STATE OF CALIFORNIA—THE RESOURCES AGENCY GRAY DAVIS, GOVERNOR

CALIFORNIA COASTAL COMMISSION
45 FREMONT, SUITE 2000
SAN FRANCISCO, CA 94105-2219
VOICE AND TDD (415) 904-5200
FAX (415) 904-5400

RSM

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Filed:	April 22,1999
49th Day:	June 10, 1999
Staff:	Jo Ginsberg
Staff Report:	June 25, 1999
Hearing Date:	July 16, 1999
Commission Action:	

STAFF REPORT: APPEAL

SUBSTANTIAL ISSUE

LOCAL GOVERNMENT:	County of Mendocino
DECISION:	Approval with Conditions
APPEAL NO.:	**A-1-MEN-99-26**
APPLICANT:	**ROSEMARIE KLUTE**
APPLICANT'S AGENT:	Ed McKinley
PROJECT LOCATION:	29950 South Highway One, Gualala, Mendocino County; APN 142-031-03
PROJECT DESCRIPTION:	(1) Construction of a 16 ½-foot-high, 2,146-square -foot single-family residence with a 22-foot-high, 1,152-square-foot attached garage and guest cottage, septic system, well, and crushed rock driveway; and (2) Use of a temporary trailer during construction.
APPELLANTS:	**Friends of Schooner Gulch; Mendocino CoastWatch**
AGENTS:	Peter Reimuller, Roanne Withers.
SUBSTANTIVE FILE DOCUMENTS:	Mendocino County CDP #52-98; Mendocino County LCP; Earth Science Consultants' Geotechnical Investigations 1/22/98 and 6/4/99.

SUMMARY OF STAFF RECOMMENDATION:

1. SUMMARY OF STAFF RECOMMENDATION: SUBSTANTIAL ISSUE

The staff recommends that the Commission determine that a substantial issue exists with respect to the grounds on which the appeal has been filed, and that the Commission hold a de novo hearing, because the appellants have raised a substantial issue with the local government's action and its consistency with the certified LCP.

Mendocino County approved a coastal development permit for construction of a 16 ½-foot-high, 2,146-square-foot single-family residence with a 22-foot-high, 1,152-square-foot attached garage and guest cottage, septic system, well, and crushed rock driveway. The appellants contend that the project is not consistent with the County's LCP, and have two main areas of concern, (1) geologic hazards and seawalls, and (2) water supply.

Commission staff believes the appeal of the development, as approved by the County, raises a substantial issue of whether the proposed residence, located 20 feet from the edge of the bluff, would create a geologic hazard or require the construction of a protective device, inconsistent with the policies of the certified LCP regarding hazards. Commission staff also believes the appeal of the development, as approved by the County, raises a substantial issue of whether there is adequate water to serve the proposed development, inconsistent with the public services and new development policies of the certified LCP. At the time the County approved the project, there was no proof of water for the site, which is in an area known for water problems.

The Motion to adopt the Staff Recommendation of Substantial Issue is found on Page 5.

2. SUMMARY OF STAFF RECOMMENDATION DE NOVO: APPROVAL WITH CONDITONS

The staff recommends that the Commission approve with conditions the coastal development permit for the proposed project on the basis that, as conditioned by the Commission, it is consistent with the County's certified LCP and with the public access and public recreation policies of the Coastal Act.

The current project, as approved by the County, is inconsistent with the geologic hazard policies of the certified LCP. However, this inconsistency can be eliminated by proposed Special Condition No. 3. This condition requires recordation of a deed restriction regarding assumption of risk/future response to erosion to ensure that no shoreline protective device shall be constructed on the parcel, that the landowner shall remove the house and its foundation when bluff retreat reaches the point where the structure is threatened, and that the applicant accepts sole responsibility for the removal of any structural debris resulting from landslides, slope failures, or erosion on the site. Thus, the adverse impacts of the project can be mitigated consistent with the provisions of the certified LCP through special conditions. In addition to recommending specific conditions addressing geologic hazards, staff is recommending that the Commission attach several other conditions that are similar to conditions the County had attached to its permit to ensure the project's consistency with the certified LCP.

The Motion to adopt the Staff Recommendation of Approval with Conditions is found on Page 15.

STAFF NOTES:

1. Appeal Process.

After certification of Local Coastal Programs (LCPs), the Coastal Act provides for limited appeals to the Coastal Commission of certain local government actions on coastal development permits (Coastal Act Section 30603.)

Section 30603 states that an action taken by a local government on a coastal development permit application may be appealed to the Commission for certain kinds of developments, including developments located within certain geographic appeal areas, such as those located between the sea and the first public road paralleling the sea or within three hundred feet of the mean high tide line or inland extent of any beach or top of the seaward face of a coastal bluff, or those located in a sensitive coastal resource area.

Furthermore, developments approved by counties may be appealed if they are not designated the "principal permitted use" under the certified LCP. Finally, developments that constitute major public works or major energy facilities may be appealed, whether approved or denied by the city or county. The grounds for an appeal are limited to an allegation that the development does not conform to the standards set forth in the certified local coastal program or the public access and public recreation policies set forth in the Coastal Act.

The subject development is appealable to the Commission because the proposed development is located between the sea and the first public road paralleling the sea, is also within 300 feet of the mean high tide line and the top of the seaward face of a coastal bluff, and is located within a designated Highly Scenic Area, which constitutes a "sensitive coastal resource area."

Section 30625(b) of the Coastal Act requires the Commission to hear an appeal unless the Commission determines that no substantial issue is raised by the appeal. If the Commission decides to hear arguments and vote on the substantial issue question, proponents and opponents will have three minutes per side to address whether the appeal raises a substantial issue. It takes a majority of Commissioners present to find that no substantial issue is raised. Unless it is determined that there is no substantial issue, the Commission would continue with a full public hearing on the merits of the project, which may occur at a subsequent meeting. If the Commission were to conduct a de novo hearing on the appeal, because the proposed development is between the first road and the sea, the applicable test for the Commission to consider would be whether the development is in conformity with the certified Local Coastal Program and with the public access and public recreation policies of the Coastal Act.

The only persons qualified to testify before the Commission on the substantial issue question are the applicants, persons who made their views known before the local government (or their representatives), and the local government. Testimony from other persons regarding substantial issue must be submitted in writing.

2. Filing of Appeal.

The appellants filed an appeal to the Commission in a timely manner on April 22, 1999, within ten working days of the County's issuance of the Notice of Final Action, which was received in the Commission's offices on April 9, 1999.

3. Continuation of Hearing.

Pursuant to Section 30621 of the Coastal Act, an appeal hearing must be set within 49 days from the date an appeal of a locally issued coastal development permit is filed. The appeal on the above-described decision was filed on April 22, 1999. The 49th day occurred on June 10, 1999. The only meeting within the 49-day period was May 11-14, 1999. In accordance with the California Code of Regulations, on April 23, 1999, staff requested all relevant documents and materials regarding the subject permit from the County, to enable staff to analyze the appeal and prepare a recommendation as to whether a substantial issue exists. The County permit file information had not been received as of

the day of the mailing of staff reports to the Commission and interested parties on items on the Commission's May meeting agenda. Thus, the requested information was not received in time for the staff to review the information for completeness or prepare a recommendation on the substantial issue question. Consistent with Section 12112 of the California Code of Regulations, since the Commission did not timely receive the requested documents and materials, staff requested that the Commission open and continue the hearing open until all relevant materials are received from the local government. On May 14, 1999, the Commission voted to open and continue the public hearing to determine whether substantial issue exists with respect to the grounds on which the appeal has been filed. On May 15, 1999, the applicant submitted a letter requesting that the public hearing be continued to the July Commission meeting.

4. Additional Information.

The basis for this appeal is that the project, as approved by the County, is not consistent with the policies of the certified LCP. Subsequent to filing of the appeal, but prior to completion of the staff report, the applicant submitted some additional information that is relevant to the project. An addendum to the geotechnical investigation has been submitted, as well as information regarding a newly drilled well. While this additional information is pertinent to the de novo review of the project, it does not affect the question of substantial issue, which is based on the information available to the County at the time it approved the project.

PART ONE – SUBSTANTIAL ISSUE

I. STAFF RECOMMENDATION ON SUBSTANTIAL ISSUE

Pursuant to Section 30603(b) of the Coastal Act and as discussed below, the staff recommends that the Commission determine that a substantial issue exists with respect to the grounds on which the appeal has been filed. The proper motion is:

MOTION:

I move that the Commission determine that Appeal No. A-1-MEN-99-26 raises NO substantial issue as to conformity with the certified Local Coastal Program with respect to the grounds on which an appeal has been filed pursuant to Section 30603 of the Coastal Act.

Staff recommends a NO vote. To pass the motion, a majority vote of Commissioners present is required. Approval of the motion means that the County permit is final.

II. Findings and Declarations.

The Commission hereby finds and declares:

A. APPELLANTS' CONTENTIONS.

The Commission received from the appellants (Friends of Schooner Gulch and Mendocino CoastWatch) an appeal of the County of Mendocino's decision to approve the project. The project as approved by the County consists of the construction of a 16 ½-foot-high, 2,146-square-foot single-family residence with a 22-foot-high, 1,152-square-foot attached garage and guest cottage, septic system, well, and crushed rock driveway, and use of a temporary trailer during construction. The appellants' contentions are summarized below, and the full text of the contentions are included as Exhibit No. 5.

The appellants' contentions involve inconsistency with the County's LCP policies regarding geologic hazards and seawalls, and with water supply, as described below.

