The first 3' does not count. a. Total area below eave, over- hang, projection, or deck more than 7'6" in height b. Area of first 3' of eave or 140 sq. ft. whichever is larger c. Remaining area (a - b) d. TOTAL COVERED AREA OF SIDE 1) Use one of the following: a) If length of covered area exceeds 1/3 of the building length on that side:
	TOTAL COVERED AREA OF SIDE (enter c) EXISTING SQ. FT. SQ. FT.

12. LARGE DWELLING CALCULATIONS:

	b) If length of covered area is less than 1/3 of the building length on that side: TOTAL COVERED AREA OF SIDE	NA- EXISTING SQ. FT.	PROPOSED SQ. FT.	0.0. TOTAL SQ. FT.
	e. TOTAL COVERED AREA OF ALL SIDES(enter sum of all sides),	EXISTING SQ. FT.	ρφ PROPOSED SQ. FT.	₽.₽ TOTAL SQ. FT.
9.	TOTAL FLOOR AREA OF THE BUILDING	EXISTING SQ. FT.	PROPOSED SQ. FT.	1770 TOTAL SQ. FT.
10.	TOTAL FLOOR AREA OF ALL BUILDINGS(Sum of the floor area of all buildings.)	NA- EXISTING SQ. FT.	PROPOSED SQ. FT.	1770 TOTAL SQ. FT.
11.	FLOOR AREA RAT D CALCULATIONS. Proposed FAR: 49.6 % (net parce) area%proposed	i floor are	a from #10	x 100)



Mid Coast Engineers

Civil Engineers and Land Surveyors

70 Penny Lane, Suite A - Watsonville, CA 95076 Phone: (831) 7242580

Fax: (831) 724-8025 e-mail: art@midcoastengineers com

Richard A. Wadsworth

Civil Engineer

Arthur L. Bliss Civil Engineer

Stanley O. Nielsen Land Surveyor

> Lee O. Vaage Land Surveyor

Jeff S. Nielsen Land Surveyor

July 17, 2005

MCE's Job Ref# 03007-X

Ms. Alyson Tom, Dept. of Public Works-Drainage Division 701 Ocean Street -4th Floor Santa Cruz. CA 95060

Re: Supplemental drainage/hydrology review and supplemental calculations as requested to accompany Application # 02-0432 [Assessor's Parcel # 028-232-16 – Val Vaden

Dear Alyson,

The accompanying exhibit of the subject site and adjacent parcels is forwarded per your request to reflect tributary watershed of that area to/toward the intersection of 23rd and East Cliff.

The site specific runoff, as well as the above noted watershed has been calculated using County design criteria and indicates a potential runoff increase from the site of 0.054 cfs. The proposed site development shows that a number of "BPM's" or best management practices have been incorporated to detain this potential short duration increase in flow. The accompanying calcs indicate that a detaining facility of not more than 34 CuFt would eliminate even the 25 year event and that a 25 CuFt ([0.78-0.52]Cr*2.02in/hr*0.8Ac*10min*60 sec) volume would be sufficient to contain the 10 year design storm increase.

The roofleader dispersion trench and grassey swales are incorporated in the design to allow greater percolation rates into the existing soil and will probably eliminate any increased impact from the proposed project. Never-the-less, the full increase can easily be handled by the on site and 8" PVC downstream piping to the existing area drain. When maintenance is completed on the 10" CMP leaving that above referenced Area Drain, this less than 4% [0.054/1.41cfs] will be fully contained within the existing drainage system.

The overall tributary area of approximately 46,000 square feet has a potential of a 25 year return frequency flow of 1.41 CFS vs the 10 year design frequency's flow of 1.22 CFS. This [larger] design flow is handled as a potential overland release and would still be contained within this "23" Avenue" driveway section.

Our specific site review notes that the downstream pipeline of the 18 x 18 Area Drain in the County's right-of-way has been plugged but the upstream facilities have continued functioning properly; this area drain is currently functioning as a "bubble-up" and said upstream flows have continued downstream within the westerly sideline of East Cliff to the sandy low point where the water is absorbed into the adjacent beach sand.

There is a short section of asphalt berm that, while currently serviceable, should be scheduled for maintenance/repair by the pertinent Homeowner's Association or similar neighboring owners' group responsible for the roadway's maintenance.

Should you have any additional questions regarding the above, the accompanying calculations and/or exhibits, please feel encouraged to call at your earliest convenience.

Exp. 3-31-06

Sincerely,

Arthur L. Bliss,

RCE 26114

My current registration

renewal date is:

March 31,2006

JobNum=03007-D

Mid Coast Engineers 70 Penny Lane, Suite A July 15, 2005

Watsonville, CA 95076 (831)724-2580

Sheet No.lof 3

DETENTION SYSTEM DESIGN

Composite Runoff Coefficient for Rational Method

00000000

l

Reference: "Design and Construction of Sanitary and Storm Sewers", A.S.C.E. Manual No. 37,1972.

Site only

APN 028-232-16 = 23rd Avenue (west of East Cliff

Find composite runoffcoefficient for predevelopmentQ:

Square Feet (1)	Character of surface (2)		Coefficie	ent	(4)	Compos. Factor (1)*(3+4)/2
	Pavement		orig's			
· 0	AC and Conc.	0.85	0.85	to	0.90	0
0	Brick	0.90	0.90	to	0.90	0
0	Roofs	0.90	0.90	to	0.90	0
Die 6 560	Lawns, sandy soil					
0	Flat, 2 %	0.40	0.40	to	0.60	0
2855	Average, 2 to 7%	0.40	0.40	to	0.60	1428
713	steep, > 7%	0.60	0.60	to	0.60	426
	Lawns, heavy soil					
	Flat, 2 %	0.50	0.50	to	0.60	0
0	Average, 2 to 7%	0.50	0.50	to	0.60	0
9 9	Steep, > 7%	0.50	0.50	to	0.60	0
3568	s.f. total (or approx.		C	omposit	te "C":	0.52
•		0.08	Acres			

Find composite runoff coefficient for postdevelopment O:

Square Feet (1)	Character of surface (2)	Runoff (3)	coefficie	ent	(4)	Compos. Factor (1)*(3+4)/2
	Pavement					
1275	AC and Conc.	0.85	0.85	to	0.90	<u> 111</u> 6
0	Brick	0.90	0.90	to	0.90	0
1250	Roofs	0.90	0.90	to	0.90	1125
	Lawns, sandy soil					
0	Flat, 2 %	0.40	0.40	to	0.60	0
831	Average, 2 to 7%	0.40	0.40	to	0.60	416
212	Steep, > 7 %	0.60	0.40	to	0.60	127
	Lawns, heavy soil					
0	Flat, 2 %	0.50	0.50	to	0.60	0
0	Average, 2 to 7 %	0.50	0.50	to	0.60	0
0	Steep, > 7 %	0.60	0.50	to	0.60	0

3568 s.f. total (or approx.

Composite "C":

0.78

JobNum=03007-D

Mid Coast Engineers 70 Penny Lane, Suite A Watsonville, CA 95076 (408) 724-2580 July 15, 2005

Sheet No 2 of 3

DETENTION SYSTEM DESIGN

Pre- and Post-Development Runoff

Reference: "County of Santa Cruz - Design Criteria PART 3 STORM DRAINAGE" Design Criteria: Rational Method Q = CaCl A where [i] = tabular values of rainfall

from Co's. Fig. SD-7 and P60 Isopleth of SD-6

While [ii] is established directly for a return period of 10 years, [Q10]

Other return periods are developed from multiplier factors.

For a P60 value of and a Predevelopment C = and a Postdevelopment C =

Watershed Area = 0.08 acres

Pre-development runoff (allowable release rate): is based on a Design storm of year frequency of return, which uses a 1.00 adjusting factor or,

i ("/hr) =	2.02 fort=)]minutes	_
	and Q = CaCiA =		0.086	CFS
			252525	
Post-develo	pmentrunoff using a	(designing)	25	yr storm of various durations:
(which uses	an intensity modifying	g factor) of	1.10	a - ly
for t of	10 minutes,	lt =	2.22	in/hr
	and Q = CaCiA =		0.14	CFS
for t of	15 minutes,	It =	1.82	inlhr
	and Q = CaCiA =		0.12	CFS
fort of	20 minutes,	lt =	1.67	inlhr
	and Q = CaCiA =		0.11	CFS
fort of	25 minutes,	It =	1.49	inlhr
	and Q = CaCiA =		0.10	CFS
	basa g			
fort of	30 minutes,	it =	1.36	in/ hr
	and Q = CaCiA =		0.09	CFS
fort of	40 minutes,	it =	1.19	
	and Q = CaCiA =		0.08	CFS
fort of	50 minutes,	lt =		inlhr
	and Q = CaCiA =		0.07	CFS
for t of	60 minutes,	It =	0.97	
	and Q = CaCiA =		0.06	CFS
for t of	80 minutes,	n =	0.89	
	and Q = CaCiA =		0.06	CFS
		L.		
fort of	100 minutes,	It =		inlhr
	and $Q = CaCiA =$		0.05	CFS

JobNum=03007-D

Mid Coast Engineers 70 Penny Lane, Suite A Watsonville, CA 95076 (408) 724-2580 July 15, 2005

3 of 3

===

Sheet

DETENTION SYSTEM DESIGN

Required Storage Volume

Reference: "Practices in Detention of Urban Stormwater Runoff,

Special Report No. 43*, American Public Works Association

Design Criteria: Modified Rational Method

assumes constant release rate

Project post	-deve	lopmentcon	centration tin	ne = 10 minutes. Storm Volume CuFt	Release Volume CuFt		
Fort≈	1 o	minutes. V	/olume =	65	52	34	< <u>M</u> A
Fort≒	15	minutes, V	/olume =	104	78	27	
Fort=	20	minutes, V	/olume =	126	103	24	
Fort≒	25	minutes, V	/olume =	143	129	14	
Fort≒	30	minutes, V	/olume =	156	155	1	
Fort =	40	minutes, \	/olume =	183	207	- 24	
Fort≔	50	minutes, \	/olume =	204	258	-54	
Fort =	60	minutes. \	/olume =	224	310	- 86	
Fort≒	60	minutes. \	/olume =	272	414	- 141	
Fort =	100	minutes, \	/olume =	307	517	-210	

This site has a roof leader storm dispersion trench system being proposed and it utilizes various BMPs including grasey swales on either side of the proposed structure to further minimize the impact of the potential increase of runoff as indicated above.

MAXIMUM REQUIRED STORAG 34 CF

Val Vaden's 23rd Avenue JobNum=03007-D Mid Coast Engineers July 15, 2005 70 Penny Lane, Suite A Watsonville, CA 95076 (831) 724-2580 Sheet No.lof 3 **DETENTION SYSTEM DESIGN** Composite Runoff Coefficient for Rational Method __0000000 Reference: "Design and Construction of Sanitary and Storm Sewers", A.S.C.E. ManualNo.37, 1972. APN 028-232-16 = 23rd Avenue (west of Eas Cliff Location Find composite runoff coefficient for predevelopment Q:

Square Compos. Feet Character of surface Factor (3) (4) (1) (1)*(3+4)/2Pavement orig's 6583 AC and Conc. 0.85 0.90 6089 to · 0 0.80 **Brick** 0.90 0 to 10365 Roofs 0.85 to 0.90 9588 Lawns, sandy soil 9 Flat, 2 % 0.40 0.60 0 to 23242 Average, 2 to 7 % 0.40 0.60 8135 5810 steep, > 7 % 0.40 0.60 2179 Lawns, heavy soil 0 Flat, 2 % 0 0.50 0.60 to 0 Average, 2 to 7 % 0.50 0.60 0 to ____0 steep, > 7 % 0.50 0 to 0.60

46000 s.f. total (orapprox. Composite "C": 0.57

Find composite runoff coefficient for postdevelopment Q:

Square Feet (1)	Character of surface (2)			(4)	compos. Factor (1)*(3+4)/2
	Pavement				
7858	AC and Conc	0 85	to	0.90	7269
0	Brick	080	to	0.90	0
11615	Roofs	085	to	0.90	10744
10000000	Lawns, sandy soil				
· 0	Flat, 2 %	040	to	0.60	0
20270	Average. 2 to 7 %	0 40	to	0.60	7095
6757	Steep. > 7 %	040	to	0.60	2534
	Lawns, heavy soil				
0	Flat, 2 %	050	to	0.60	0
0	Average, 2 to 7 %	050	to	0.60	0
0	Steep, > 7 %	0 50	to	0.60	0

46500 s.f. total (or approx. Composite "C": 0.59

Acres

Mid Coast Engineers 70 Penny Lane, Suite A Watsonville, CA 95076 (408) 724-2580

July 15, 2005

Sheet Nc 2 of 3

DETENTIONSYSTEM DESIGN

Pre- and Post-Development Runoff

Reference: "County of Santa Cruz- Design Criteria PART 3 STORM DRAINAGE Design Criteria: Rational Method, Q = CaCi A where [i] =tabular values of rainfall

from Co's. Fig. SD7 and P60 Isopleth of SD-6

While [i] is established directly for a return period of 10 years, [Q10]

Other return periods are developed from multiplier factors.

For a P60 value of: 1.4 >"i" = 0.94 [i of 60 min @23rd on coast] and a Predevelopment C = 0.57 [derived on first page] and a PostdevelopmentC = 0.59 [alsoderived-lstpage] Predev. conc. time = 10 minutes (maximum) Watershed Area = 1.07 acres

Pre-development runoff (allowable release rate): is but on a list is storm of 10 year frequency of return, which uses a 1.00 adjusting factor or

winder AMERIC	year requericy of fetom, which uses a	adjusting factor of
i ("/hr) =	2.02 fort= and Q = CaCiA =	10 minutes 1.220 CFS 252525
Postdevelo	opmentrunoff using a (designing)	25 yr storm of various duratio
	s an intensity modifying factor) of	1.10
fort of	10 minutés, It =	2.22 inlhr
	and Q = CaCiA =	1.41 CFS
lort of	15 minutes, It =	1.82 in/h r
	and Q = CaCiA =	1.15 CFS
fort of	20 minutes, It =	1.67 inlhr
	and Q = CaCiA =	1.06 CFS
fort of	25 minutes, It =	1.49 inlhr
	and Q = CaCiA =	0.95 CFS
fort of	30 minutes, It =	1.36 in/hr
	and Q = CaCiA =	0.86 CFS
fort of	40 minutes, It =	1.19 in/hr
	and Q = CaCiA =	0.76 CFS
fort of	50 minutes, It =	1.07 in/h r
	and Q = CaCiA = েট্টেল্টেল্ট	0.68 CFS
fort of	60 minutes, It =	0.97 inlhr
	and Q = CaCiA =	0.62 CFS
for t of	80 minutes, It ≃	0.89 inlhr
	and Q = CaCiA =	0.56 CFS
fort of	100 minutes, It=	0.80 inlhr
	10.000	

0.51 CFS

and Q = CaCiA =

JobNum=03007-D

Mid Coast Engineers

July 15, 2005

70 Penny Lane, Suite A

Watsonviile, CA 95076 (408) 724-2580

Sheet of 3

DETENTION SYSTEM DESIGN

Required Storage Volume

Reference: "Practices in Detention of Urban Stormwater Runoff.

Special Report No. 43, American Public Works Association

Design Criteria: Modified Rational Method

Fort= 100 minutes, Volume =

assumes constant release rate			_		1 Doce
Project postd	evelopmentconcentration	ontime = 10 minutes. storm Volume CuFt	Release Volume CuFt	Net Storage CuFt	full b Hotel
Fort =	10 minutes, Volume =	847	732	115 <	MARIE TO de sheet)
Fort =	15 minutes, Volume =	1037	1098	-60	(water
Fort=	20 minutes. Volume =	1269	1464	-195	

15 minutes, Volume = Fort = 1037 1098 -60 Fort = 20 minutes. Volume = 1269 1464 -195 Fort = 25 minutes. Volume = -411 1419 1830 30 minutes, Volume= For t = 2196 -642 1554 Fort = 40 minutes, Volume = 1814 2928 -1114 Fort = 50 minutes. Volume = 2028 3660 -1632 Fort = 60 minutes, Volume = 2221 4392 -2170 Fort = 80 minutes, Volume = 2702 5856 -3154

> MAXIMUM REQUIRED STORAG 115 CF

This site has a roof leader storm dispersion trench system being proposed and itilizes various BMPs including grasey swales on either side of the proposed structure to further minimize the impact of the potential increase of runoff as indicated above.

3051

7320 -4269

COUNTY OF SANTA CRUZ INTER-OFFICE CORRESPONDENCE

DATE: September 24,2002

TO: Larry Kasparowitz, Planning Department

FROM Melissa Allen, Planning Liaison to the Redevelopment Agency

SUBJECT: Application 02-0432, APN 028-232-16, 23rd Ave at East Cliff Dr

The applicant is proposing to construct a two-story single family dwelling with basement/garage. The project requires a Coastal Development Permit. The property is located on the east side of 23rd Avenue at approximately 160 feet south from East Cliff Drive.

The Redevelopment Agency (RDA) has the following comments regarding the proposed project. The Redevelopment Agency's primary concern for this project involves the provision of adequate onsite parking. RDA supports the standard of not allowing any private parking or encroachments into the public right-of-way, especially in neighborhoods along the coastline.

1. It is not clear if the parking needs **of** this project *are* completely satisfied onsite.

The items and issues referenced above should be evaluated as part of this application and/or addressed by conditions of approval. Assuming these items/issues are addressed and/or resolved then RDA does not need to **see** future routings of these plans. The Redevelopment Agency (RDA) appreciates this opportunity to comment. Thank you.



CENTRAL FIRE PROTECTION DISTRICT

of Santa Cruz County Fire Prevention Division

930 **Hf**" Avenue, Santa Cruz, CA 95062 phone (831) 479-6843 fax (831) 479-6847

Date: 3 September 2002

To: Val Vaden
Applicant: Wayne Miller
From: Eric Sitzenstatter

Subject 02-0432

Address: ??? 23" Avenue, Santa Cruz

APN: 028-232-16 **OCC:** 2823216 **Permit:** 020237

We have reviewed plans for the above subject project. THE FOLLOWING ARE DISTRICT REQUIREMENTS:

The plans shall comply with California Building and Fire Codes (1998) and District Amendment

The FIRE FLOW requirement for the subject property is 1000 gallons per minute for 120 minutes

A public fire hydrant within 250 feet of any portion of the building meeting the minimum required fire flow for the building is required.

Compliance with the District Access Requirements outlined on the enclosed handout is required. Access road width, grade, road surface shall comply.

The building shall be proteded by an approved automatic sprinkler system complying with the LATEST edition of NFPA 13D currently adopted in Chapter 35 of the California Building Code.

Please have the DESIGNER add appropriate NOTES and DETAILS showing the information listed below to plans that WILL BE SUBMITTED FOR PERMIT

NOTE on the plans that these plans are in compliance with California Building and Fire Codes (1998) and District Amendment.

NOTE on the plans the OCCUPANCY CLASSIFICATION. BUILDING CONSTRUCTION PIPE-FIRE RATING and either SPRINKLERED or NON-SPRINKLERED as determined by the building official and outlined in Chapters 3 through 6 of the 1998 California Building Code (e.g., R-3, Type V-N. Sprinklered).

The FIRE FLOW requirement for the subject property is 1000 gallons per minute for 120 minutes. NOTE on the plans the REQUIRED and AVAILABLE FIRE FLOW. The AVAILABLE FIRE FLOW information can be obtained from the water company.

SHOW on the plans a public fire hydrant, meeting the minimum required fire flow for the building, within 250 feet of any portion of the building.

SHOW on the plans, DETAILS of compliance with District rural Water Storage Requirements. Please refer to and comply with the diagram on Page 5. Do not sticky-back diagrams.

NOTE ON PLANS: New/upgraded hydrants, water storage tanks, and/or upgraded roadways shall be installed PRIOR to and during time of construction (CFC **901.3**).

SHOW on the plans DETAILS of compliance with the District Access Requirements outlined on the enclosed handout.

NOTE on the plans that the building shall be protected by an approved automatic sprinkler system complying with the edition of NFPA **13D** currently adopted in Chapter **35** of the California Building Code.

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

Show on the plans where smoke detectors are to be installed according to the following locations and approved by this agency as a minimum requirement:

- One detector adjacent to each sleeping area (hall, foyer, balcony, or etc).
- One detector in each sleeping room.
- One at the top of each stairway of 24" rise or greater and in an accessible location by a ladder
- There must be at least one smoke detector on each floor level regardless of area usage.
- There must be a minimum of one smoke detector in every basement area.

NOTE on the plans where address numbers will be posted and maintained. Note on plans that address numbers shall be a minimum of FOUR (4) inches in height and of a color contrasting to their background.

NOTE on the plans the installation of an approved spark arrestor on the top of the chimney. Wire mesh not to exceed ½ inch.

NOTE on the plans that the roof coverings to be no less than Class "C" rated roof.

NOTE on the plans that a 30-foot clearance will be maintained with non-combustible vegetation around all structures.

Submit a check in the amount of \$100.00 for this particular plan check, made payable to Central Fire Protection District. A \$35.00 Late Fee may be added to your plan check fees if payment is not received within 30 days of the date of this Discretionary Letter. INVOICE MAILED TO APPLICANT. Please contact the Fire Prevention Secretary at (831) 479-6843 for total fees due for your project.

If you should have any questions or comments please page me at **(415) 699-3634**, or e-mail me at edsfpe@sitz.net.

CC: File & County

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 any deficiencies noted by this review, subsequent review, inspection or other source. Further, the submitter, designer, and installer agrees to hold harmless fmm any and all alleged claims to have arisen fmm any compliance deficiencies, without prejudice, the reviewer and the Central FPD of Santa Cruz County.

Any order of the Fire Chief shall be appealable to the Fire Code Board of Appeals as established by any party beneficially interested, except for order affecting acts or conditions which, in the opinion of the Fire Chief, **Dose** an immediate threat to life, property, or the environment as a result of panic, fire, explosion or release,

Any beneficially interested party has the right to appeal the order served by the Fire Chief by filing a written "NOTICE OF APPEAL" with the office of the Fire Chief within ten days after service of such written order. The notice shall state the order appealed from, the identity and mailing address of the appellant, and the specific

grounds upon which the appeal is taken.

2823216_40



CENTRAL FIRE PROTECTION DISTRICT

of Santa Cruz County Fire Prevention Division

930 17" Avenue, Santa Cruz, CA 95062 phone (831) 479-6843 fax (831) 479-6847

21 October 2003

JUDY MILLER'S OFFICE P.O. Box 1929 Freedom, CA 95019-1929

Subj: Lot at beach side of 23rd Avenue, Assessor's Parcel Number (APN): 028-232-16

Ref (a): CFPD Discretionary ltr dtd 3 Sep 02, County Application #: 02-0432

Encl (1): Assessor's Map No. 28-23, East Cliff and 23rd Avenue

Dear Judy;

Construction application plans have not yet been submitted to this District via the County of Santa Cruz Planning Department for the proposed project at the above-referenced address; however, discretionary correspondence has been transmitted regarding the turn-around requirements (Reference (a)).

In 2001, a verbal discussion was made by this District that a turn-around would not be required for the subject property located at APN 028-232-16. This discussion was based on **the** fact that the building envelope is within close proximity to the 150' rule, and mitigating factors were added, including, but not limited **to**, the installation of an automatic sprinkler system throughout the proposed structure, arid the installation of a new fire hydrant (as per our current standards) at the northwest corner of East Cliff and 23rd Avenue as shown on Enclosure (1).

All other applicable codes, standards, and ordinances shall apply at time of plan review.

Should you have any further questions, please don't hesitate to call me at (831) 479-6843.

Respectfully,

Jeanette Lambert

Division Chief/Fire Marshal



of Santa Cruz County Fire Prevention Division

930 17th Avenue, Santa Cruz, CA 95062 phone (831) 479-6843 fax (831) 479-6847

Date:

February 9,2004

To:

County Planning

Applicant: Wayne and Judy Miller

From:

Jeanette Lambert, Fire Marshal

Subject:

Turnaround between Assessors Parcel Number 28-232-16

and 28-232-15

Address

23rd Avenue

APN

28-232-16 & 28-232-15

As discussed in previous meetings with Wayne and Judy Miller it has been determined that a fire department turnaround meeting this districts approval shall be provided between lots **28-232-1**5 and **28-232-1**6 on **23rd** Avenue, Santa Cruz, California.

Respectfully,

Dealsette Charefbeire Marshal

Cc: Wayne and Judy Miller

Val Vaden



CENTRAL FIRE PROTECTION DISTRICT

of Santa Cruz County Fire Prevention Division

930 17th **Avenue,** Santa Cruz, **CA** 95062 phone (831) 479-6843 fax (831) 479-6847

Date:

August 19,2004

To:

Larry Kasparowitz

Applicant:

Lands of Val Vaden

From:

Jeanette Lambert, Division Chief/Fire Marshal

subject:

Proposed Turnaround

Address

23rd Avenue

APN:

028-232-15& 028-232-16

OCC:

2823215

Permit:

The proposed turnaround for the properties located at assessor parcel numbers 028-232-15 and 028-232-16 is acceptable to this jurisdiction provided the entire area, including the highlighted turning radius (See attached plan.) meets this districts road surface requirements.

The proposed turnaround shall be marked "No Parking - Fire Lane" as required by this jurisdiction.

Upon completion of the above listed requirements please call the Fire Prevention Division to set up an appointment for an inspection. You will be asked for an address and Assessors Parcel Number (APN). **A MINIMUM OF 48 HOURS NOTICE** to the fire department is required prior to inspection.