1. Geologic Hazards and Seawalls.

The appellants contend that the project approved by the County may not have an adequate bluff setback; that the County did not require a prohibition against future seawalls, which should be prohibited because of the visual blight that a seawall would create in a designated Highly Scenic Area; that the geologic report was flawed and inadequate; and that the project is thus inconsistent with LUP Policies 3.5-1, 3.5-4, 3.4-7, 3.4-9, and Zoning Code Sections 20.500.010 and 20.504.015(c)(1) and (3).

2. Water Supply.

The appellants contend that the lot has no proven on-site water since no acceptable well has been drilled, there is no community water system, and there are no springs available. They assert that this is a known area of insufficient water, and that the project, which has no proof of water, is thus inconsistent with LUP Policies 3.8-1 and 3.9-1, Zoning Code Section 20.532.095.

B. LOCAL GOVERNMENT ACTION.

On March 25, 1999, the Mendocino County Coastal Permit Administrator approved the project with conditions (CDP #52-98). The project was not appealed to the Board of Supervisors. The County then issued a Notice of Final Action on the permit, which was received by Commission staff on April 9, 1999 (see Exhibit No. 6).

The County attached to its coastal permit a number of special conditions (see Exhibit No. 6), including, among others: (1) a requirement that prior to issuance of the CDP, the applicant shall submit a letter from Earth Science Consultants indicating the current project layout has been reviewed and recommendations have been updated accordingly, and that the applicant shall incorporate all recommendations included in the geotechnical report and any addendum; (2) a requirement that prior to issuance of the CDP, the applicant shall submit a drainage plan consistent with the requirements of the geotechnical investigation; (3) requirements concerning design and lighting restrictions; and (4) a requirement requiring submittal of a landscape plan with specific criteria.

C. PROJECT AND SITE DESCRIPTION.

The proposed development consists of (1) construction of a 16 ½-foot-high, 2,146-square-foot single-family residence with a 22-foot-high, 1,152-square-foot attached garage and guest cottage, wood decking, screening fences around the water tanks, propane tank and trash area, septic system, well, and crushed rock driveway; and (2) use of a temporary trailer during construction. (See Exhibits 3 and 4).

The subject site is on a blufftop approximately five miles south of Point Arena, on the west side of Highway One, near the intersection with Iversen Road. The site consists of a former ancient wave cut marine terrace that slopes slightly towards the west.

The parcel is located within a designated Highly Scenic Area. There is no sensitive habitat on the property.

D. SUBSTANTIAL ISSUE ANALYSIS.

Section 30603(b)(1) of the Coastal Act states:

> The grounds for an appeal pursuant to subdivision (a) shall be limited to an allegation that the development does not conform to the standards set forth in the certified local coastal program or the public access policies set forth in this division.

1. Appellants' Contentions That Raise a Substantial Issue.

Both of the contentions raised in the appeal present potentially valid grounds for appeal in that they allege the project's inconsistency with policies of the certified LCP. In both cases, the Commission finds that a substantial issue is raised.

Public Resources Code section 30625(b) states that the Commission shall hear an appeal unless it determines:

> With respect to appeals to the commission after certification of a local coastal program, that no substantial issue exists with respect to the grounds on which an appeal has been filed pursuant to Section 30603.

The term substantial issue is not defined in the Coastal Act or its implementing regulations. The Commission's regulations simply indicate that the Commission will hear an appeal unless it "finds that the appeal raises no significant question." (Cal. Code Regs., tit. 14, section 13115(b).) In previous decisions on appeals, the Commission has been guided by the following factors:

1. The degree of factual and legal support for the local government's decision that the development is consistent or inconsistent with the certified LCP and with the public access policies of the Coastal Act;

2. The extent and scope of the development as approved or denied by the local government;

3. The significance of the coastal resources affected by the decision;

4. The precedential value of the local government's decision for future interpretation of its LCP; and

5. Whether the appeal raises only local issues, or those of regional or statewide significance.

Even where the Commission chooses not to hear an appeal, appellants nevertheless may obtain judicial review of the local government's coastal permit decision by filing petition for a writ of mandate pursuant to Code of Civil Procedure, section 1094.5.

In this case, for the reasons discussed further below, the Commission exercises its discretion and determines that the development as approved by the County presents a

substantial issue with regard to both of the appellants' contentions: geologic hazards and seawalls, and water supply.

a. **Geologic Hazards and Seawalls.**

The appellants contend that the proposed project is inconsistent with Mendocino County LUP Policies 3.5-1, 3.5-4, 3.4-7, 3.4-9, and Zoning Code Sections 20.500.010 and 20.504.015(c)(1) and (3) regarding geologic hazards and the protection of visual resources, as they apply to seawalls.

i. Inadequacy of Geotechnical Investigation: The appellants assert that the geological report is fatally flawed, and point out many inadequacies of the report, including that the blufftop setback may be inadequate, that the measuring of cliff recession is inadequate, that the probability of rising seas due to global warming was not addressed, and that the subject of the future effects of earthquakes is not discussed.

LCP Policies:

LUP Policy 3.4-7 states that:

> *The County shall require that new structures be set back a sufficient distance from the edges of bluffs to ensure their safety from bluff erosion and cliff retreat during their economic life spans (75 years). Setbacks shall be of sufficient distance to eliminate the need for shoreline protective works. Adequate setback distances will be determined from information derived from the required geologic investigation and from the following setback formula:*
>
> *Setback (meters) = Structure life (years) x Retreat rate (meters/year)*
>
> *The retreat rate shall be determined from historical observation (e.g., aerial photographs) and/or from a complete geotechnical investigation.*
>
> *All grading specifications and techniques will follow the recommendations cited in the Uniform Building Code or the engineering geologist's report.*

These requirements are reiterated in Zoning Code Section 20.500.020(B).

LUP 3.4-9 states that:

> *Any development landward of the blufftop setback shall be constructed so as to ensure that surface and subsurface drainage does not contribute to the erosion of the bluff face or to the instability of the bluff itself.*

Discussion:

The geotechnical report initially submitted, dated January 22, 1998, concludes that the proposed development is feasible from the geotechnical engineering standpoint if performed and maintained in accordance with the recommendations of the report (see Exhibit No. 8).

The report bases this conclusion in part on a review of a 1967 aerial photo of the area, and the current observed and measured site features, which indicate that no apparent bluff regression has occurred during the past 31 years, likely due to the harder bedrock and favorable bedding of the bedrock and reasonably well sheltered location.

The report goes on to say that "However, we have found during our 32 years of coastal experience that bluff recession may remain dormant for many years, then a significant local amount may occur during a severe storm or severe winter or earthquake. Therefore, for planning purposes we would recommend a maximum local bluff recession rate to be equal to or less than .0263 feet per year or 3.16 inches per year...for a 75 year local maximum bluff regression amount of 19.7 feet." The report then recommends a 20-foot minimum blufftop setback for development on the site.

The geotechnical report does not indicate why it concludes that the bluff will average 3.16 inches per year. In addition, apparently only one historic photo was examined, from which it was concluded that there had been no bluff erosion during the past 21 years. At the same time, the report comments that a significant local event might result in sudden bluff recession. Thus, it is not entirely clear whether the house is set back a sufficient distance from the bluff to ensure the safety of the structures from bluff erosion and cliff retreat during the economic lifespan of the project, nor is it clear whether the project will create or contribute to erosion, geologic instability, or destruction of the site or surrounding area.

The Commission thus finds that the project as approved by the County raises a substantial issue with respect to conformance of the approved project with the LCP policies regarding geologic hazards.

ii. Seawalls: The appellants further contend that sooner or later the owner of the subject parcel will want a seawall and/or retaining wall, which would constitute a major assault on the scenic viewshed. The appellants further contend that in this designated Highly Scenic Area, if one seawall were allowed, a precedent would be set for the other blufftop lots in the area.

LCP Policies:

Zoning Code Section 20.500.010 states that development shall:

> *(1) Minimize risk to life and property in areas of high geologic, flood and fire hazard;*
> (2) *Assure structural integrity and stability; and*
> (3) *Neither create nor contribute significantly to erosion, geologic instability or destruction of the site or surrounding areas, nor in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.*

LUP Policy 3.5-1 states in applicable part that:

> *The scenic and visual qualities of Mendocino County coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas designated by the County of Mendocino Coastal Element shall be subordinate to the character of its setting.*

LUP Policy 3.5-4 states in applicable part that:

> *Buildings and building groups that must be sited within the highly scenic area shall be sited near the toe of the slope, below rather than on a ridge, or in or near the edge of a wooded area. Except for farm buildings, development in the middle of large open areas shall be avoided if an alternative site exists...Minimize visual impacts of development on terraces by (1) avoiding development in large open areas if [an] alternative site exists;.(2) minimize the number of structures and cluster them near existing vegetation, natural landforms or artificial berms; (3) provide bluff setbacks for development adjacent to or near public areas along the shoreline; (4) design development to be in scale with rural character of the area.*

Zoning Code Section 20.504.010 states that permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize alteration of natural landforms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas.

Zoning Code Section 20.504.015(C) states in applicable part:

> *(1) Any development permitted in highly scenic areas shall provide for the protection of coastal views from public areas including highways, roads, coastal trails, vista points, beaches, parks, coastal streams, and waters used for recreational purposes...*
>
> *(3) New development shall be subordinate to the natural setting and minimize reflective surfaces. In highly scenic areas, building materials including siding and roof materials shall be selected to blend in hue and brightness with their surroundings...*

Discussion.