If you should have any questions regarding the plan check comments, please call me at (831) 479-6843,

CC: File

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 any deficiencies noted by this review, subsequent review, inspection or other source. Further, the submitter, designer, and installer agrees to hold harmless from any and all alleged claims to have arisen from any compliance deficiencies, without prejudice, the reviewer and the Central FPD of Santa Cruz County. Any order of the Fire Chief shall be appealable to the Fire Code Board of Appeals as established by any party beneficially interested, except for order affecting acts or conditions which, in the opinion of the Fire Chief, pose an immediate threat to life, property, or the environment as a result of panic, fire, explosion or release. Any beneficially interested party has the right to appeal the order served by the Fire Chief by filling a written "NOTICE OF APPEAL" with the office of the Fire Chief within ten days after service of such written order. The notice shall state the order appealed from, the identity and mailing address of the appellant, and the specific grounds upon which the appeal is taken.

SANTA CRUZ COUNTY SANITATION DISTRICT

INTER-OFFICE CORRESPONDENCE

DATE:

September 11, 2002

TO:

Planning Department, ATTENTION: LARRY KASPAROWITZ

FROM:

Santa Cruz County Sanitation District

SUBJECT:

SEWER AVAILABILITY **AND** DISTRICT'S CONDITIONS OF SERVICE FOR THE FOLLOWING PROPOSED DEVELOPMENT:

APN: 28-23 -16

APPLICATION NO.: 02-0432

PARCEL **A DRESS:** PROJECT I SCRIPTION:

NO SITUS (VACANT PARCEL LOCATED ON 23RD AVENUE) CONSTRUCT TWO STORY SINGLE-FAMILY DWELLING

Sewer service is available for the subject development upon completion of the following conditions. This notice is effective for one year from the issuance date to allow the applicant the time to receive tentative map, development or other discretionary permit approval. If after this time frame this project has not received approval from the Planning Department, a new sewer service availability letter must be obtained by the applicant. Once a tentative map is approved this letter shall apply until the tentative map approval expires.

Proposed location of on-site sewer lateral(s), clean-out(s), public sewer easement and connection(s) to existing public sewer must be shown on the plot plan of the building permit application.

Show all existing and proposed plumbing fixtures on floor plans of building application. Completely describe all plumbing fixtures according to table 7-3 of the uniform plumbing code.

Other:

The existing public sewer line adjacent to the subject property is located toward the rear boundary of the lot and not in 23rd Avenue. Prior to approving the subject application, the applicant shall submit a plot plan showing the surveyed location of the sewer main and easement and a note that no permanent improvements shall be constructed in the easement. The surveyed location of the sewer main and easement shall also be shown on the plot plan of the building permit application.

DIANE ROMEO

Sanitation Engineering

DR/mta:220

Attachment

c:

Survey

Applicant (w/a):

Wayne Miller

P.O. Box 1929

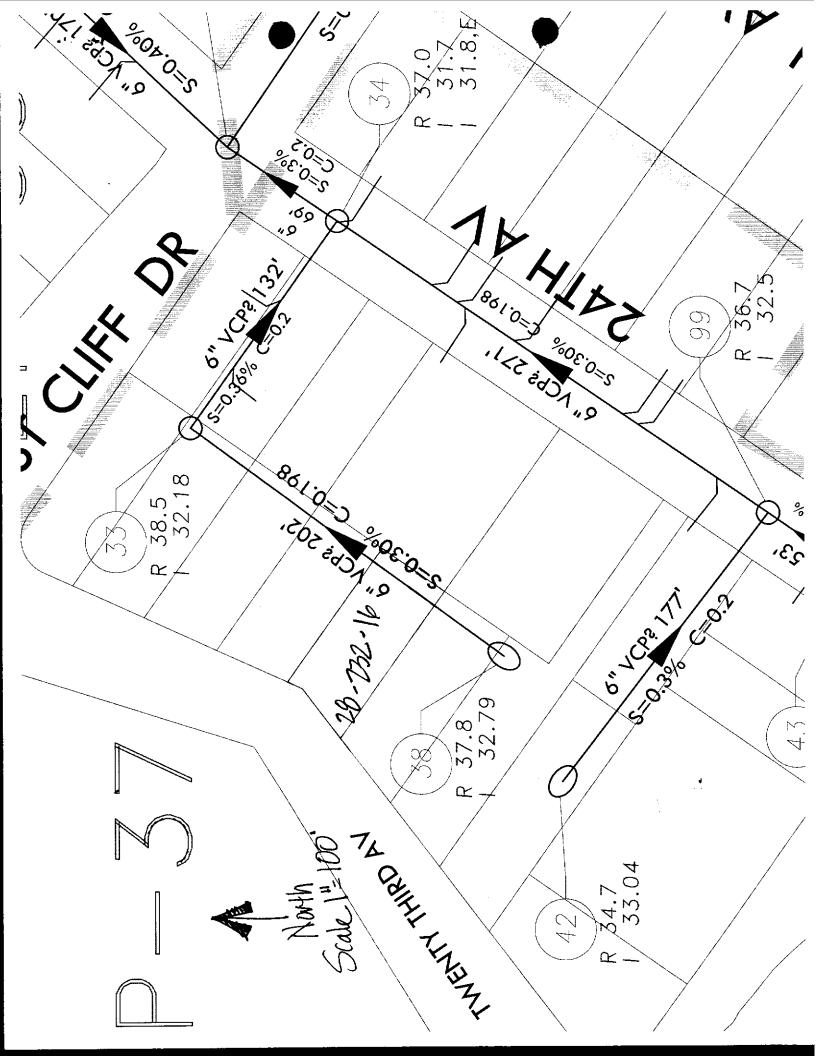
Property Owner (w/a):

Val Vaden

Freedom, CA 95019

P.O. Box 10195, Dept. 39

Palo Alto, CA 94303



COUNTY OF SANTA CRUZ

Inter-Office Correspondence

DATE: September 12, 2002

TO: Alvin James, Planning Director

Larry Kasparowitz, Planner John Presleigh, Public Works

FROM: Supervisor Jan Beautz () 1

RE: COMMENTS ON APP. 02-0432, APN 028-232-16, 23RD AVENUE

Please consider the following areas of concern in your evaluation of the above application to construct a single family home on a vacant parcel overlooking the public beach:

Extensive grading to a depth of seven feet or more appears necessary to construct the proposed 1,220 square foot lower level of this structure. Does such grading activity in close proximity to 23rd Avenue create stability issues €or the roadway/bluff area and surrounding homes? 23rd Avenue is an extremely substandard roadway. Should additional right-of-way dedication and/or road improvements be required for this application?

This parcel is within the Coastal Zone and quite visible from the adjacent public beach. As such, will this be required to comply with the requirements of County Code Section 13.20.130, Design Criteria for Coastal Developments? County Code Section 13.20.130(a) (2) also indicates that a project must also comply with design criteria set forth in County Code Chapters 13.10 and 13.11, Design Review. The view that this structure presents to the beach area will be of a large, three story home. Will the applicant be providing axonometric views of this structure in relation to the surrounding neighborhood to determine visual compatibility with the existing neighborhood's character and scale?

This development proposes to omit a 1,220 square foot lower level from the County Code required number of stories and size calculations by designating it a basement. It appears that exterior perimeter wall sections having 5 feet 6 inches or more in height above grade may exceed the allowable 20% for a basement. Does this meet the County Code required definition of a basement as per County Code Section 13.10.700(b) to allow this level to be exempt from the

September 12, 2002 Page 2

maximum number of stories and/or requirements of F.A.R.? How will this be addressed?

The applicant may not have included all required areas in determining compliance with Floor Area Ratio. County Code Section 13.10.323(c) requires that all floor areas be included in the calculation and that areas with ceiling heights greater than 16 feet be counted twice. It appears that the two story open area adjacent to the front entry/stairway may not have been correctly counted and the second floor bedroom closet may have been overlooked. Once these areas are included, the proposed structure may well exceed the allowable Floor Area Ratio. The exterior elevations also appear to indicate some of the deck areas covered by roof overhangs. However, insufficient information regarding overhang depth has been provided to determine if these areas would also be required to be included in calculations. Will this information be provided? Floor Area Ratio was established as an objective method to tie building size and mass to the size of the parcel, resulting in development providing a continuity of scale. No exceptions to the maximum allowable ratio should be allowed.

This three story structure will be quite visible from the beach. The proposed landscape plan planting schedule indicates that three different species of trees, 15 gallon in size, will be planted. However, the footprint for the planting schedule has no indication as to where any of these trees will be planted. Instead, the front yard is proposed to be landscaped entirely with ground cover and low shrubs. This will not offer sufficient visual mitigation for this coastal structure. How will this be addressed?

The front portion of this parcel has been designated as within the flood way/flood plain as well as FEMA Flood Zone A. From County maps it appears that this designation extends roughly 23 feet into the property from 23rd Avenue. Clearly, a portion of the proposed living area is within this designation. Is the proposed design appropriate given this designation or are modifications required to address this issue?

JKB:pmp

1613M1

CALIFORNIA COASTAL COMMISSION

CENTRAL COAST DISTRICT OFFICE 725 FRONT STREET. SUITE 300 SANTA CRUZ, CA 95060 PHONE (831) 427-4883 FAX: (831) 4274877





September 23,2002

Larry Kasparowitz
Santa Cruz County Planning Department
701 Ocean Street, Suite 400
Santa Cruz, CA 95060-4073

Subject: Project Comments for Application Number 02-0432 (Vaden SFD on 23rd Avenue)

Dear Mr. Kasparowitz:

Thank you for forwarding the above-referenced development proposal to our office for review. We received the brief project description you provided along with the proposed site plans that illustrate the project. In light of your request for comments, we provide the following.

- The proposed project is prominently located in an important public viewshed location atop the beach fronting Corcoran Lagoon. The proposed project must be evaluated in this context. Accordingly, we note that Countywide maximum considerations of mass and scale (such as height, lot coverage, and floor area ratio) may not be applicable here; these maximums are not entitlements, but rather maximums that may need adjustment in light of resource constraints (beach viewshed, scenic road, etc.).
- We note that the project plans you forward propose development that exceeds a number of applicable Local Coastal Program (LCP) standards that are designed to ensure the appropriate mass and scale of coastal development. Specifically, a 20 foot minimum front setback is required, and 15 is proposed; side yard setbacks of 5 and 8 feet minimum are required, 5 and 5 are proposed; a 28 foot height is the maximum allowed, and the height exceeds 30 feet; a 30% maximum of site coverage is allowed, and roughly 50% of the parcel (about 2,000 square feet) is covered. As to allowable number of stories and FAR, the plans are a bit misleading and unclear. If the garage/basement is to serve as a garage (to satisfy parking requirements), it must have a vertical clearance of at least 7% feet; the plans show a 7 foot height. A 7% foot garage height also means it must be counted as a story and in the FAR calculations. The SFD would thus be proposed at 3 stories when 2 are the maximum allowed (note that irrespective of Zoning Code technicalities, the appearance from the critical beach/East Cliff Drive viewshed would be of a 3-story residence regardless), and would have an FAR in excess of 50% (and greater than 80% if the entirety of the garage/basement is so counted), when 50% is the maximum allowed. These proposed deviations from LCP requirements require variances (although the project description that you forwarded does not indicate this fact). Please note that we are not supportive of development within this critical beach viewshed that cannot be constructed within the established LCP mass and scale limits.
- The plans do not identify improvements that would need to be made to 23rd Avenue to enable access to the site. Please have the applicant clarify this and provide plan sheets with all

Larry Kasparowitz, Santa County Planning Department
Project Comments for Santa Cruz County Application Number 02-0432
September 23,2002
Page 2

drainage and other such improvements noted in relation to topography. We note **as** well that 23rd Avenue provides public access from East Cliff Drive to the beach via a path fronting this property and extending seaward. We further note that the Commission has found that 23rd Avenue is a public road right-of-way and is not supportive of development that would reduce the public's ability to use this resource. We note, for example, that past proposed developments along 23rd Avenue have included companion measures to quit-claim and/or quiet title away the County's interest in the 23rd road right-of-way. Such measures are un-supportable at this location. On the contrary, we note that the Commission has found that more – not less – public access is appropriate for 23rd Avenue. In 2000, the Commission found:

...23rd Avenue is designated in the LCP as a neighborhood accessway for which the development of pathways and public amenities is to be pursued (LUP Policies 7.7.18 and 7.7.19). LUP Policy dictates that such publicly owned lands be utilized where possible for pedestrian trails. Likewise, 23rd Avenue provides a stunning coastal vista to the northwest for which the LCP encourages the development of vista points and overlooks with benches and railings, and facilities for pedestrian access to the beaches (LUP Policy 7.7.1).

It is within this context that any 23^{rd} Avenue improvements should be considered. In fact, we recommend that any improvements to 23^{rd} Avenue (to serve this or other developments located there) should be contingent upon providing enhanced public access improvements and amenities. We further note that the blufftop location fronting the subject parcel has been specifically identified by the Commission in the past **as** an appropriate view overlook area where development to support this public use should be pursued.