The subject property is a sloping coastal terrace west of Highway One. The site is in a designated "Highly Scenic Area" south of Point Arena that is very sparsely developed, and a popular recreational area, providing two major tourist destinations, Bowling Ball Beach and Schooner Gulch Beach. The subject site is visible from a number of public areas, including portions of Highway One, a scenic turnout to the north, and from the public beach. As discussed above, based on the information in the record before the County, it is not entirely clear whether the house as approved would be set back from the bluff sufficiently to ensure the safety of the structures from bluff erosion and cliff retreat during the economic lifespan of the project. If not, a seawall might become necessary to protect the structures. Such a protective device would also be visible from a number of public areas, would not be subordinate to the character of its setting, and would not be visually compatible with the character of surrounding areas. In addition, the addition of a seawall or retaining wall would not minimize the alteration of natural landforms.

Because of the extraordinary nature of the project setting, the Commission finds that the visual resources that would be affected by the construction of a seawall or retaining wall are very significant. In addition, Mendocino contains many coastal parks and beaches, both state and local, in areas where residential development pressure is growing. The outcome of the review of this coastal development permit application will have precedential significance for the County's review of other future residential development proposed to be sited near public parks and beaches, and will have precedential

significance regarding the potential need for seawalls and/or retaining walls on vacant lots near the subject site. Thus, the Commission finds that the project as approved by the County raises a substantial issue with respect to conformance of the approved project with the LCP policies regarding seawalls and their effect on visual and scenic resources.

b. Water Supply:

The appellants contend that the lot has no proven on-site water: no well, no community water system, and no springs available. This area is a known area of insufficient water. If the proposed development is allowed without evidence of water being available, a precedent will be set for future developments on the headlands to the north, and elsewhere in Mendocino County.

LCP Policies:

Policy 3.9-1 of the Mendocino County Land Use Plan states that new development shall be located within or near existing developed areas able to accommodate it or in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources. The intent of this policy is to channel development toward more urbanized areas where services are provided and potential impacts to resources are minimized.

Policy 3.8-1 states that Highway 1 capacity, availability of water and sewage disposal system and other know planning factors shall be considered when considering applications for development permits.

Discussion:

At the time the County approved the proposed project and the appeal was filed, there was no evidence that a water source existed to provide water for the proposed development. The site is adjacent to the Iversen Point subdivision and very near the Whiskey Shoals subdivision, both of which have a known critically limited groundwater supply.

Since it was not clear at the time the County approved the project whether water was available to serve the project, the Commission finds that the project as approved by the County raises a substantial issue with respect to conformance of the approved project with the LCP policies regarding provision of services.

Conclusion.

The Commission finds that, as discussed above, the appeal raises a substantial issue with respect to conformance of the approved project with the policies of the LCP concerned geologic hazards and seawalls, and with water supply.

PART TWO – DE NOVO ACTION ON APPEAL

Notes

1. Procedure.

If the Commission finds that a locally approved coastal development permit raises a Substantial Issue with respect to the policies of the certified LCP, the local government's approval no longer governs, and the Commission must consider the merits of the project with the LCP de novo. The Commission may approve, approve with conditions (including conditions different than those imposed by the County), or deny the application.

2. Incorporation of Substantial Issue Findings.

The Commission hereby incorporates by reference the Substantial Issue Findings above.

I. MOTION, STAFF RECOMMENDATION DE NOVO, AND RESOLUTION:

1. Motion:

I move that the Commission approve Coastal Development Permit No. A-1-MEN-99-26 subject to conditions.

2. Staff Recommendation of Approval:

Staff recommends a YES vote and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

3. Resolution to Approve Permit:

The Commission hereby grants, subject to the conditions below, a permit for the proposed development on the grounds that the development, as conditioned, is in conformance with the certified Mendocino County LCP, is located between the sea and the nearest public road to the sea and is in conformance with the public access and public recreation policies of Chapter 3 of the Coastal Act, and will not have any significant adverse impacts on the environment within the meaning of the California Environmental Quality Act.

II. Standard Conditions: See attached.

II. Special Conditions:

1. Future Development:

PRIOR TO ISSUANCE of the Coastal Development Permit, the permittee shall execute and record a deed restriction, subject to the review and approval of the Executive Director, stating that the subject permit is only for the development herein described in the coastal development permit and that any future additions or other development on APN 142-031-03 as defined in Mendocino County Zoning Code Section 20.308.035(D), including the construction of fences, gates, additions, or outbuildings that might otherwise be exempt under Zoning Code Section 20.532.020(C), will require an amendment to this permit or will require an additional coastal development permit from Mendocino County.

This document shall run with land, binding all successors and assigns, and shall be recorded free of prior liens that the Executive Director determines may affect the enforceability of the restriction. This deed restriction shall not be removed or changed without a Coastal Commission-approved amendment to this coastal development permit unless the Executive Director determines that no amendment is required because the change is not substantive in nature.

2. Second Structure:

PRIOR TO ISSUANCE of the Coastal Development Permit, the permittee shall submit for the review and approval of the Executive Director and shall subsequently record, a deed restriction stating that the guest cottage shall be without kitchen or cooking facilities and shall not be separately rented, let, or leased, whether compensation be direct or indirect.

This deed restriction shall be recorded with the deed to parcel APN 142-031-03 as a covenant running with the land, binding all successors and assignees of the permittee, and shall be recorded free of prior liens that the Executive Director determines may affect the enforceability of the restriction. This deed restriction shall not be removed or changed without a Coastal Commission-approved amendment to this coastal development permit unless the Executive Director determines that no amendment is required because the change is not substantive in nature.

2. Assumption of Risk, Waiver of Liability Indemnification Agreement, and Landowner Obligations and Responsibilities:

PRIOR TO THE ISSUANCE of the Coastal Development Permit, the applicant as landowner shall execute and record a deed restriction, in a form and content acceptable to the Executive Director, which shall provide that:

(a) The landowner understands that the site may be subject to extraordinary geologic and erosion hazard and the landowner assumes the risk from such hazards;

(b) The landowner unconditionally waives any claims of liability against the California Coastal Commission, its successors in interest, advisors, officers, agents, and employees for any damage from such natural hazards or arising out of any work performed in connection with the permitted project;

(c) The landowner agrees to indemnify and hold harmless the California Coastal Commission, its successors in interest, advisors, officers, agents and employees against any and all claims, demands, damages, costs, and expenses of liability (including without limitation attorneys' fees and costs of suit) arising out of the design, construction, operation, maintenance, existence or failure of the permitted project, including without limitation any and all claims made by any individual or entity or arising out of any work performed in connection with the permitted project;

(d) The landowner agrees that any adverse impacts to property caused by the permitted project shall be fully the responsibility of the applicant;

(e) The landowner shall not construct any bluff or shoreline protective devices to protect the subject single-family residence, guest cottage, garage, septic system, or other improvements in the event that these structures are subject to damage, or other natural hazards in the future;

(f) The landowner shall remove the house and its foundation when bluff retreat reaches the point where the structure is threatened. In the event that portions of the house, garage, foundations, leach field, septic tank, or other improvements associated with the residence fall to the beach before they can be removed from the blufftop, the landowner shall remove all recoverable debris associated with these structures from the beach and ocean and lawfully dispose of the material in an approved disposal site. The landowner shall bear all costs associated with such removal;

(g) That any changes to the proposed project or other development as defined in Coastal Act Section 30106 shall require an amendment to this permit or an additional coastal development permit from the California Coastal Commission or its successor agency.

The document shall run with the land, bind all successors and assigns, and shall be recorded free of all prior liens and encumbrances, except for tax liens.

4. Final Foundation and Drainage Plans:

PRIOR TO ISSUANCE of the Coastal Development Permit, the permittee shall submit for the Executive Director's review and approval, final foundation and site drainage plans that incorporate all the recommendations included in the geotechnical report dated January 22, 1998 prepared by Earth Science Consultants and addendum dated June 4, 1999, included with the County application, regarding site grading, foundations, and site drainage. The permittee shall undertake development in accordance with the approved final plans. Any proposed changes to the approved final plans shall be reported to the Executive Director. Proposed changes to the approved final plans shall not occur without a Coastal Commission approved amendment to this coastal development permit unless the Executive Director determines that no amendment is required.

5. Landscaping Plan:

PRIOR TO ISSUANCE of the Coastal Development Permit, the applicant shall submit, for the Executive Director's review and approval, a landscaping plan prepared by a qualified professional with expertise in the field of landscaping, such as a landscape architect. The plan shall provide for the following:

(a) Trees shall be planted along the eastern and southern boundaries of the proposed residence to soften the view of the residence from the public view turnout to the north and from Highway One to the east. In addition to the five proposed cypress trees indicated on the site plan, a minimum of three additional trees shall be planted to the west of the proposed driveway.

(b) Specifications shall be included to indicate species, size at planting, height at maturity, and establishment techniques (e.g., irrigation, fertilization, etc.)

(c) The plan shall also specify that all existing trees within the construction area that screen the residence from Highway One and the public view area shall be protected during the construction phase with construction fencing, and all screening trees shall be retained.

(d) The plan shall include a tree maintenance program (e.g., pruning, fertilizing, watering, etc.) for newly planted trees and shrubs and a replacement program for the mature trees and shrubs on a one-to-one or greater ratio for the life of the project. The new trees and shrubs shall be planted, and all necessary irrigation equipment shall be installed, within 60 days of completion of the project, and in any case prior to occupancy of the site.

(e) The plan shall also indicate the location of all existing trees/shrubs on the property that will serve as landscape screening for the proposed structures and that shall remain undisturbed. Except as provided for in the approved Landscaping Plan, and any vegetation that must be removed for fire safety as required by the California Department of Forestry and Fire Protection, no existing vegetation on the site outside the building envelope shall be removed. Any existing trees or vegetation providing screening that do not survive must be replaced on a one-to-one or higher ratio for the life of the project. Any future removal of trees shall require a new coastal permit or an amendment to Coastal Permit No. 1-1-MEN-99-26, unless the Executive Director determines that no amendment is required.

(f) The site shall be monitored for the first five years following planting, and a monitoring report shall be submitted by September 1 of each year for the review and approval of the Executive Director of the Coastal Commission. The monitoring report will document the health of the planted and existing trees and recommend any needed corrective actions to achieve compliance with the requirements of this condition.

The permittee shall undertake development in accordance with the approved final landscaping plans. Any proposed changes to the approved final plans shall be reported to the Executive Director. Proposed changes to the approved final plans shall not occur without a Coastal Commission approved amendment to this coastal development permit unless the Executive Director determines that no amendment is required.

The applicant shall notify the Executive Director in writing when the trees and shrubs have been planted, and Commission staff shall verify the planting via a site visit or by examining photographs submitted by the applicant.

6. Design Restrictions:

(a) All exterior siding of the proposed structures shall be composed of natural or natural appearing materials, and all siding and roofing of the proposed

structures shall be composed of materials of dark earthtone colors only. The current owner or any future owner shall not repaint or stain the house with products that will lighten the color the house as approved. In addition, all exterior materials, including roofs and windows, shall be non-reflective to minimize glare.

(b) Further, all exterior lights, including any lights attached to the outside of the buildings, shall be the minimum necessary for the safe ingress and egress of the structures, and shall be low-wattage, non-reflective, shielded, and have a directional cast downward such that no light will shine beyond the boundaries of the subject parcel.

(c) All fencing north of the residence shall be eliminated. The trash enclosure area and the propane tank shall be relocated to the area around the water tanks.

IV. FINDINGS AND DECLARATIONS

The Commission hereby finds and declares as follows:

1. Project and Site Description:

As noted in the Substantial Issue portion of this report, the proposed development consists of construction of a 16 ½-foot-high, 2,146-square-foot single-family residence with a 22-foot-high, 1,152-square-foot attached garage and guest cottage, wood decking, screening fences around the water tanks, propane tank and trash area, septic system, well, and crushed rock driveway; and (2) use of a temporary trailer during construction. (See Exhibits 2-4).

The subject site is a one-acre blufftop lot located approximately five miles south of Point Arena, on the west side of Highway One, near the intersection with Iversen Road. The site consists of a former ancient wave cut marine terrace that slopes slightly towards the west.

The parcel is located within a designated Highly Scenic Area. There is no sensitive habitat on the property.

2. Planning and Locating New Development

Policy 3.9-1 of the Mendocino County Land Use Plan states that new development shall be located within or near existing developed areas able to accommodate it or in other

areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources. The intent of this policy is to channel development toward more urbanized areas where services are provided and potential impacts to resources are minimized.

Policy 3.8-1 states that Highway 1 capacity, availability of water and sewage disposal system and other know planning factors shall be considered when considering applications for development permits.

Zoning Code Section 20.376.025 provides for one dwelling unit per residentially designated parcel.

Zoning Code Section 20.458.010 states that the creation and/or construction of a second residential unit is prohibited, except for such things as farm employee housing, farm labor housing, and family care units.

The subject property is zoned in the County's LCP as Rural Residential-5 acre minimum [Rural Residential-1 acre minimum conditional with proof of water] (RR:L-5 [RR]), meaning that there may be one parcel for every five acres, or one parcel for every acre with proof of water. The subject parcel, which is approximately one acre in size and which will be served by an existing well and proposed septic system, is a legal, conforming lot.

At the time the County approved the project, no well had been drilled, but since that time, a test well providing adequate water (2 gpm) to serve the development has been drilled. The proposed septic system is a sand filter system approved by the Mendocino County Department of Environmental Health.

The proposed development includes a single-family residence. plus a 576-square-foot guest cottage over a 576-square-foot attached garage.

To ensure that the proposed guest cottage will not be used at any time as a second residential unit, Special Condition No. 2 is attached to this permit, requiring recordation of a deed restriction stating that the guest cottage shall be without kitchen or cooking facilities, and shall not be separately rented, let, or leased.

The Commission finds, therefore, that the proposed development, as conditioned, is consistent with LUP Policies 3.9-1 3.8-1, and with Zoning Code Sections 20.368.025 and 20.458.010, because Special Condition No. 2 of this permit will ensure that there will be only one residential unit on the parcel, and because there will be adequate services on the site to serve the proposed development.

2. Geologic Hazards and Seawalls:

LUP Policy 3.4-7 states that:

> *The County shall require that new structures be set back a sufficient distance from the edges of bluffs to ensure their safety from bluff erosion and cliff retreat during their economic life spans (75 years). Setbacks shall be of sufficient distance to eliminate the need for shoreline protective works. Adequate setback distances will be determined from information derived from the required geologic investigation and from the following setback formula:*
>
> *Setback (meters) = Structure life (years) x Retreat rate (meters/year)*
>
> *The retreat rate shall be determined from historical observation (e.g., aerial photographs) and/or from a complete geotechnical investigation.*
>
> *All grading specifications and techniques will follow the recommendations cited in the Uniform Building Code or the engineering geologist's report.*

This language is reiterated in Zoning Code Section 20.500.020(B).

LUP Section 3.4-8 states that:

> *Property owners should maintain drought-tolerant vegetation within the required blufftop setback. The County shall permit grading necessary to establish proper drainage or to install landscaping and minor improvements in the blufftop setback.*

LUP 3.4-9 states that:

> *Any development landward of the blufftop setback shall be constructed so as to ensure that surface and subsurface drainage does not contribute to the erosion of the bluff face or to the instability of the bluff itself.*

Zoning Code Section 20.500.010 states that development shall:

> (1) *Minimize risk to life and property in areas of high geologic, flood and fire hazard;*
> *(2) Assure structural integrity and stability; and*

(3) *Neither create nor contribute significantly to erosion, geologic instability or destruction of the site or surrounding areas, nor in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.*

Zoning Code Section 20.500.020(B) states that "*Construction landward of the setback shall not contribute to erosion of the bluff face or to instability of the bluff.*"

Zoning Code Section 20.500.020(E)(1) states that "*Seawalls, breakwaters, revetments, groins, harbor channels and other structures altering natural shoreline processes or retaining walls shall not be permitted unless judged necessary for the protection of existing development, public beaches or coastal dependent uses.*"

A geotechnical investigation was done and a report dated January 22, 1998 prepared for the site by Earth Science Consultants; an addendum dated June 4, 1999 was also prepared, after the County acted on the project (see Exhibits 8 and 9). Based on the results of their geotechnical investigation, Earth Science Consultants concludes that the proposed development is feasible from the geotechnical engineering standpoint if performed and maintained in accordance with their recommendations.

The geotechnical report indicates that the base of the bluff at the Klute property is moderately well sheltered by the adjacent protruding land points to the south and north that are of the harder Iversen basalt. The report goes on to state that the base of the bluff is further protected by the abundant large sea rocks and sea mounts moderately close to the base of the bluff area, varying from about 40 feet to 75 feet across that tends to significantly dissipate wave energy prior to reaching the rocky beach area at the base of the bluff.

The report concludes that no apparent bluff regression has been noted during the past 31 years, and bases this conclusion on a review of a 1967 aerial photo of the area, plus observation and measuring of site features, likely due to the harder bedrock and favorable bedding of the bedrock and reasonably well sheltered location. The consultant goes on to state that during his 32 years of coastal experience, bluff recession may remain dormant for many years, then a significant local amount may occur during a severe storm or severe winter or earthquake, so for planning purposes, he recommends a maximum local bluff recession rate to be equal to or less than 3.16 inches per year for a 75-year local maximum bluff regression amount of 19.7 feet. The report further makes specific recommendations regarding site grading, foundations, and drainage.

The addendum to the geotechnical report, dated June 4, 1999 (see Exhibit No. 9), clarifies certain geotechnical considerations with respect to the proposed residence, in response to

allegations by the appellants of inadequacy of the original geotechnical report. The addendum contains a more complete discussion of the rate of bluff erosion and regression, including the use of aerial photos. The addendum specifically states that the subject site will not require a seawall due to the fact that the underlying bedrock materials are older, harder, and relatively well protected.

The proposed development is sited 20 feet from the bluff edge, the minimum distance recommended by the geotechnical report.

To ensure that the project will not create any geologic hazards, the Commission has attached to the permit several Special Conditions. Special Condition No. 1 requires recordation of a deed restriction stating that all future development on the subject parcel that might otherwise be exempt from coastal permit requirements requires an amendment or coastal development permit. This condition will allow future development to be reviewed to ensure that the project will not be sited where it might result in a geologic hazard. Special Condition No. 4 requires submittal of final foundation and site drainage plans that incorporate all recommendations of the geotechnical report and addendum intended to avoid creating a geologic hazard. Special Condition No. 4 also requires development to proceed consistent with the certified plans. This condition reiterates a similar County condition.

In addition, it has been the experience of the Commission that in some instances, even when a thorough professional geotechnical analysis of a site has concluded that a proposed development will be safe from bluff retreat hazards, unexpected bluff retreat episodes that threaten development during the life of the structure sometimes still do occur. The geotechnical report itself states that, "...we have found during our 32 years of coastal experience that bluff recession may remain dormant for many years, then a significant local amount may occur during a severe storm or severe winter or earthquake."