- The edge of bluff top is not identified on the proposed project plans. Please have the applicant clarify this and provide proof as to the geotechnical stability at this location over the next 100 years as required by the LCP. Please have the applicant forward copies of any geologic and/or geotechnical reports to this office when they become available. In addition, we note that such stability issues necessary must be understood in relation to any improvements to 23* Avenue. As such, please ensure that the geotechnical analysis addresses any proposed improvements in the right-of-way as well.
- Corcoran Lagoon is not identified on the proposed project plans. We note that Corcoran Lagoon temporally occupies that area of the beach below the subject property. Absent notation on the plans, it is difficult to verify the setback that this development would maintain from this resource. Depending on the distance to the Lagoon edge (at times at the foot of the bluff here), please ensure that any required biotic reports are completed as applicable and copies forwarded to this office when they become available. It is possible that a riparian exception would need to be considered to allow development at this site.
- The planting plan proposed identified non-native species, including ice plant. We do not support the use of such non-native species along the coastal **bluff**; and are particularly opposed to the use of ice-plant. Please note that we have a native planting palette available designed for

Larry Kasparowitz, Santa County Planning Department
Project Comments for Santa Crur County Application Number 02-0432
September 23,2002
Page 3

work along coastal bluffs.

• In sum, the proposed project appears over-scale for this small site in the beach/East Cliff Drive viewshed. Although we are generally supportive of the architectural detailing proposed (that provides for some interesting articulation), we are concerned that the project scale as proposed may have an overbearing negative impact on the public viewshed inconsistent with the Local Coastal **Program's** viewshed and character compatibility directives for development in such a location. We recommend that project modifications be pursued to reduce the scale of the development proposed and to eliminate variances from LCP requirements. Any improvements to 23rd Avenue should include public access improvements on the beach side of 23rd, and should not lessen the public's right of access.

Thank you for the opportunity to comment in the development stage of this project. We hope that the above comments help to frame the coastal permitting decision in this matter and that the best possible project – one that is respective of the special site location – can be developed here. If the project is modified, please forward any additional project plans for review. In any event, we may have more comments for you on this project after we have seen additional project information, geotechnical analysis, biotic reports, or revisions. If you have any questions, please do not hesitate to call me at (831) 427-4893.

Sincerely,

Dan Carl

Coastal Planner

ELESEL

FAX NO. 8314284057

STATE OF CALIFORNIA - THE RESDURCES AGENCY

GRAY DAVIS, Sovemer

CALIFORNIA COASTAL COMMISSION

CENTRAL COAST DISTRICT OFFICE 726 FRONT STREET, SUITE 300 BANTA CRUZ, CA 95080 PHONE: (831) 427-4493 PAX: (831) 427-477



October 1, 2002

Larry Kasparowitz
Santa Cruz County Planning Department
701 Ocean Street, Suite 400
Santa Cruz, CA 95060-4073

Subject: Project Comments for Application Number 02-0432 (Vaden SFD on 23rd Avenue)

Dear Mr. Kasparowitz:

We received your September 25, 2002 letter, written in response to our September 23, 2002 comments, in which you clarify for the applicant that a number of variances would be necessary to allow the development as proposed in the above-referenced application. We appreciate your clarifying these issues for the applicant. That said, we note that your September 25th letter also includes a "site development standards" table and a highlighted copy of the Zoning Code 13.10.323 site and structural dimensions requirements presumably applicable to this parcel; these require additional clarification.

Please note that highlighted chart that you provided (and by inference the table) refers to the incorrect R-1-4 standards. Because the parcel is less than 4,000 square feet, the standards cited in our September 23, 2002 letter are the standards that apply to this proposed project (see September 23, 2002 letter attached). Please make corrections as necessary.

Also, we do not understand how you arrived at the FAR, height, and coverage figures associated with the proposed residence as shown in your table. Again, based on the plans that we reviewed (dated August 20, 2002), these figures would be much higher in each case (again, see September 23, 2002 letter attached). Please clarify and/or make corrections as necessary.

At any rate, thank you for the project clarifications. Please continue to consider our previous comments as you review this project (provided herein to ensure that the broader list of recipients associated with your letter have the benefit of all associated correspondence). As always, please don't hesitate to contact me if you have any questions or would like to discuss this further.

Sincerely.

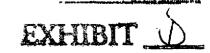
BONNICAL

Dan Carl
Coastal Planner

Enclosure: September 23, 2002 project comments for 02-0432

cc: Supervisor Ian Beautz
Val Vaden (applicant)
Wayne Miller (applicant's representative)
Ralph Borelti (neighbor)

G:\Central Coastil & R\SCO\2. Live Ook\5. 26th (23rd - Soquel Point)\02-0432 (Vaden SFD) comments 10.1.2002.doc





September 19,2002

Mr. Larry Kasparowitz, Project Planner County of Santa Cruz 701 Ocean Avenue, Room 400 Santa Cruz, CA 95060

Subject: Development Application 02-0432, 23rd Avenue, Santa Cruz County

Dear Mr. Kasparowitz:

It has come to my attention that a development application (referenced above) was recently filed for a vacant parcel on 23rd Avenue. As owner of the home at 90 23rd Avenue, which is adjacent to the subject property. I have done considerable research in regard to the development constraints on the subject property. Although the County's review of the development application will undoubtedly uncover the issues I raise, I feel it is important to state them here for the record.

Although the current development application does not include it, there is a second vacant parcel that is adjacent to, and south of, the subject property. These two parcels are currently in common ownership. The results of my research indicate that, given the significant development constraints on both of the vacant parcels, it will probably be necessary to combine the parcels to create one buildable lot. As such, I believe it is essential to process development applications for both lots concurrently. The attached sketch shows the modest developable area of both lots (combined) that would remain after dedication for an adequate emergency vehicle turnaround.

In order to provide access to the subject property, 23rd Avenue would have to be extended. I believe that County General Plan Section 16.10 requires that any road extension be set back at least 25 feet from the top of the coastal bluff. Although the current applicant's plans do not show the location of the bluff, I believe, based upon previous surveys, that the bluff is only 15 to 20 feet from the front property line of the subject property. It will, therefore, be difficult to provide access and an adequate turn-around for emergency vehicles without dedicating a significant portion of the subject property or involving the other vacant parcel. Any dedication for roadway purposes will reduce the "Net Developable Area" of the property, thereby reducing the size of the home that could be built. Even with no dedications, and excluding the basement, the proposed structure comes within 1% of the maximum Lot Coverage and maximum Floor Area Ratio for the R-1-4,000 zoning district.

Mr. Larry **Kasparowitz** County File No. 02-0432 September 19,2002 Page 2

The access issues affecting the property are well documented. The County Public Works Department, in their review of Coastal Development Permit 00-0671 for the adjacent vacant lot, requested a 36-foot wide street with 4-foot sidewalks (on each side) separated from the street by 4-foot landscaped strips. They also questioned the adequacy of the sight distance at 23rd Avenue and East Cliff Drive and required an analysis of this issue by a qualified engineer. Central Fire Protection District (CFPD) stated that the County of Santa Cruz should require an adequate turnaround for emergency vehicles at the end of 23rd Avenue. As you may be aware, Coastal Development Permit 00-0671 was never completed and was eventually withdrawn by the applicant.

The project plans lack a Grading Plan prepared by a licensed Civil Engineer. The issues of bluff location, grading, site drainage, sewer location, retaining walls, erosion control and slope stability have not been adequately addressed. The preparer of the plans appears to be a building designer, not a Civil Engineer, and would therefore be unqualified to provide this information. Still, the County should request that the applicant provide this information. In addition, there is some discrepancy with regard to the boundary of the subject property. In order to resolve this situation, I believe the County should require the applicant to provide a boundary and topographic survey prepared by a licensed Land Surveyor. Of particular concern to me is the proposed basement excavation in close proximity to my home. At the rear of the proposed structure, the depth of the excavation would be 9 to 10 feet at a distance of approximately 9 feet from my home. I request that the County require the applicant's Soils/Geotechnical Engineer to analyze this issue in detail.

The review of the project plans by Supervisor Beautz (memo dated September 12,2002) raises many important points. One of these issues was neighborhood compatibility. To adequately analyze this issue, I request that the County require the applicant to submit a photomontage, showing how the proposed home would fit between the existing homes. The vantage point of this photomontage should be the beach. This would allow Planning Staff to analyze the proposal in light of County Code Section 13.20.130. Supervisor Beautz also notes that there is reason to believe that the lower floor of the proposed home may not comply with the County's definition of a basement and should therefore be included in the Floor Area calculation. Also of concern to Supervisor Beautz was the possible miscalculation of Floor Area. The applicant should be required to submit detailed supplemental calculations to conclusively establish the proposed Floor Area.

In order to build on the subject property, I believe additional development applications must be filed. Construction of an access road to the property, regardless of whether it meets County of Santa Cruz and CFPD's standards, will require an exception to the 25-foot Coastal Bluff Setback and a Riparian Exception for its proximity to Corcoran Lagoon. In addition to the required architectural and civil engineering plans, the application *must* include the geotechnical, soils, and hydrologic information necessary to prove that a reduction of the Coastal Bluff Setback is warranted, If the parcel size is reduced by roadway dedications, it is likely that the application will need to include a Variance to other development standards such as Building Setbacks, Minimum Net Developable Area, Lot Coverage, and Floor Area Ratio.



Mr. Larry Kasparowitz County File No. 02-0432 September 19,2002 Page 3

I respectfully request to be copied **on** all County correspondence related to this **file** as I wish to review all future submittals by the applicant. Thank you for your attention to this matter.

Very truly yours,

Ralph Borelli 90 23rd Avenue

Santa Cruz, CA 95062

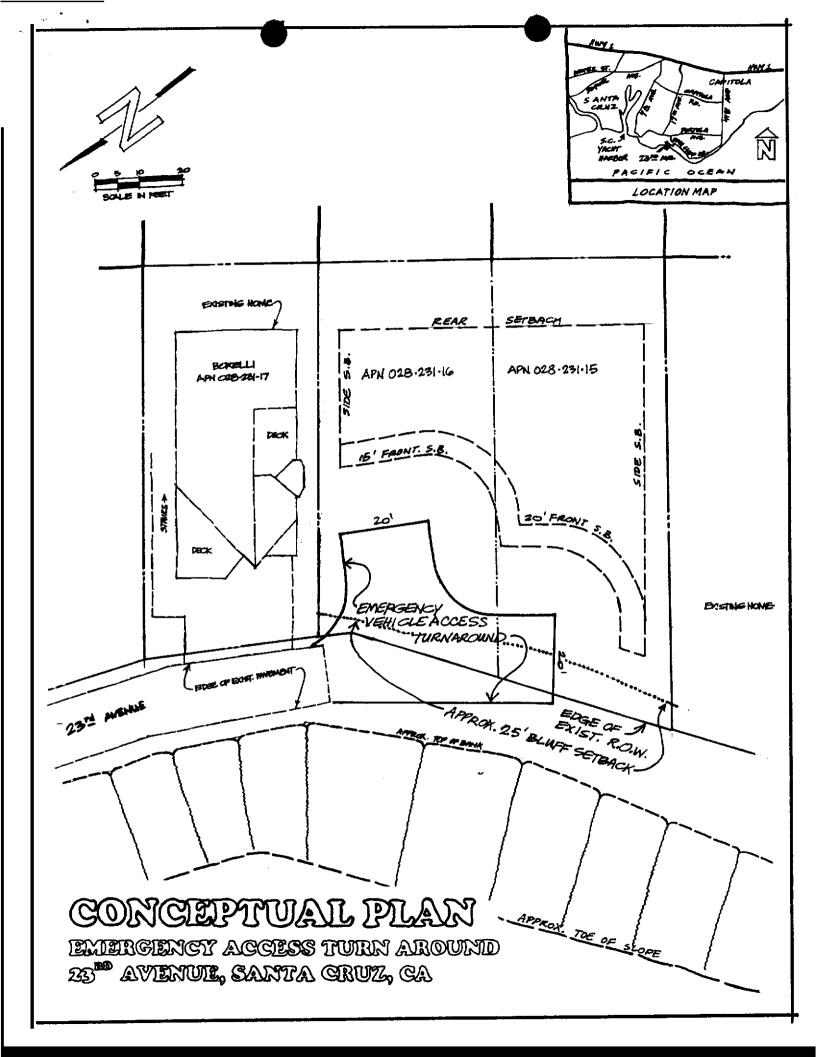
cc: Jan Beautz, District 1 Supervisor

Dan Carl, Coastal Commission

m Bue

Mark Carlquist, Esq.







September 27. 2002

Mr. Larry Kasparowitz, Project Planner County of Santa Cruz 701 Ocean Avenue, Room 400 Santa Cruz, CA 95060

Subject: Development Application 02-0432, 23rd Avenue, Santa Cruz County

Dear Mr. Kasparowitz:

On behalf of my client, Mr. Ralph Borelli, I am enclosing two pictures of 23rd Avenue to aid you and the County Geologist in your review of the application referenced above. As the photos show, portions of the 23rd Avenue roadway already appear to be unstable. It was surprising to us that the County's comment letter dated September 24.2002; (the "completeness" determination) did not require the applicant to submit a full Geologic Report due to the close proximity of proposed excavation to my client's home and the close proximity of proposed construction to the coastal bluff. The need for a Geologic Report was documented in a previous application (File #00-0671) for a similar proposal.

The completeness letter also failed to mention the applicant's need for a reduction to the minimum Coastal Bluff Setback as required by County Code Section 16.10.060(h)ii. One can determine from a site visit that any extension of 23^{rd} Avenue will require encroachment into the minimum Coastal Bluff Setback of 25 feet. Since the basis for an exception to this standard will be the ability of the bluff to provide a stable area for development over the 100-year life of the improvements, we believe that the County should have required a full Geologic Report.

In addition, it appears that the applicant would have to apply for a Riparian Exception, pursuant to County Code Section 16.30.060: to reduce the required buffer zone adjacent to Corcoran Lagoon. The completeness letter also failed to disclose this to the applicant. Since the basis for an exception would be the level of potential environmental damage caused by the development, we believe that the County should have required the applicant to submit a Biotic Report as described in the Coastal Commission's letter to the County dated September 23.2002.

According to County records and the applicant's plans, the parcel is already less than the minimum size required by the R1-4,000 zoning district. We believe the completeness letter should have described the process to allow a variance to this development standard and required submittal of the appropriate application by the project proponent.

Mr. Larry Kasparowitz County File Nb. 02-0432 September 27.2002 Page 2

We don't believe the issue of neighborhood compatibility, raised by Jan Beautz in her memo dated September 12,2002, has been adequately addressed by the County. My client, in his letter to you dated September 19, 2002, requested that the applicant be required to submit a photomontage looking from the beach toward the proposed development. We believe that such an exhibit, which includes existing homes, will be necessary to determine whether the proposed development is "visually compatible" with the neighborhood as required by County Code Section 13.10.130.

We respectfully request that the County inform the project applicant of these items as soon as possible. We believe that submittal of the information described above is an essential step in analyzing the impacts of the proposed development. We will stay in touch with you during the review of this application. We look forward to reviewing each of the applicant's submittals. Thank you for your attention to this matter.

Very truly yours, **Bolton Hill Company**



Todd Graff Project Consultant

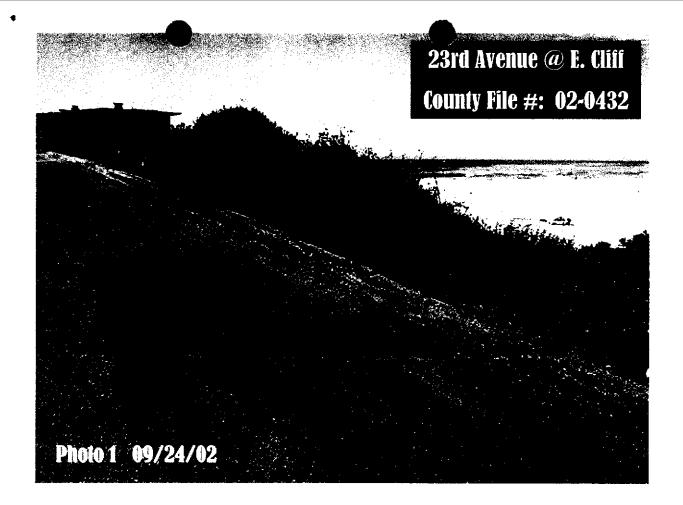
cc: Mr. Joe Hanna. County Geologist

Ms. Jan Beautz, County Supervisor

Mr. Dan Carl. Coastal Commission

Mr. Ralph Borelli

Mr. Mark Carlquist, Esq.







June 9.2003

Mr. Larry Kasparowitz Santa Cruz County Planning Department 701 Ocean Street. 4th Floor Santa Cruz, CA 95060

Subject: File #02-0432, 23rd Avenue, Santa Cruz County

Dear Mr. Kasparowitz:

Since we believe it is in the best interest of everyone involved, including my client, to ensure that the County provides accurate and timely information to the applicant, we have compiled this list of issues associated with the project referenced above. These items are not new. They were raised in a letter to you from my client, Ralph Borelli, dated September 19, 2002, and in a letter from me dated September 27,2002. Many of these issues were raised by Jan Beautz in her memo dated September 12,2002, and in a letter from the Coastal Commission dated September 23,2002. We restate them here because we believe that they have not been adequately addressed by the County.

Emergency Access Turnaround

It appears that the Planning Department is taking a "hands off' approach to the issue of extending 23rd Avenue by waiting for the applicant to negotiate a solution with Central Fire District. We believe that this approach is unproductive for all involved. My client's September 19.2002, letter makes it clear that the configuration and location of this turnaround will directly affect many planning-related **issues** such as the Net Developable Area of the property. rrquired setbacks from the turnaround, Floor Area Ratio, Lot Coverage and even whether this property will be developed as a single lot. We urge the Planning Department to take an active role in this discussion since, if a solution cannot be found, then all the time and money spent on other issues will have been wasted. This benefits no one.

Bluff Setback

After repeated requests. the County Geologist recently visited the property and determined (according to Robert Loveland) that the bluff fronting the property is indeed a "Coastal Bluff" as defined by the County Code. Therefore, we respectfully request that the applicant be notified, in writing, that the 25-foot Coastal Bluff setback applies to the project. In addition. since it is clear from the applicant's topographic survey, that any connection to the paved portion of 23rd Avenue

Development Application 02-0432, 23rd **Avenue Mr.** Larry Kasparowitr
June 9,2003
Page 2

will violate the bluff setback requirement, we respectfully request that the applicant also be notified, in writing, that they will be required to file an exception to this standard. We believe that this is an important issue that is directly related to the completeness of the application. As such. it should have been mentioned in your correspondence to the applicant dated September 24. 2002, and April 18.2003.

Consistency with Basement Definition

I have reviewed your fax to me, dated June 2,2003, wherein you conclude that the proposed basement/garage/storage room does not constitute a story since not more than 20% of the perimeter wall exceeds 5' 6' in height above the exterior grade. Again, my client and I respectfully disagree and wish to voice the following concerns with regard to your decision.

First, based upon our review of the file, no Grading Plan has ever been submitted. In the absence of this plan, it seems unlikely that you could conclusively determine the exterior grades. It then follows that you would be unable to determine whether or not the perimeter wall is exposed to a height of more than 5' 6". If you're relying exclusively on the floor plans and the elevation drawings, we believe that you're relying on incomplete and inconclusive information.

Second, even if you are willing to assume that a retaining wall will be proposed at the front left comer of the house (to reduce the exposed perimeter), we believe your calculation of the exposed portion of the perimeter is still incorrect. The dimensions of the exposed walls on your fax are $10^{\circ}+9^{\circ}+12^{\circ}=31^{\circ}$. The floor plan for this story (on sheet 3) shows these dimensions as $14^{\circ}+9^{\circ}$ (not dimensioned)+ $10^{\circ}=33^{\circ}$ or 21.7% of the 152° perimeter. For these reasons, we believe that your previous correspondence to the applicant should have indicated that the applicant was in violation of this requirement and should either revise the plans or apply for a Variance.

Substandard Front Setback to Garage

It appears that the proposed setback to the garage is 16' where 20' is required by County Code. We could find no evidence in the file that you have requested a redesign or a Variance application to be submitted by **the** applicant.

Neighborhood Compatibility

Both Jan Beautz and the Coastal Commission included this issue in their correspondence to you. It appears from the file that you have made a determination that the proposed home is "visually compatible" with the neighborhood as required by Section 13.20.130. However: no rationale for this determination is included in the file. If it is available, we would be very interested in reviewing your rationale.

Development Application 02-0432, 23rd Avenue Mr. Larry Kasparowitz June 9.2003 Page 3

We believe that, if the issues raised in this letter are not resolved during the staff review process, they will come out during the public hearing process or the appeal processes. Therefore, we firmly believe that all issues should be addressed at this time. Please consider this letter a request to be copied on all correspondence relating to this application in accordance with County Code Section 18.10.223. If there is a **fee** for this, please let us know and we **will** submit it immediately. Thank you for your attention to this matter.

Very truly yours. **Bolton Hill Company**



Todd Craff
Project Consultant

cc: Jan Beautz, County Supervisor
Dan Carl. Coastal Commission
Ken Hart. County Environmental Planning
Jeanette Lambert, Central Fire District

Ralph Borelli Mark Carlquist, **Esq.** Jonathan Wittwer William P. Parkin Shandra Dobrovolny Andrea M. Kendrick

WITTWER & PARKIN, LLP

147 SOUTH RIVER STREET, SUITE 221
SANTA CRUZ, CALIFORNIA 95060
TELEPHONE: (831) 429-4055
FACSIMILE: (831) 429-4057
E-MAIL: office@wittwerparkin.com

PARALEGAL Jana Rinaldi

Hand Delivered at Approximately 4:00 p.m. on November 14,2003

November 14,2003

Larry Kasparowitz, Project Planner County of Santa Cruz 701 Ocean Avenue, Room 400 Santa Cruz, CA 95060

Re: Application # 02-0432 for Development of APN # 28-232-16 (23rd Avenue)

Dear Mr. Kasparowitz:

My firm represents the interest of Ralph Borelli, the owner of the home at 90 23rd Avenue, a parcel adjacent to the above referenced property. As expressed in his correspondence with your office commencing shortly after the initial above-referenced application for development was submitted on August 23, 2002, Mr. Borelli is concerned that the land use regulations be applied properly to this application.

One major item of concern which has not been adequately addressed is that this proposed single-family dwelling will be constructed on a parcel with a coastal bluff fronting the property. The Geology Report by Nielsen & Associates submitted on behalf of the Applicant acknowledges that the parcel includes a "coastal bluff." As you are aware, developments on coastal bluffs are subject to additional development restrictions, including the setback requirements of Santa Cruz County Code (hereinafter "County Code") Section 16.10.070(h).

Additional Requirements for Development on Coastal Bluffs

The County Code defines a coastal bluff as follows: "A bank or cliff along the coast subject to coastal erosion processes." Pursuant to County Code Section 16.10.070(h)(1), projects subject to coastal bluff erosion must meet several requirements.

One such requirement is a 25 foot setback from the top edge of the coastal bluff. County Code Section 16.10.070(h)(1)(ii) provides that:

[f]or all development [in areas subject to coastal bluff erosion], including that

Larry Kasparowitz Re: Application#02-0432, 23rd Avenue November 10,2003 Page 2

which is cantilevered, and for non-habitable structures, a minimum setback shall be established at least 25 feet from the top edge of the coastal bluff, or alternatively, the distance necessary to provide a stable building site over a 100-year lifetime of the structure, whichever is greater.*

Significantly, the required setback is at least 25 feet.

Both "development" and "structures" are defined in the County Code to include a road and utilities. Not only must single-family dwellings be outside the 25 foot minimum setback, but any roads or driveways are also required to be outside this setback. This is because, pursuant to County Code Section 16.10.070(h)(ii), "for all **development**... and for non-habitable **structures**, a minimum setback shall be established at least 25 feet from the top edge of the coastal bluff." (Emphasis added.) **A** road qualifies as "development," as that definition includes "[c]onstruction of **roads**, utilities, or other facilities." County Code Section 16.10.040(11) (emphasis added). The County Code defines "structure" as "[a]nything constructed or erected which requires a location on the ground, including, but not limited to, a building, manufactured home, gas or liquid storage tank, **or facility such as a road**, retaining wall, pipe, flume, conduit,

* The "Geologic Report of Two Properties One of Which Is Proposed for a New Single Family Home" (Nielsen 7/2003-hereinafter "Nielsen Report") concluded in its 100-year site stability determination that the properties were likely to remain stable for a minimum of 100 years. However, the Nielsen Report acknowledges that wave erosion was completely blocked until the storms of 1982 and 1983 when old East Cliff Drive was washed away. In assessing the stability of the site, the Nielsen Report observes that if the properties were unstable, they would have eroded during the El Nino year of 1997. It concludes that because erosion did not occur, the sites are likely to remain stable for a minimum of 100 years.

Based on our consultation with a geotechnical firm, we believe this determination lacks sufficient factual basis because of the lack of adequate passage of time since old East Cliff Drive was washed away. Simply because there was little erosion during 1997 does not determine how much erosion is likely to occur over the 100-year period after old East Cliff Drive washed away. This is particularly true in light of the fact reported to me by my client that riprap was installed at the toe **a** the bluff in close proximity to the subject site and was removed in only the last 18 months at the request of the regulating authority. This riprap could have affected the erosion pattern during the 1997 El Nino year. In addition, the assessment was based on only one boring deeper than eleven feet and a slope stability analysis with back up laboratory test data should also be performed. Thus, the Neilsen Report does not contain adequate information to make this 100-year site stability determination.