The Commission thus attaches Special Condition No. 3, which requires recordation of a deed restriction whereby the landowner assumes the risks of extraordinary erosion and geologic hazards of the property and waives any claim of liability on the part of the Commission and agrees that no bluff or shoreline protective devices shall be constructed on the subject site.

This requirement is consistent with Section 20.500.010 of the Mendocino County Coastal Zoning Ordinance, which states that new development shall not in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs. The Commission finds that the proposed development could not be approved as being consistent with Zoning Code Section 20.500.010 if projected bluff

retreat would affect the proposed house and necessitate construction of a seawall to protect it.

As noted above, some risks of an unforeseen natural disaster, such as an unexpected landslide, massive slope failure, erosion, etc. could result in destruction or partial destruction of the house or other development approved by the Commission. When such an event takes place, public funds are often sought for the clean up of structural debris that winds up on the beach or on an adjacent property. As a precaution, in case such an unexpected event occurs on the subject property, the Commission attaches Special Condition No. 3 (f), which requires the landowner to accept sole responsibility for the removal of any structural debris resulting from landslides, slope failures, or erosion on the site, and agree to remove the house should the bluff retreat reach the point where the structure is threatened.

The Commission finds that Special Condition No. 3 is required to ensure that the proposed development is consistent with the LCP and that recordation of the deed restriction will provide notice of potential hazards of the property and help eliminate false expectations on the part of potential buyers of the property, lending institutions, and insurance agencies that the property is safe for an indefinite period of time and for further development indefinitely into the future, or that a seawall could be constructed to protect the development. Only as conditioned is the proposed development consistent with the LCP policies on geologic hazards.

The Commission thus finds that the proposed development, as conditioned, is consistent with the policies of the certified LCP regarding geologic hazards, including LUP Policies 3.4-7, 3.4-8, and 3.4-9, and Zoning Code Sections 20.500.010 and 20.500.020, as the proposed development will not result in the creation of any geologic hazards, will not have adverse impacts on the stability of the coastal bluff or on erosion, and the Commission will be able to review any future additions to ensure that development will not be located where it might result in the creation of a geologic hazard.

4. Visual Resources

LUP Policy 3.5-1 and Zoning Code Section 20.504.010 state that the scenic and visual qualities of Mendocino County coastal areas shall be considered and protected as a resource of public importance, and that permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas and, where feasible, to restore and enhance visual quality in visually degraded areas.

LUP Policy 3.5-3 and Zoning Code Section 20.504.015(C)(2) state that new development west of Highway One in designated Highly Scenic Areas is limited to one story (above

natural grade) unless an increase in height would not affect public views to the ocean or be out of character with surrounding structures.

LUP Policy 3.5-4 and Zoning Code Section 20.504.015(C) state that buildings and building groups that must be sited within the highly scenic area shall be sited near the toe of a slope, below rather than on a ridge, or in or near the edge of a wooded area. Visual impacts on terraces should be minimized by (1) avoiding development in large open areas if an alternative site exists; (2) minimizing the number of structures and clustering them near existing vegetation, natural landforms or artificial berms; (3) providing bluff setbacks for development adjacent to or near public areas along the shoreline; and (4) designing development to be in scale with the rural character of the area.

LUP Policy 3.5-5 states that providing that trees will not block coastal views from public areas such as roads, parks, and trails, tree planting to screen buildings shall be encouraged.

Zoning Code Section 20.504.015(C)(1) states that any development permitted in highly scenic areas shall provide for the protection of coastal views from public areas including highways, roads, coastal trails, vista points, beaches, parks, coastal streams, and waters used for recreational purposes.

Zoning Code Section 20.504.015(C)(3) states that new development shall be subordinate to the natural setting and minimize reflective surfaces. In highly scenic areas, building materials including siding and roof materials shall be selected to blend in hue and brightness with their surroundings.

Zoning Code Section 20.504.035(A)(2) states that where possible, all lights shall be shielded or positioned in a manner that will not shine light or allow glare to exceed the boundaries of the parcel on which it is placed.

Zoning Code Section 20.376.045 requires a height of 18 feet above natural grade for Rural Residential parcels in designated Highly Scenic Areas west of Highway One unless an increase in height would not affect public views to the ocean or be out of character with surrounding structures.

The subject parcel is located on a headland west of Highway One in a designated "Highly Scenic Area" south of the town of Point Arena. The visual impact of any development in this area is of primary concern because of the extraordinary beauty of the setting.

The proposed development includes a one-story, 16 ½-foot-high, 2,146-square-foot residence with an attached 1,152-square foot garage and guest cottage. According to

County staff, earlier designs for the house were proposed that included a two-story structure that was higher than surrounding structures and was highly visible from the public viewing area to the north. Another proposed design spread the structures out across the site, which resulted in the development appearing to dominate the view from the highway. The currently proposed development maintains a low building height with the residence at 16 ½ feet, and the guest cottage, which is above the garage, at 22 feet. The project blends fairly well into its surroundings due to the low profile design, natural materials, and dark colors that are proposed. The proposed structure is also approximately the same size and height as other residences on Iversen Point and is thus in character with surrounding development.

However, the project as proposed would not be completely subordinate to the character of the area as the house would still be very visible from Highway 1.

The proposed project includes a proposal to plant three cypress trees between the residence and the highway, and two more cypress trees at the southwest end of the building. To reduce the impacts of the proposed development on visual resources, the Commission attaches Special Condition No. 5, which requires that the applicant submit a landscaping plan that provides for the additional planting of trees along the eastern and southern boundaries of the proposed residence to soften the view of the residence from Highway 1 and from the public view turnout to the north. The submitted plan must include a tree maintenance program (e.g., pruning, fertilizing, watering, etc.) for newly planted trees and a tree replacement program on a one-to-one or greater ratio for the life of the project.

Since the existing trees on the site provide some softening effects and/or backdrop to minimize visual impacts, this condition also requires that any existing trees or vegetation providing screening shall remain undisturbed, except for those required to be removed to meet the fire safety regulations of the California Department of Forestry and Fire Protection or those required to be removed for any development permitted by this permit, and must be replaced on a one-to-one or higher ratio for the life of the project. Therefore, Special Condition No. 5 ensures that the project is consistent with LUP Policy 3.5-5.

The Commission also attaches Special Condition No. 6, which imposes design restrictions, including a requirement that all exterior siding and roofing of the proposed structure shall be of natural or natural-appearing materials of dark earthtone colors only; that all exterior materials, including the roof and the windows, shall be non-reflective to minimize glare; and that all exterior lights, including any lights attached to the outside of the house, shall be low-wattage, non-reflective, and have a directional cast downward. These requirements are consistent with the provisions of Zoning Code Sections 20.504.020(C) and 20.504.035(A)(2).

The Commission also attaches Special Condition No. 1, which requires recordation of a deed restriction stating that all future development on the subject parcel that might otherwise be exempt from coastal permit requirements requires an amendment or coastal development permit. This condition will allow future development to be reviewed to ensure that the project will not be sited where it might have significant adverse impacts on visual and scenic resources.

Finally, the Commission attaches Special Condition No. 3, which requires recordation of a deed restriction stating that the landowner shall not construct any bluff or shoreline protective devices to protect the residence, guest cottage, garage, septic system, or other improvements in the event that these structures are subject to damage, or other natural hazards in the future. This condition will ensure that in the future, no seawall will be constructed that would have significant adverse impacts on visual resources in this Highly Scenic Area.

In conclusion, although the proposed development will be somewhat visible from Highway 1 and the public view area to the north, visibility has been minimized by requiring additional landscaping, requiring dark earthtone colors for the structure, and requiring lighting restrictions. The proposed development also will not break the horizon when viewed from the north, and will blend in with its surroundings. Furthermore, Special Condition No. 3 will ensure that a seawall that would dominate the appearance of the bluff as seen from the beach and other public vantage points will not be constructed in the future. The Commission thus finds that the proposed development, as conditioned, is consistent with LUP Policies 3.5-1, 3.5-3, 3.5-4, and 3.5-5, and with Zoning Code Sections 20.376.045, 20.504.015, 20.504.020, 20.504.035, and 20.504.040, as the project has been sited and designed to minimize visual impacts, will be subordinate to the character of its setting, will be visually compatible with the character of surrounding areas, and will provide for the protection of coastal views.

5. Public Access:

Projects located within the coastal development permit jurisdiction of a local government are subject to the coastal access policies of both the Coastal Act and the LCP. Coastal Act Sections 30210, 30211, and 30212 require the provision of maximum public access opportunities, with limited exceptions. Section 30210 states that maximum access and recreational opportunities shall be provided consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse. Section 30211 states that development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation. Section 30212 states that public

access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources, adequate access exists nearby, or agriculture would be adversely affected.

The Mendocino County LUP includes a number of policies regarding standards for providing and maintaining public access. Policy 3.6-9 states that offers to dedicate an easement shall be required in connection with new development for all areas designated on the land use plan maps. Policy 3.6-28 states that new development on parcels containing the accessways identified on the land use maps shall include an irrevocable offer to dedicate an easement. LUP Policy 3.6-27 states that:

> *No development shall be approved on a site which will conflict with easements acquired by the public at large by court decree. Where evidence of historic public use indicates the potential for the existence of prescriptive rights, but such rights have not been judicially determined, the County shall apply research methods described in the Attorney General's "Manual on Implied Dedication and Prescriptive Rights." Where such research indicates the potential existence of prescriptive rights, an access easement shall be required as a condition of permit approval.*

This language is reiterated in Zoning Code Section 20.528.030.