Larry Kasparowitz

Re: Application # 02-0432, 23rd Avenue

November 10, 2003

Page 3

siphon, aqueduct, telephone line, electrical power transmission or distribution line." County Code Section 16.10.040(3k) (emphasis added).

Appendix B of the Nielsen Report shows that the development of the road, parking, and utilities on this parcel is less than 25 feet from the top edge of the coastal bluff.

Exception to Coastal Bluff Setback Reauirement

A request for an exception to the coastal bluff setback requirement "may be considered by the Planning Director if the exception is necessary to mitigate a threat to public health, safety and welfare." County Code 16.10.100(a). This is a very strict standard. The application for an exception is initiated by the applicant upon filing a written request stating why the exception is requested, the proposed substitute provisions, when the exception would apply, and the threat to public health, safety, or welfare that would be mitigated. County Code Section 16.10.100(b). No exception to the 25 foot setback requirements applicable to the subject property has been considered because the Applicant has not made such a request. Hence, the application must be deemed incomplete.

In the event such a request is subsequently filed, four findings must be made in order for an exception to be granted. See County Code Section 16.10.100(c). First, it must **be** found that a hardship, as defined in County Code Section 16.10.040(2j) exists. County Code Section 16.10.100(c)(1). County Code Section 16.10.040(2j) defines hardship as follows:

Hardship...means the exceptional hardship that would result from failure to grant the requested Exception. The specific hardship must be exceptional, unusual, and peculiar to the property involved. Economic or financial hardship alone is not exceptional. Inconvenience, aesthetic considerations, personal preferences, or the disapproval of neighbors also cannot qualify as exceptional hardship, as these problems can be resolved through means other than granting an Exception, even if those alternative means are more expensive, require a property owner to build elsewhere, or put the parcel to a different use than originally intended or proposed. Section 16.10.040(2j).

Being limited to building a smaller single-family dwelling on an existing parcel (due to a need to relocate road and utilities) does not meet the definition of hardship.

Second, the Planning Director must find that the project is necessary to mitigate a threat to public health, safety, or welfare. County Code Section 16.10.100(c)(2). This is an exceptionally strict standard and very difficult to satisfy with regard to development of a property with a private single-family dwelling. In determining what constitutes a threat to the public health, safety, or welfare, our courts have considered the approval of permits for a major

Iany Kasparowitz

Re: Application # 02-0432, 23rd Avenue

November 10,2003

Page 4

subdivision as that threat because it could fundamentally alter the current way of life for the residents of the county. *See 216 Sutter Bay Associates v. County of Sutter* (1997) 58 Cal. App. **4"** 860, 868. A threat to public health, safety, or welfare necessarily affects the community at large. For this finding to be made as related to the above referenced application, it must be determined that it is necessary to develop the parcel with the single-family dwelling, at the size and in the location proposed, to mitigate a threat to the community at large. This finding simply cannot be made.

The third finding which must be made is that the request must be for the smallest amount of variance from the coastal bluff setback requirements as possible. County Code Section 16.10.100(c)(3). This finding cannot be made either for the current proposal.

Finally, the County Code requires that for an exception to be granted, a finding must be made that adequate measures will be taken to ensure consistency with the purposes of the Geologic Hazards Chapter of the County Code and with the County General Plan. County Code Section 16.10.100(c)(4). One notable purpose of the chapter on geologic hazards is "[t]o set forth standards for development and building activities that will reduce public costs by preventing inappropriate land uses and development in areas where natural dynamic processes present a potential threat to the public health, safety, welfare, and property." County Code Section 16.10.010(c). This finding cannot he made without further study of the stability of the site and demonstrating the stability of the coastal bluff over the next 100-year period.

Conclusion

This letter requests that the Planning Department find this application incomplete due to the failure of the Applicant to include a request for Exception in his application.**

Very truly yours,

WITTWER & PARKIN, LLP

concertan latter face

Jonathan Wittwer

cc: Todd Graff Client

There are other reasons why this application should not be deemed complete, which we will be addressing in a subsequent letter. We are submitting this letter at this time in order to raise this issue as soon as possible because it impacts so many other aspects of the application.

Jonathan Wittwer William P. Parkin Shandra Dobrovolny Andrea M. Kendrick

WITTWER & PARKIN, LLP

147 SOUTH RIVER STREET, SUITE 221 SANTA CRUZ, CALIFORNIA 95060 TELEPHONE: (831) 429-4055 FACSIMILE: (831) 429-4057 E-MAIL: office@wittwerparkin.com PARALEGAL Jana Rinaldi

November 24,2003 **DELIVERED BY FASCIMILE TO (831) 479-6848 November 24,2003**

Board of Appeals Central Fire Protection District 930 17" Avenue Santa Cruz, CA 95062

ATTN: Fire Chief Bruce Clark

Re: NOTICE OF APPEAL

Application for Development # 02-0432 (23rd Avenue)

APN # 028-232-16

Honorable Board

My firm represents the interests of Ralph Borelli, the owner of the home at 90 - 23'' Avenue, adjacent to APN #28-232-16 on 23rd Avenue, a lot upon which an application for development is currently active. Mi. Borelli is a beneficially interested party and is concerned that the Fire District's regulations, which serve to protect the safety of adjacent properties and the community by providing adequate access to all properties, be properly applied to this development application.

Mr. Borelli hereby appeals the Order of the Fire Chief that the Fire District will not require a turnaround with the currently active development Application # 02-0432.

Ralph Borelli's address is 90 – 23rd Avenue, Santa Cruz, California. He may also be reached at 1770 Technology Drive, San Jose, California, 95110. Please mail all correspondence regarding this appeal to me at the above address.

As you are aware, Todd Graff of the Bolton Hill Company is also representing Mr. Borelli to protect any interest which may be compromised as a result of this proposed development. He has informed me of the details of a conference call between Fire Chief Bruce Clark, Fire Marshal Jeanette Lambert, and himself. He has reported to me the following details of that call:

(1) The Fire District will not require a turnaround with the currently active development Application # 02-0432.

Board of Appeals November **24,2003**

Re: County of Santa Cruz Application #02-0432

Page 2

- (2) The Fire District will require a turnaround should a development application be filed on the adjacent vacant lot, APN #28-232-15.
- (3) The Fire District's position on development application # 02-0432 is that the structure as proposed is within the access limits of the Fire Code (given the mitigating factors of a new fire hydrant on the comer and the fire sprinklers included in the structure).
- (4) The Central Fire Protection District only makes recommendations to the Planning Department and has no enforcement authority.
- (5) There is no appeal process for staff recommendations from the Central Fire Protection District.

We have subsequently obtained a copy of the Central Fire Protection District Fire Code which includes appeal provisions at Section **34.103.1.4** and following. Hence we are filing this appeal.

Turn-around for Application # 02-0432

Central Fire Protection District FPB-59 Access Road Requirements Access Road Specifications (5) states that "[a]ny access road more than 150' in length must be provided with an approved turn-around." The length of the road as proposed is in excess of 150 feet.

The Central Fire Protection District is required to provide a turnaround for all new development for access roads in excess of **150** feet in length pursuant to the Santa Cruz County General Plan section on *Fire Hazards: Access Standards*. Santa Cruz County General Plan, Objective **6.5.1**. provides:

Require all new structures, including additions of more than **500** square feet, to single-family dwellings on existing parcels of record, to provide an adequate road for fire protection in conformance with the following standards:

(h) 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.

We recognize that General Plan Section **6.5.2**, provides **an** exception to the standards of the section at the discretion of the Fire Chief for single-family dwellings on existing parcels of

Board of Appeals November 24,2003

Re: County of Santa Cruz Application #02-0432

Page 3

record when the access road is acceptable to the Fire Department having jurisdiction. However, the Fire Department should not deem this access road as acceptable because a turn-around is required to protect the safety of the other homes in the neighborhood. Furthermore, this is a unique situation because the adjoining property is owned by the same owner and the Fire Chief desires to have the fire vehicle turnaround master-planned with that adjoining parcel.

Turnaround on Adiacent Vacant Lot

Mr. Graff reported that the Fire District will require a turn-around should a development application be filed on the adjacent lot. In addition, he explained that because the District is aware that both lots have the same owner, the District intends to discuss the situation with the owner and ask him to master plan the turn-around.

A subsequent owner may claim that it is an unfair burden to bear the entire responsibility for constructing a turn-around which would reduce the size on that one parcel. The current applicant should be required to bear one-half the burden for the turn-around to assure adequate access is available and to conform to the requirements of Santa Cruz County.

Thank you for your consideration of our concerns.

Very truly yours,

WITTWER & PARKIN, LLP

ratha Withren

(Johannan Wittwei

cc: Larry Kasparowitz, County of Santa Cruz Planning Department

Todd Graff

Client

Jonathan Wittwer William P. Parkin Shandra Dobrovolny Andrea M. Kondrick

WITTWER & PARKIN, LLP

147 SOUTH RIVER STREET, SUITE 221
SANTA CRUZ, CALIFORNIA 96060
TELEPHONE: (831) 429-4066
FACSIMILE: (831) 429-4067
E-MAIL: office@wittworparkin.com

PARALEGAL Jana Rinaldi

December 8,2003

Chief Bruce Clark Central Fire Protection District 930 17" Avenue Santa Cruz, CA 95062

Re: Application for Development# 02-0432(23rd Avenue)

APN # 028-232-16

Dear Chief Clark

This letter is to confirm our telephone conversation on December 4,2003 in which Fire Marshal Jeanette Lambert also participated. In that conversation you informed me that your District had notified the Planning Department of the County of Santa Cruz that the Fire District has not yet made a final decision whether to require a turnaround for the above-referenced application for development. You stated that the issue has been sent back for letermination.

Phil Passafuime, the Fire District attorney, informed me that, given that a final decision has not been made, the appeal which we submitted on November 24,2003 will be on hold until the Fire District makes a final decision.

In addition, this will confirm that Ralph Borelli and Todd Graff will **be** meeting with you on December 16,2003 at 10:00 a.m. to informally discuss the situation.

Sincerely,

WITTWER & PARKIN, LLP

Yonathan Wittwer

cc: Phil Passafuime, Esq.

Larry Kasparowitz, County of Santa Cruz Planning Department

Todd Graff

Client

Jonathan Wittwer William P. Parkin Shandra Dobrovolny Andrea M. Kendrick

WITTWER & PARKIN, LLP

147 SOUTH RIVER STREET, SUITE 221
SANTA CRUZ, CALIFORNIA 95060
TELEPHONE: (831) 429-4055
FACSIMILE: (831) 429-4057
E-MAIL: office@wittwerparkin.com

PARALEGAL Jana Rinaldi

November 26,2003

HAND DELIVERED ON NOVEMBER 26.2003

Mr. Larry Kasparowitz, Project Planner County of Santa Cruz 701 Ocean Avenue, Room 400 Santa Cruz, CA **95060**

Re: Application # 02-0432 for Development of APN # 28-232-16 (23rd Avenue)

Dear Mr. Kasparowitz:

On behalf of my client, Ralph Borelli, the owner of the home at 90 - 23rd Avenue, we submit that the above referenced Application should not be recommended for approval to any County decision-making body absent additional information which enables the required findings to be made. Development of the parcel as proposed does not meet the requirements of the Santa Cruz County Code ("County Code") and the County of Santa Cruz General Plan ("General Plan") for the reasons explained in this letter. Hence, we do not believe the findings can be made.

Turnaround for Fire District Access

We have enclosed a copy of the letter which we have sent to the Central Fire Protection District appealing any Order the Fire Chief may have made as to a turnaround for fire vehicle access regarding the subject Application. We have also confirmed in that letter the conversation between the District Fire Chief Bruce Clark, District Fire Marshal Jeanette Lambert and Todd Graff (consultant for Mr. Borelli) which included the following:

- (1) The Fire District will require a turnaround should a development application be filed on the adjacent vacant lot, APN #28-232-15. In addition, the Fire Chief explained that because the District is now aware that both lots have the same owner, the District intends to discuss the situation with the owner and ask him to master plan the turnaround.
- (2) The Central Fire Protection District believes that it only makes recommendations to the Planning Department and has no enforcement authority.

Furthermore, County of Santa Cruz General Plan 6.5.1(h) requires that a turnaround shall be provided for access roads and driveways in excess of 150 feet in length. Twenty-Third Avenue

Larry Kasparowitz Application #02-0432 for Development of APN #28-232-16(23rd Avenue) November 26,2003 Page 2 of **4**

clearly exceeds 150 feet in length. Thus, according to the General Plan, there must be a turnaround. The fire department then decides the requirements of this turnaround. General Plan Section 6.5.2.

A subsequent owner of APN # 28-232-15 (the adjacent property currently owned by the Applicant) may claim that it is an unfair burden to bear the entire responsibility for constructing a turnaround which would reduce the developable area on that one parcel. The current Applicant should be required to hear one-half the burden for the turnaround to assure adequate access is available and to conform to the requirements of Santa Cruz County.

Furthermore, our office was informed yesterday morning by Todd Graff (following a telephone conversation with you yesterday) that it is your understanding that the Central Fire Protection District has not taken a final position on the fire turnaround issue. Whatever the case may be, in the interest of safety for all the property owners on 23rd Avenue, we request that a turnaround be required in connection with this Application.

Sight Distance

An adequate sight distance for exit onto East Cliff Drive must be provided to ensure safe access. In comments on the subject Application, the County Department of Public Works stated on October 2,2002 that the plans must:

"[i]ndicate the sight distance at the intersection of 23rd Avenue and East Cliff Drive. If sufficient sight distance is not available (250 feet minimum) a sight distance analysis must be performed by a qualified engineer."

Our review of the records does not reveal that this site distance determination was ever undertaken. We request that this information be provided by the Applicant prior to any recommendation being prepared for the Zoning Administrator.

Drainage and Gradine Plan

The County Department of Public Works comments on September 24 requested that a Civil Engineer address the condition of the gutter on 23^{rd} Avenue and a point of release for runoff into the gutters for this road. The review questioned whether runoff from this development will encourage any erosion to the bluff in front of the proposed home. This item was still outstanding as of **May 20,2003** and we have found no evidence that a Civil Engineer has addressed these issues. Pursuant to County Code Section 16.22.070, runoff from activities subject to a building permit shall be properly controlled to prevent erosion.

Larry Kasparowitz November 26,2003

Re: Application # 02-0432 for Development of APN #28-232-16 (23rd Avenue)

Page 3

We contend that the design plan is deficient because it does not provide finished grades on the bluff side of the driveway. Therefore, it is impossible to determine where runoff will be directed. Given the existing topography, it appears that fill will have to be placed under the bluff-side portion of the driveway. If fill is proposed, the Applicant's geotechnical engineer should review and comment on the feasibility of this proposed design. The geotechnical engineer review should be made available to the public when completed and well in advance of any public hearing.

Lower Floor/Basement

The Applicant has not demonstrated how the lower floor qualifies **as** a basement. Pursuant to County Code Section 13.10.700-B, "[t]o qualify as a basement more than 50% of the basement exterior perimeter wall area must be below grade and no more than 20% of the perimeter exterior wall may exceed 5 feet - 6 inches above the exterior grade." The current plans do not comply with this definition. In fact, in a County of Santa Cruz Inter-Otfice Correspondence from Supervisor Jan Beautz to the Planning Director and the Planner dated April 8, 2003, the Supervisor commented on the above-referenced Application stating "Sheet 3 of the of the plans indicates that at least 28% of the exterior wall will exceed 5 feet, 6 inches. As a result, it appears that this lower floor does not meet the definition of a basement."

While the Applicant may be able to revise the plans to comply, we believe this would include the addition of at least one retaining wall along the northern side of the driveway. Currently, the plans show no retaining wall in the area.

Riparian Setback

According to a letter from Dan Carl of the Coastal Commission to Larry Kasparowitz, dated September 23,2002, "Corcoran Lagoon temporally occupies that area of the beach below the subject property." The water exiting Corcoran Lagoon qualifies as a Riparian Comdor pursuant to its definition in County Code Section 16.30.030(4): "Lands extending 100 feet (measured horizontally) from the high watermark of a lake, wetland, estuary, lagoon or natural body of standing water." The actual location of the water in the lagoon was along the toe of the bluff at 23rd Avenue this past year. Because of its location in the Riparian Comdor, the Applicant must, therefore, provide a 100-foot setback or apply for a Riparian Exception for development under County Code Section 16.30.060.

Agreement for Maintenance of 23rd Avenue

The County Department of Public Works, in a memorandum dated March 26,2002, **asks** that the Applicant create a maintenance agreement for 23rd Avenue because the road is to be privately maintained, There is no evidence that the Applicant has provided such an agreement.

Larry Kasparowitz November 26,2003

Re: Application # 02-0432 for Development of APN #28-232-16 (23rd Avenue)

Page 4

Conclusion

Absent additional information, the decision-making body cannot make the findings required for permit approval. For the reasons stated in this letter and our letter of November **14**, 2003 (a copy of which is attached), we request that the Applicant be required to provide this information to enable preparation of a Staff Report regarding these issues.

Very truly yours,

WITTWER & PARKIN, LLP

Jonathan Wittwer

Encl.

cc: Central Fire Protection District

Dan Carl, Coastal Commission

Jan Beautz, Planning Department

Client Todd Graff Jonathan Wittwer William P. Parkin Shandra Dobrovolny Andrea M. Kendrick

WITTWER & PARKIN, LLP

147 SOUTH RIVER STREET, SUITE 221
SANTA CRUZ, CALIFORNIA 95060
TELEPHONE: (831) 429-4055
FACSIMILE: (831) 429-4057
E-MAIL: office@wittwerparkin.com

PARALEGAL Jana Rinaldi

May 14,2004

HAND DELIVERED ON MAY 14.2004

Mr. Larry Kasparowitz. Project Planner County of Santa Cruz 701 Ocean Avenue, Room 400 Santa Cruz, CA 95060

Re: Application # 02-0432 for Development of APN 28-232-16 (23rd Avenue)

Dear Mr. Kasparowitz:

This office represents the interests of Ralph Borelli, :he owner of rhe home at 90 - 23rd Avenue. Todd Graff, a representative of Mr. Borelli, reviewed the above referenced application on May 4, 2004 and notes that the revised plan shows a turnaround for fire district access which straddles the **two** vacant lots APNs 28-232-15 and 28-232-15. These two parcels are currently owned by members of the same family. On behalf of my client, we submit the following comments on the turnaround as proposed by the Applicant.

Turnaround Reduces Net Developable Area

For the following reasons, we submit that the turnarcund area must be excluded from the net developable area of APNs 28-232-15 and 28-232-16.

First, the portion of a piece of property on which a turnaround is located is undevelopable. The turnaround area must be <u>unobstructed at all times</u> and cannot be used for parking cars, pursuant to Uniform Fire Code Section 902.2.4.1 (adopted by the County Code). That section provides: "The required width of a fire apparatus access road (which includes a turnaround) shall not be obstructed in any manner, including parking of vehicles." See *also* County General Plan Section 6.5.1(l) ("All private access rozds, driveways, turn arounds 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.")

Larry Kasparowitz May 14, 2004

Re: Application # 02-0432 for Development of APN #28-232-16 (23rd Avenue)

Page 2

The turnaround is not "developable land" and may not be included in the net developable area of a parcel. County Code Section 13.10-700-N defines the net developable area of a parcel as follows:

"Net Developable area" means the portion of a parcel which can be used for density calculations; public or private road rights-of-way and land not developable (see definition of "developable land") are not included in the net developable area of a parcel.

"Developable land" is defined in County Code Section 13.10.700-D as follows:

Land which is suitable as a location for structures and which can be improved through normal and conventional means, free of development hazards, and without disruption or significant impact on natural resource areas.

As explained above, the turnaround area cannot be used for a purpose which obstructs it any manner, therefore, it is not "suitable as a location for structures." For this reason, it cannot reasonably qualify as part of the net developable area of the site.

Second, fire department access turnarounds are consistent with the legal definition of a right-of-way. Pursuant to County Code Section 13.10-700-N, set forth fully above, the net developable area of a parcel does not include "public or private road rights-of-way . . . [these] are not included in the net developable area of a parcel." The County Zoning Ordinance does not define either public road right-of-way or private road right-of-way. When the term is used in California case law in the context of private roads, it is normally to describe a nght-of-way for ingress and egress. See *i.e.*, Flavio v. McKenzie (1963) 218 Cal.App.2d 549, 551. This emergency access turnaround is exactly that, a legal right-of-way for Fire Department vehicles to enter and exit the property, and use for fire safety purposes.

This turnaround is a right-of-way for fire access to all of 23rd Avenue and the benefits of its existence inures to <u>third parties</u> as well as to the owners of the property upon which the turnaround is located and the Central Fire Protection District. Therefore, it fits the definition of a right-of-way because the property owners are required by law to keep tt open for the Fire Department and the turnaround area is not to be included in the net developable area.

Larry Kasparowitz May 14,2004

Re: Application # 02-0432 for Development of APN #28-232-16 (23rd Avenue)

Page 3

Conclusion

For **the** reasons stated in this letter we request that the *area* of the Fire District access turnaround be excluded from the net developable **area** of the parcel.

Very truly yours,

WITTWER & PARKIN, LLP

Jonathan Wittwer

cc: Jan Beautz, County Supervisor

Client

Todd Graff

Jonathan Wittwor William P. Parkin Shandra Dobrovolny

WITTWER & PARKIN, LLP

147 SOUTH RIVER STREET, SUITE 221
SANTA CRUZ, CALIFORNIA 95060
TELEPHONE: (831) 429-4055
FACSIMILE: (831) 429-4057
E-MAIL: office@wittwerparkin.com

PARALEGAL
Miriam Celia Gordon

September 1,2005

Larry Kasparowitz, Project Planner County of Santa Cruz 701 Ocean Avenue, Room 400 Santa Cruz, CA 95060

Re: Application # 02-0432 for Development of APN # 28-232-16 (23rd Avenue)

Dear Mr. Kasparowitz:

This office represents Ralph Borelli, the owner of the home at 90 23rd Avenue, a parcel adjacent to the above-referenced property. **As** expressed in his correspondence with your office commencing shortly after the initial submittal of **the** above-referenced application for development on August 23, 2002, Mr. Borelli is concerned that the land use regulations be applied properly to this application in the interest of the "critical reciprocity" which the California Supreme Court has identified as the very foundation of such land use regulations.

Additional Requirements for Development on Coastal Bluffs

One major item of concern which has not been adequately addressed is that this proposed single-family dwelling will be constructed on a parcel with a coastal bluff fronting the property. The Geology Report by Nielsen & Associates submitted on behalf of the Applicant acknowledges that the parcel includes a "coastal bluff." As you are aware, any development on coastal bluffs is subject to additional development restrictions, including the setback requirements of Santa Cruz County Code (hereinafter "County Code") Section 16.10.070(h). Please refer to my letter dated November 10,2003 for **a** detailed discussion of these requirements and the need for an "Exception" to be applied for an obtained. As far as Mr. Borelli is aware, the developer for Application # 02-0432 has not applied *for an* Exception from the coastal bluff setback requirement or attempted to provide the information necessary to make the Required Findings.

In a document in the County Planning File entitled "Responses to issues raised" the requirement for an "Exception" is recognized by Planning Staff and it is stated that "Staff believes that an exception can be made per 16.10.100." A discussion of the Required Findings for an Exception will follow. However, there is a threshold issue of great importance which should be addressed first. That threshold issue is expressed in a recent letter (copy attached as Exhibit A) from County Planning to the representative of another applicant who owns property along a coastal bluff. as follows:

Larry Kasparowitz, Project Planner Application No. 02-0432 for 23rd Avenue September 1,2005 Page 2 of 8

"You are approaching the exception to the Geologic Hazards Ordinance like a normal variance, which it is not. **The** required findings are more difficult **to** make (See Section 16.10.100(c) attached), and requires the finding that a hardship, as required by the Geologic Hazards Ordinance, exists..." (Emphasis added)

The "Response to issues raised" does not appear to recognize how difficult the Required Findings are to make. Furthermore, case law even for variances has made clear that the County must apply the "true meaning" of the Required Findings and may not approve even a variance by loosely interpreting the rules. *Stolman v. City of Los Angeles* (2003) 114 Cal. App.4th 916, citing the California Supreme Court reference to the "critical reciprocity" underpinning zoning regulations in *Topanga Assn.for a Scenic Community v. County & Los Angeles*, (1974) 11 Cal. 3d 506.

As is set forth below, the Required Findings for an Exception cannot be made. The true meaning of these very difficult to make Findings cannot be avoided by loose interpretation.

Exception to Coastal Bluff Setback Requirement

A request for an Exception to the coastal bluff setback requirement "may be considered by the Planning Director if the exception is necessary to mitigate a threat to public health, safety and welfare." County Code 16.10.100(a). This is a very strict standard and, as confirmed by County Planning in the above-referenced letter, is more difficult to satisfy than variance findings. The application for an Exception is initiated by the applicant upon filing a written request stating why the Exception is requested, the proposed substitute provisions, when the exception would apply, and the threat to public health, safety, or welfare that would be mitigated. County Code § 16.10.100(b). No Exception to the 25 foot setback requirements applicable to the subject property can be considered until the Applicant has made such a request. Hence, at this time, Application No. 02-0432 must be deemed incomplete.

In the event such a request is subsequently filed, specific findings must be made in order for an Exception to be granted. See County Code § 16.10.100(c).

Required Finding #1

First, it must be found that a hardship, as defined in County Code Section 16.10.040(2j) exists. County Code §16.10.100(c)(1). County Code Section 16.10.040(2)(j) defines hardship as follows:

Hardship . . . means the exceptional hardship that would result from failure to

Larry Kasparowitz, Project Planner Application No. 02-0432 for **23**rd Avenue September 1,2005 Page 3 of **8**

grant the requested Exception. The specific hardship must be exceptional, unusual, and peculiar to the property involved. Economic or financial hardship alone is not exceptional. Inconvenience, aesthetic considerations, personal preferences, or the disapproval of neighbors also cannot qualify as exceptional hardship, as these problems can be resolved through means other than granting an Exception, even if those alternative means are more expensive, require a property owner to build elsewhere, or put the parcel to a different use than originally intended or proposed.