In its application of these policies, the Commission is limited by the need to show that any denial of a permit application based on these sections, or any decision to grant a permit subject to special conditions requiring public access, is necessary to offset a project's adverse impact on existing or potential public access.

The subject site is located west of the first public road and sits atop a steep coastal bluff. The County's land use maps do not designate the subject parcel for public access, and there does not appear to be any safe vertical access to the rocky shore down the steep bluffs. According to the County, there is no evidence of public prescriptive use of the subject site, and so the County did not instigate a prescriptive rights survey. Since the proposed development will not increase significantly the demand for public access to the shoreline and will have no other impacts on existing or potential public access, the Commission finds that the proposed project, which does not include provision of public access, is consistent with the public access policies of the Coastal Act and the County's LCP.

5. Environmentally Sensitive Habitat Areas

LUP Policy 3.1-7 and Zoning Code Section 20.496.020(A) state that a buffer area shall be established adjacent to all environmentally sensitive habitat areas to provide for a sufficient area to protect the environmentally sensitive habitat from significant degradation resulting from future developments. The width of the buffer area shall be a minimum of 100 feet...measured from the outside edge of the environmentally sensitive habitat areas.

A botanical survey of the property was conducted by Mary Rhyne on June 28. 1998. Ms. Rhyne concluded that there was no evidence of rare plants or wetlands on the subject site.

The Commission thus finds that the proposed development is consistent with LUP Policy 3.1-7 and Zoning Code Section 20.496.020, as there is no sensitive habitat on the property that needs to be protected.

6. California Environmental Quality Act (CEQA)

Section 13096 of the California Code of Regulations requires Commission approval of Coastal Development Permit applications to be supported by a finding showing the application, as conditioned by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available that would substantially lessen any significant adverse effect that the activity may have on the environment.

The proposed project has been conditioned to be found consistent with the policies of the Mendocino County LCP and the public access and recreation policies of the Coastal Act. Mitigation measures, which will minimize all adverse environmental impacts, include the following requirements:

(1) that a deed restriction shall be recorded stating that the subject permit is only for the development herein described in the coastal development permit and that any future additions or other development that might otherwise be exempt under Zoning Code Section 20.532.020(C), will require an amendment to this permit or will require an additional coastal development permit from Mendocino County;

(2) that a deed restriction shall be recorded stating that the guest cottage shall be without kitchen or cooking facilities and shall not be separately rented, let, or leased, whether compensation be direct or indirect;

(3) that the applicant shall record a deed restriction regarding assumption of risk and waiver of liability, and stating that no bluff or shoreline protective devices shall be constructed, and also stating that the applicant shall remove the house and its foundation when bluff retreat reaches a point where the structure is threatened and that the applicant accepts sole responsibility for the removal of any structural debris resulting from landslides, slope failures, or erosion on the site;

(4) that final foundation and site drainage plans shall be submitted that incorporate all the recommendations included in the geotechnical report and addendum letter;

(5) that a landscaping plan shall be submitted, including a maintenance and monitoring program, to provide permanent landscape screening for the project; and

(6) that design restrictions be imposed regarding color and materials of structures, and lighting; and

As conditioned, there are no feasible alternatives or feasible mitigation measures available, beyond those required, which would substantially lessen any significant adverse impact that the activity may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified impacts, can be found consistent with the requirements of the Coastal Act and to conform to CEQA.

ATTACHMENT A

Standard Conditions

1. Notice of Receipt and Acknowledgment. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.

2. Expiration. If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.

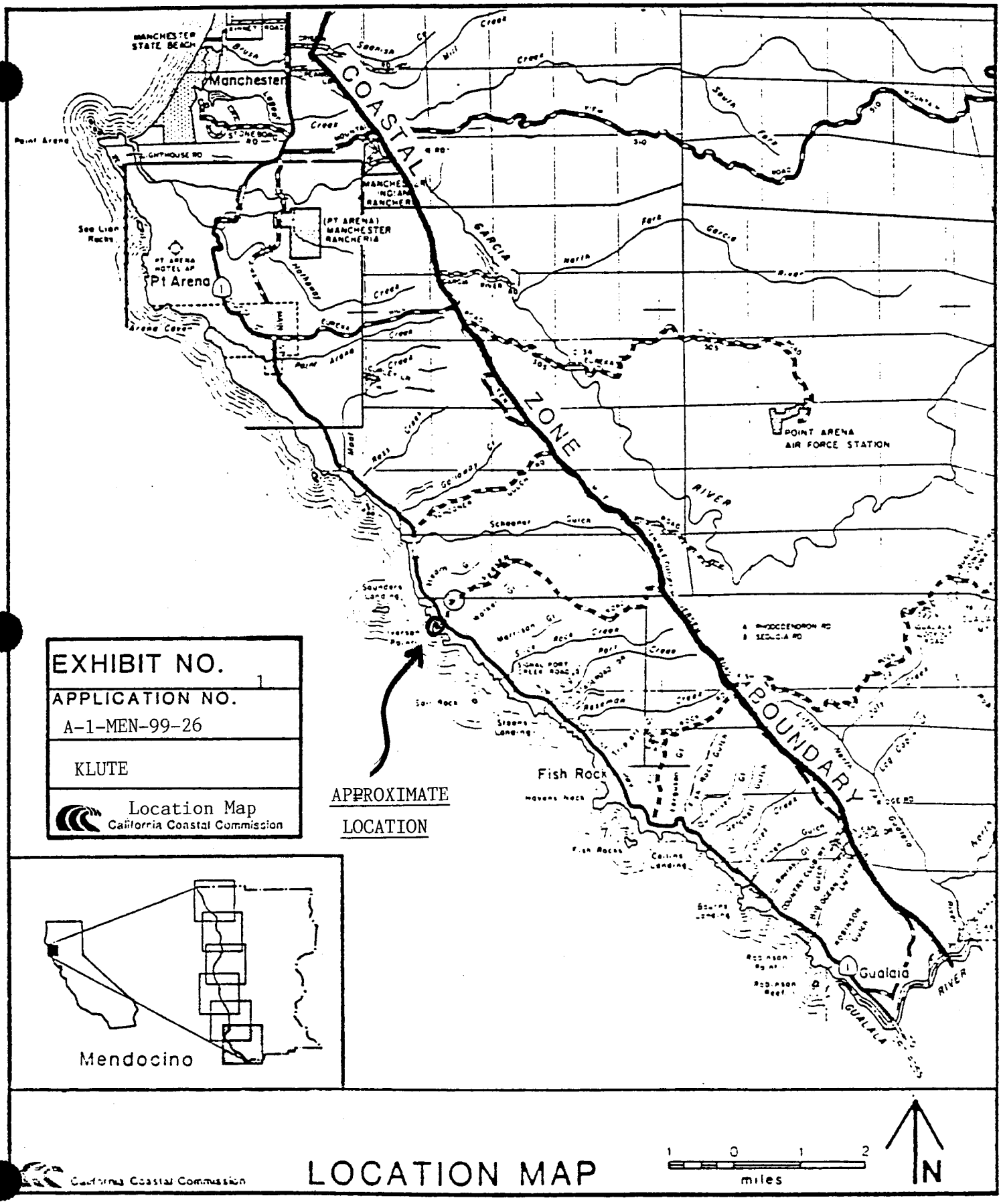
3. Compliance. All development must occur in strict compliance with the proposal as set forth in the application for permit, subject to any special conditions set forth below. Any deviation from the approved plans must be reviewed and approved by the staff and may require Commission approval.

4. Interpretation. Any questions of intent of interpretation of any condition will be resolved by the Executive Director or the Commission.

5. Inspections. The Commission staff shall be allowed to inspect the site and the development during construction, subject to 24-hour advance notice.