County Code § 16.10.040(2)(j). The "Responses to issues raised" document appears to contain an erroneous assumption that it would qualify **as** a hardship if the Applicant could not "develop the property in manner similar to the surrounding development." If "similar" as used in this document only refers to residential use, this could be true; however, **as** used, "similar" appears to refer to equivalent or larger size and this would not qualify as a "hardship" under the abovequoted Required Finding. Being limited to building a smaller single-family dwelling on an existing parcel (due to a need to relocate or properly size the road, turnaround and/or utilities) does not meet the definition of hardship.

Required Finding #2

Second, the Planning Director must find that the project is necessary to mitigate a threat to public health, safety, or welfare. County Code § 16.10.100(c)(2). This is an exceptionally strict standard and very difficult to satisfy with regard to development of a property with a private single-family dwelling. In determining what constitutes a threat to the public health, safety, or welfare, our courts have considered the approval of permits for a major subdivision as a threat because it could fundamentally alter the current way of life for the residents of the county. *See* 216 *Setter Bay Associates v County of Setter* (1997) 58 Cal.App.4th 860,868. A threat to public health, safety, or welfare necessarily affects the community at large. For this finding to be made for the above-referenced application. it must be determined that it is necessary to develop the parcel with the single-family dwelling. at the size and in the location proposed, to mitigate a threat to the community at large. This finding simply cannot be made.

Required Finding #3

The third finding which must be made is that the request must be for the smallest amount of variance from the coastal **bluff** setback requirements **as** possible. County Code § 16.10.100(c)(3). The "Responses to issues raised document attempts to split the project into a roadway project and a single-family dwelling project so as to result in reduction of the road width being the only means to address the Required Findings. Modification of the proposed single-family dwelling is not only another alternative, it is the only appropriate means to make the

Larry Kasparowitz, Project Planner Application No. 02-0432 for **23**rd Avenue September 1,2005 Page 4 of 8

Required Findings because the roadwidth in front of the Applicant's properly (and on the adjoining property owned by the Borellis) shown by the 1891 and 1976 recorded maps is approximately 36.8 to 40 feet. According to the Coastal Commission, 23rd Avenue is a public right-of-way (as set forth in the Coastal Commission Staff Report dated September 23,2004 and letter dated September 23,2002 – Exhibits B and C respectively). The County General Plan Section 7.7.18 designates 23rd Avenue as an area for Neighborhood Public Access to the shoreline. Coastal Commission files also contain a memorandum addressing the status of Live Oak Beach Front Roadways, which relies upon (among other things) County Counsel's criteria in determining whether a road became public by virtue of common law dedication (Inter-Office Memorandum dated January 23, 1986 referencing (among other things) the Consolidated Judgment in Santa Cruz County Superior Court Case No. 28857). The memorandum in the Coastal Commission files states that the material relied upon by County Counsel seems to affirm the validity of a common law dedication of most Live Oak beachfront streets that (like 23rd Avenue) were designated (and dedicated to the public) on subdivision maps recorded before the 1900's. Case law affirms that common law dedication is achieved through the recording of a subdivision map dedicating a street and acceptance by user alone. As to 23rd Avenue specifically, the Board of Supervisors asserted control over this street which was offered for dedication on a subdivision map recorded in 1891 by renaming it in 1908 and identifying it as a part of the avenues leading to East Cliff Drive and to the shore. Furthermore, the Consolidated Judgment shows that no part of 23rd Avenue is part of the lower Corcoran Lagoon parcel which adjoins it.

Thus, modification of the size of the proposed dwelling unit is the only appropriate means to comply with the requirement for the smallest amount of variance from the coastal bluff setback requirements as possible.

Both the County Supervisor for the District in which the Subject Property is located and the Coastal Commission Staff have pointed out that additional right-of-way dedication or road improvement may be needed and that the size of the proposed development may be inappropriate. Hence, for the foregoing reasons, among others, the required finding that the request must be for the smallest amount of variance from the coastal bluff setback requirements as possible also cannot be made for the current proposal.

Conclusion re Exception

For the reasons set forth above (among others) it is clear that the required Exception cannot be granted for the project as proposed. In the "Responses to issues raises' (#20), it is stated that

"[I]ndeed the Planning Department may request that the applicant submit a revised design

Larry Kasparowitz, Project Planner Application No. 02-0432 for 23rd Avenue September 1,2005 Page 5 of 8

that addresses bulk, mass, scale and compatibility with reduced lot coverage and floor area ratio."

We submit that such a "request" is a necessary requirement in order for the Required Findings to be made for the Exception which is a prerequisite to any approval of a project on this site.

Indeed, in *Stolmun v. City & Los Angeles* (2003) 114 Cal. App. 4th 916, the Court of Appeal overturned a variance finding because the administrative agency (here the County) did not apply the **true** meaning of the required finding. The *Stolmun* Court described the variance approval **as** being based on an "insufficiently independent" decision by the administrative agency. In *Stolmun* the Court of Appeal reiterated the reasons that it is important for agencies with land use authority to ensure strict adherence to zoning and land use regulations.

A zoning scheme, after all, is similar in some respects to a contract; each party forgoes rights to **use** its land as it wishes in return for the assurance that the use of neighboring property will be similarly restricted, the rationale being that such mutual restriction can enhance total community welfare. [Citations.] If the interest of these parties in preventing unjustified variance awards for neighboring land is not sufficiently protected, the consequence will be subversion of the critical reciprocity upon which zoning regulation rests. Abdication by the judiciary of its responsibility to examine variance board decision-making when called upon to do so could very well lead to such subversion. ... Vigorous judicial review ... can serve to mitigate the effects of insufficiently independent decision-making.' ([Topanga Assn. for a Scenic Community v. County of Los Angeles, supra, 11 Cal.3d 506 at 517-518 fn. omitted.)" (Orinda Assn. v. Board of Supervisors, 1161-1162.) App. 3d 1145, 182 Cal. supra,

Stolman, 114 Cal.App.4th at 926 – emphasis added. This precludes the Required Findings for the Exception this project (as proposed) must obtain. Turnaround Reduces Net Developable Area

In addition to the issue concerning the **25** foot setback, Mr. Borelli is concerned with the turnaround proposed for the parcel. For the following reasons, the turnaround area is legally required to be excluded from the net developable area of APNs 28-232-15 and 28-232-16. Furthermore, this is a very important practical consideration, as **well** as a legal requirement. Inadequate assurance that the turnaround remains open and unobstructed in this highly desirable beach parking area would create a safety hazard. Please note that the comments on items #2 and #3 of the "Responses to issues raised" are out of date; the **Fire** District has indeed required a turnaround on the Subject Property.

Larry Kasparowitz, Project Planner Application No. 02-0432 for 23rd Avenue September 1,2005 Page 6 of 8

First of all, the portion of a piece of property on which a turnaround is located is undevelopable. The turnaround area must be unobstructed at all times and cannot be used for parking cars, pursuant to Uniform Fire Code Section 902.2.4.1 (adopted by the County Code). That section provides: "The required width of a fire apparatus access road (which includes a turnaround) shall not be obstructed in any manner, including parking of vehicles." See also County General Plan Section 6.5.1(l) ("All private access roads, driveways, turn arounds 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.")

The turnaround is not "developable land" and may not be included in the net developable area of a parcel. County Code Section 13.10-700-N defines the net developable area of a parcel as follows:

"Net Developable area" means the portion of a parcel which can be used **for** density calculations; public or private road **rights-of-way and land not developable** (see definition of "developable land") are not included in the net developable area of a parcel. (emphasis added)

"Developable land" is defined in County Code Section 13.10.700-D as follows:

Land which is suitable **as** a location for structures and which can be improved through normal and conventional means, free of development hazards, and without disruption or significant impact on natural resource areas.

As explained above, the turnaround area cannot be used for a purpose which obstructs it any manner, therefore, it is not "suitable as a location for structures." For this reason, it cannot reasonably qualify as part of the net developable area of the site.

As a second, and independent reason why the turnaround must be excluded from net developable area is that fire department access turnarounds are consistent with the legal definition of a right-of-way. Pursuant to County Code Section 13.10-700-N, set forth fully above, the net developable area of a parcel does not include "public or private road rights-of-way . . . [these] are not included in the net developable area of a parcel." The County Zoning Ordinance does not define either public road right-of-way or private road right-of-way. When the term is used in California case law in the context of private roads, it is normally to describe a right-of-way for ingress and egress. See i.e., *Flavio v. McKenzie* (1963) 215 Cal.App.2d 549, 551. This emergency access turnaround is exactly that, a legal right-of-way for Fire Department vehicles to enter and exit the property. and use for fire safety purposes.

The County Code also requires buildings to be setback so as to establish yards. A front

Larry Kasparowitz, Project Planner Application No. 02-0432 for 23rd Avenue September 1,2005 Page 7 of 8

yard setback is defined as "A yard extending across the full width of a site, the depth of which is the minimum horizontal distance between the front property line or **the inside edge of a right-way** and a line parallel thereto on the site." (County Code Section 13.10.700"Y" -- emphasis added) Hence, the building setback for the front yard on the Subject Property would also be set on the basis of the inside edge of the turnaround.

This turnaround is a right-of-way for fire access to all of 23rd Avenue and the benefits of its existence inures to third parties as well as to the owners of the property upon which the turnaround is located and the Central Fire Protection District. Therefore, it fits the definition of a right-of-way because the property owners are required by law to keep it open for the Fire Department and the turnaround area is not to be included in the net developable area and is the measuring point for determining the front yard setback as well.

Other Issues

By limiting this letter to the concerns discussed above, my clients are not waiving or diminishing the importance of other issues previously raised by them or others. Indeed, as the "Responses to issues raised" makes clear, there are other important issues which remain unresolved, including, but not limited to:

- (1) Sight distance at East Cliff and 23rd Avenue.
- (2) Drainage and Grading: The Grading and Drainage Plan fails to specify any limit on the grading allowed and contains very few spot elevations so it is difficult to determine what is being proposed. Nevertheless, it appears that the slope on the portion of 23rd Avenue in front of the Subject Property is too flat and will not drain properly to East Cliff Drive. This would appear to necessitate raising the end of the turnaround another 1.5 feet, which will require more fill (apparently about six feet horizontally at a 2:1 slope) at the edge of the bluff, which does not appear to have been addressed by either the Geotechnical Report or the Grading Plan).
- (3) Required Agreement for Maintenance of 23rd Avenue (or in the alternative requirement for improvements based on 23rd Avenue being a public right-of way).
- (4) Floor area ratio, parking and front setback to garage as required pursuant to letters from Coastal Commission Staff dated September 23,2002 and October 1,2002 (copy of each enclosed as Exhibits C and D respectively).
- (5) Floodplain and Riparian setbacks: The 1891Subdivision Map shows the historic reach of Corcoran Lagoon at the foot of the bluff below 23rd Avenue adjacent to the Subject

Larry Kasparowitz, Project Planner Application No. 02-0432 for 23rd Avenue September 1,2005 Page 8 of **8**

Property and the Coastal Commission letter dated September 23,2002 points out that Corcoran Lagoon temporally occupies the foot of said bluff. See also aerial photographs from 1928,1956,1963,1972, 1975,1979, and 1982 (attached as Exhibit E1-E7) showing the water at the foot of **the** bluff below 23rd Avenue adjacent to the Subject Property. Mr. Borelli has observed water in that location in 2003 as well. With the advent of rising seas from global warming, more of this situation is very foreseeable.

Conclusion

This letter requests that the Planning Department:

- 1. Require the Applicant to file a complete application for an Exception to the Coastal Bluff setback requirement addressing all of the Required Findings;
- 2 Strictly apply **the** Required Findings as mandated by case law;
- 3. Exclude the fire vehicle turnaround from calculation of net developable area and measure the front yard setback from the inside edge of said turnaround; and
- **4.** Apply all other County and LCP regulations properly to this Application

Thank you for your consideration of these matters.

Sincerely.

WITTWER & PARKIN, LLP

Encls. Exhibit A: County Planning Department Letter dated 12-15-04

Exhibit B: Excerpts from 9-23-04 Coastal Commission Staff Report

Exhibit C: Coastal Commission Staff letter to County dated 9-23-02

Exhibit D: Coastal Commission Staff letter to County dated 10-1-02

Exhibit E1-E7 Aerial Photographs of lagoon water at foot of cliff at 23rd Avenue

cc: Supervisor Beautz

County Counsel

Coastal Commission, attn. Dan Carl

Wayne Miller, Applicant's Representative

Clients

Textured Shingle Green "Elk Prestique"

Vaden Residence Colors
APN-122-232-16

Dark Green Trim