6. Assignment. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.

7. Terms and Conditions Run with the Land. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.


COASTAL ZONE BOUNDARY
Manchester
Pt Arena
Fish Rock
Gualala
POINT ARENA AIR FORCE STATION
EXHIBIT NO. 1
APPLICATION NO. A-1-MEN-99-26
KLUTE
Location Map California Coastal Commission
APPROXIMATE LOCATION
Mendocino
California Coastal Commission
LOCATION MAP
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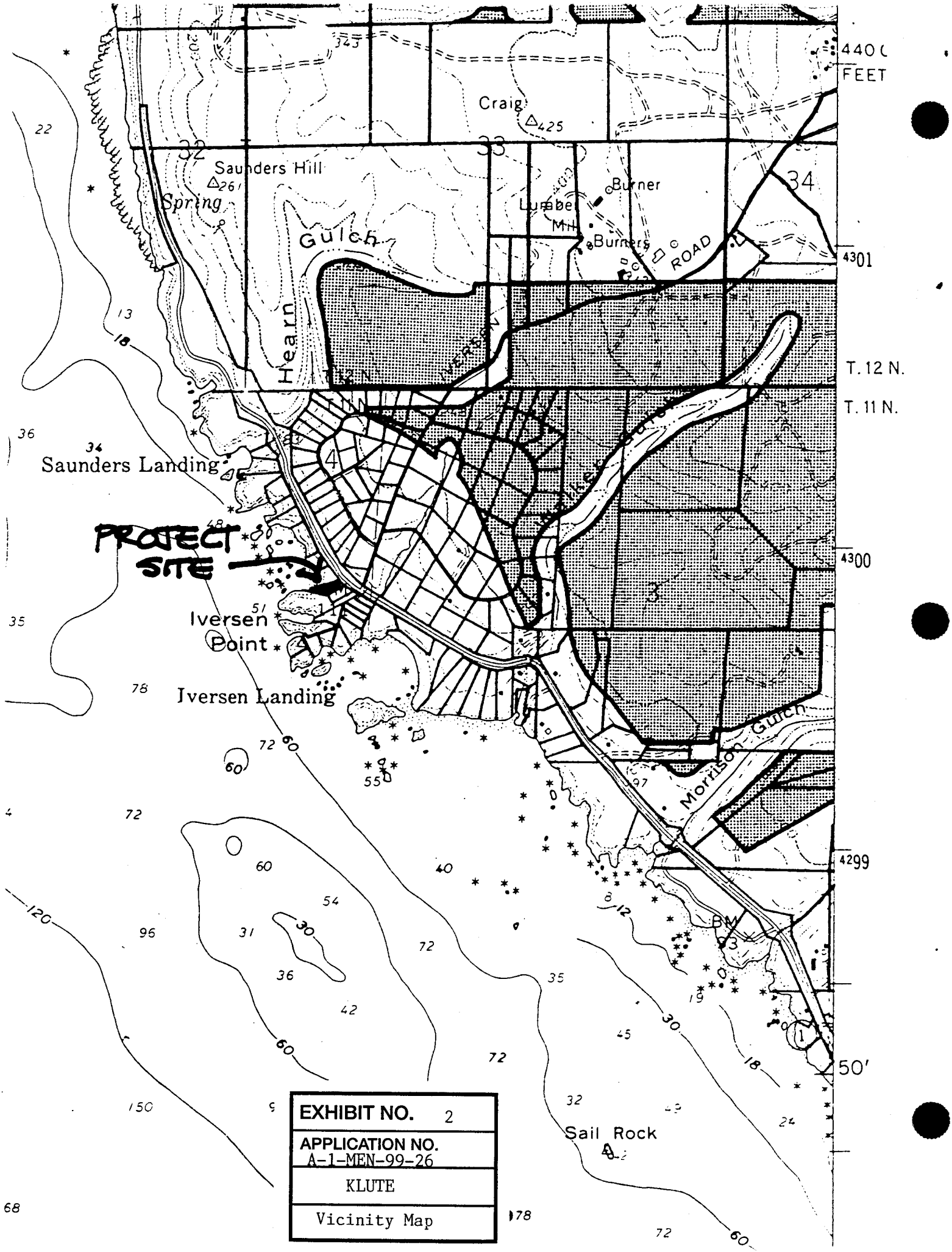


EXHIBIT NO. 2
APPLICATION NO. A-1-MEN-99-26
KLUTE
Vicinity Map

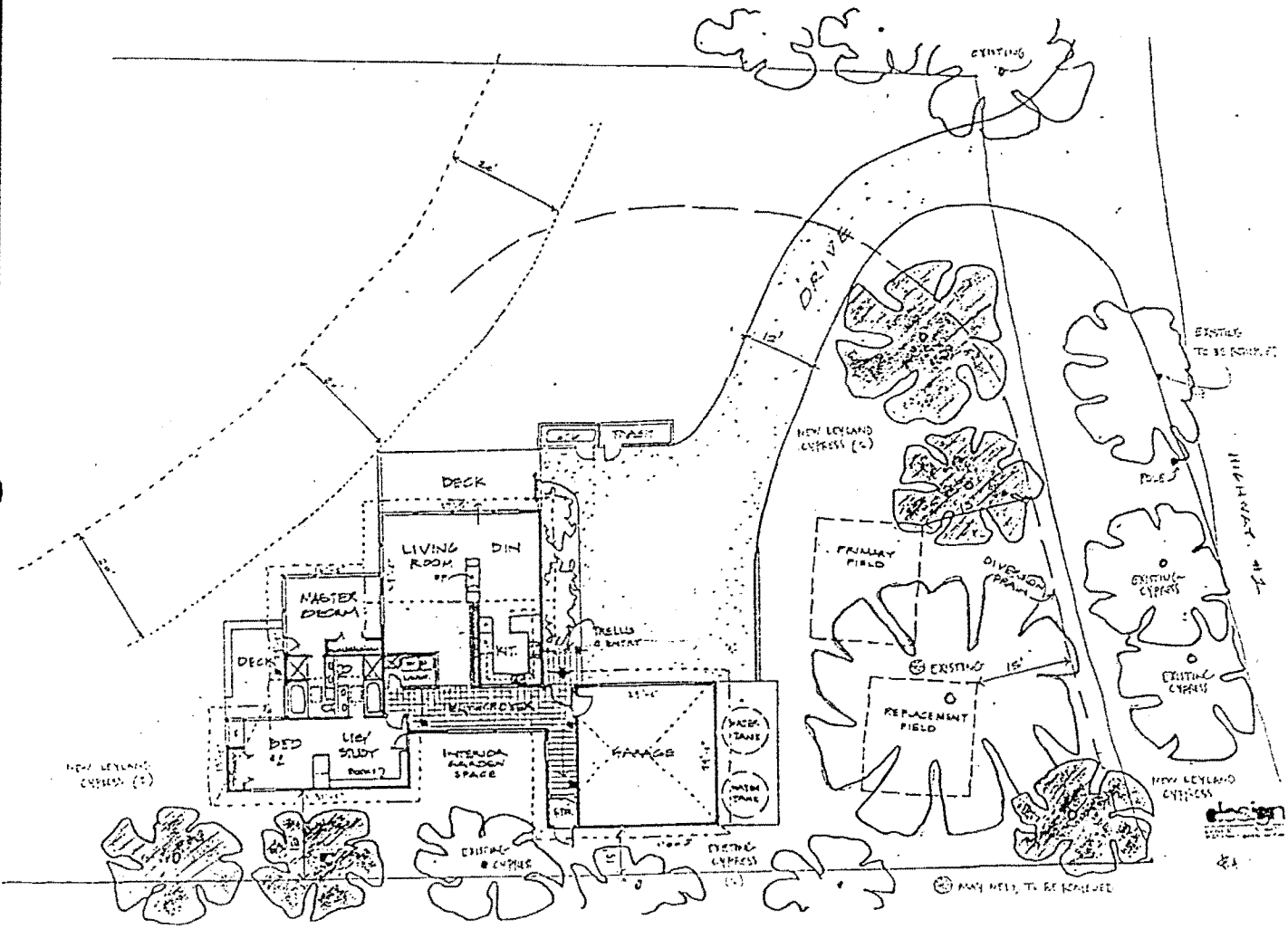
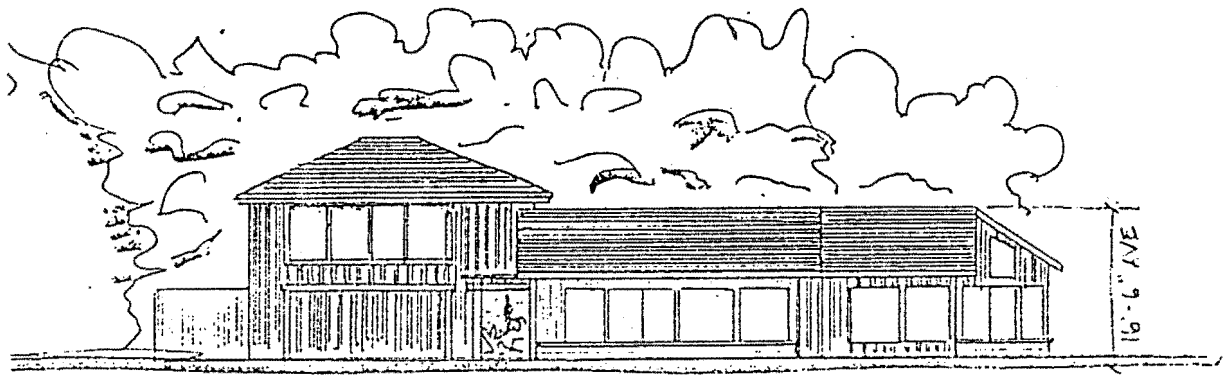
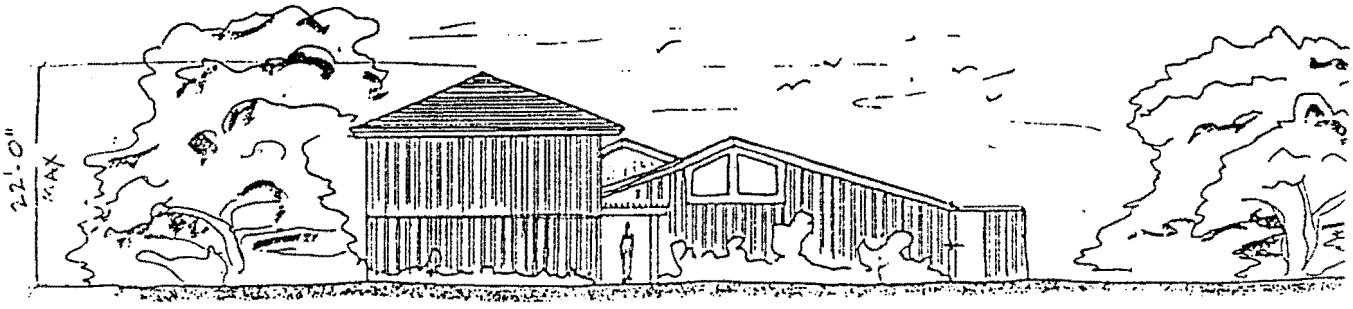


EXHIBIT NO. 3
APPLICATION NO. A-1-MEN-99-26
KLUTE
Site Plan

SITE PLAN



NORTH ELEVATION



EAST ELEVATION

EXHIBIT NO. 4
APPLICATION NO. A-1-MEN-99-26
KLUTE
Elevations

ELEVATIONS

FORNIA—THE RESOURCES AGENCY PETE WILSON, Governor

NIA COASTAL COMMISSION
RTH COAST AREA
FREMONT, SUITE 2000
SAN FRANCISCO, CA 94105-2219
(415) 904-5260

APPEAL FROM COASTAL PERMIT DECISION OF LOCAL GOVERNMENT

Please Review Attached Appeal Information Sheet Prior To Completing This Form.

SECTION I. Appellant(s)

Name, mailing address and telephone number of appellant(s):
Friends of Schooner Gulch
P O Box 4
Point Arena Ca 95468 (707) 882-2001
Zip Area Code Phone No.

SECTION II. Decision Being Appealed

1. Name of local/port government: Mendocino County

2. Brief description of development being appealed: Single Family Dwelling on a cliff, located within the "Schooner Gulch and Bowling Ball Beach Scenic Corridor."

3. Development's location (street address, assessor's parcel no., cross street, etc.): 29950 S. Hwy 1, Gualala Ca, AP 142-031-03, cross Street Iverson Road.

4. Description of decision being appealed:

a. Approval; no special conditions: _____

b. Approval with special conditions: ✓

c. Denial: _____

Note: For jurisdictions with a total LCP, denial decisions by a local government cannot be appealed unless the development is a major energy or public works project. Denial decisions by port governments are not appealable.

TO BE COMPLETED BY COMMISSION:

APPEAL NO: A-1-MEN-99-026

DATE FILED: 4/22/99

DISTRICT: North Coast

H5: 4/88

EXHIBIT NO. 5
APPLICATION NO. A-1-MEN-99-26 KLUTE
Appeal
Page 1 of 12

APPEAL FROM COASTAL PERMIT DECISION OF LOCAL GOVERNMENT (Page 2)

5. Decision being appealed was made by (check one):

a. ✓ Planning Director/Zoning Administrator

c. __ Planning Commission

b. __ City Council/Board of Supervisors

d. __ Other_____

6. Date of local government's decision: March 25, 1999

7. Local government's file number (if any): CDP 52-98.

SECTION III. Identification of Other Interested Persons

Give the names and addresses of the following parties. (Use additional paper as necessary.)

a. Name and mailing address of permit applicant:
Rosemary Klute
c/o Ed McKinley, Agent
237 Morrow St, Ft. Bragg CA 95437

b. Names and mailing addresses as available of those who testified (either verbally or in writing) at the city/county/port hearing(s). Include other parties which you know to be interested and should receive notice of this appeal.

(1) CA State Parks, Greg Picard, Box 440, Mendocino CA 95460
(2) Moat Creek Managing Agency, Box 428 Point Arena Ca 95468
(3) Coast Action Group, Box 215, Point Arena Ca 95468

(X)

(4) Supervisor DAVID COLFAX, Courthouse, Ukiah 95437

(5) (X) Ron Guenther, Chair, Sierra Club Mendo-Lake Group, 29900 Hwy 20, Ft. Bragg CA 95437

(X)

SECTION IV. Reasons Supporting This Appeal

Note: Appeals of local government coastal permit decisions are limited by a variety of factors and requirements of the Coastal Act. Please review the appeal information sheet for assistance in completing this section, which continues on the next page.

APPEAL FROM COASTAL PERMIT DECISION OF LOCAL GOVERNMENT (Page 3)

State briefly your reasons for this appeal. Include a summary description of Local Coastal Program, Land Use Plan, or Port Master Plan policies and requirements in which you believe the project is inconsistent and the reasons the decision warrants a new hearing. (Use additional paper as necessary.)

See Attached Letter from Friends of Schooner Gulch.

Note: The above description need not be a complete or exhaustive statement of your reasons of appeal; however, there must be sufficient discussion for staff to determine that the appeal is allowed by law. The appellant, subsequent to filing the appeal, may submit additional information to the staff and/or Commission to support the appeal request.

SECTION V. Certification

The information and facts stated above are correct to the best of my/our knowledge.

Friends of Schooner Gulch
Peter Kenmille

Signature of Appellant(s) or Authorized Agent

ADDITIONAL APPELLANT
Roanne Withers,
Mendocino Coastwatch,
PO Box 198,
Ft Bragg CA
95437

Date 4/21/99

NOTE: If signed by agent, appellant(s) must also sign below.

Section VI. Agent Authorization

I/We hereby authorize _____ to act as my/our representative and to bind me/us in all matters concerning this appeal.

Signature of Appellant(s)

Date _____

Friends of Schooner Gulch

A Watershed Organization
P. O. Box 4, Point Arena, California 95468
(707) 882-2001, Fax (707) 882-2011

Executive Committee:
Sarah Flowers
Charles Peterson
Peter Reimuller

April 21, 1999

Reasons for Appeal

The Mendocino County Permit Administrator did not require a prohibition against future sea walls on the property. (LUP Policies 3.5-1, 3.5-4, 3.4-7, 3.4-9, and Zoning Code Sections 20.500.010, 20.504.015(c)(1) and (3))

The permit was approved without proof of on-site water. (LUP Policies 3.8-1 and 3.9-1; and Zoning Code Section 20.532.095)

Geology and Future Sea Walls

The application requests a building permit on a very small lot in a Highly Scenic Area. In order to fit the house on the lot, the applicant feels it is necessary to build very close to the steep sea cliff. In this case, the house will be pushed to within 20′ of the top of the cliff. The geological report is fatally flawed. Friends of Schooner Gulch does not have the funds to supply a competing or contradictory geological report

The geological report submitted by the applicant consists of several descriptive pages of soil and rock identification, and from that draws a bold conclusion. That conclusion states, in part:

> "Based on our review of a 1967 aerial photo…we observed no apparent bluff regression during the past 31 years, likely due to the harder bedrock and favorable bedding of the bedrock and reasonably well sheltered location. *We have found during our 32 years of coastal experience that bluff recession may remain dormant for many years, then a significant local amount may occur during a severe storm or severe winter or earthquake. Therefore, for planning purposes we would recommend a maximum local bluff recession rate to be equal to or less than…3.16 inches per year…for a 75 year local maximum bluff regression of 19.7 feet* [italics added]."

How convenient.

Please follow the geologist's unsupported reasoning:

1. There has been no bluff regression since 1967,

2. this area is solid,
3. but he has seen significant unexpected regressions c places because of weather and earthquakes,
4. therefore, the maximum average over 75 years will be 19. feet, which happens to be the setback required.

Nowhere in the report does the geologist say why the bluff will average 3.16 inches per year. He picks that number out of the air. He might have picked an average of 8 inches per year, making the setback 50 feet. But that would have precluded the buildability of this lot. We submit to you that the geological report is a sham designed solely to win approval for a permit on this lot. If this report is supposed to show some science as to whether and how much the bluff is receding, it fails and is a fraud played upon the applicant.

The single aerial photo cited, from 1967, at best would have a scale of 1:12,000 (1"=1000'), and maybe smaller. The geologist therefore claims that he is able to measure a distance of less than .001" (one thousandth of an inch), which would represent 1 foot, on the ground. He would also need to reference (by actual measurement) the cliff edge he sees in the photo to a solid and visually distinct bench mark which still exists on the ground, and which has not moved, and which is necessarily very near the exact area where the house is to be located. Such a bench mark or reference point is always difficult, if not impossible, to locate.

This improbable system of "measuring cliff recession" has evolved over the years for the purposes of winning coastal development permits. As a system it does not work accurately and reliably, except in cases of the grossest detail. The geologist's claim that he is able to determine cliff recession from one aerial photo is not possible, or even probable, but only serves the purpose of enabling him to claim that there has been no cliff recession since 1967. A better determination would be obtained by using actual measurements such as those taken in the past during the construction of the highway or the during the original subdivision of the property.

In the boilerplate pages at the back of the geological report is a statement that the professional geologist's entire future liability, in the case of a failed cliff and a destroyed development, will be a maximum of 5 times the fees received for the report. Clearly, something is amiss here

if the owner and the Commission are relying on scientific geology to guarantee buildability of coastal lots.

The bay, or fjord, at the foot of the cliff has been created by the action of the sea. This is because the rocks in this area are specifically less stable and more subject to erosion than are the headlands which have survived the sea assault. Since there has been considerable bluff regression next to this lot in the past in order to create the bay the lot sits on, there will be more in the future.

The geological report also ignores the future probability of rising seas because of global warming. Any rise in the average sea level because of global warming would only greatly accelerate the rate of cliff recession.

The geological report says the setback will protect the house for 75 years. For the record, we are holding that there should be no estimated life span for a house on these or any other eroding cliffs anywhere in California. The economics of building, remodeling, and protecting existing developments on desirable coastal parcels, and the high construction quality ensured by modern building codes, would both would indicate that "75 year" developments will be here long after 75 years has passed. Therefore, it should be assumed that homes such as this one will become a public nuisance when the cliffs finally give away.

Sooner or later the owner of this parcel will want a sea wall, or the house will be abandoned. And if that wall is allowed, sooner or later it too will fail.

Future sea walls and/or retaining walls along the bottoms or tops of the cliffs of this area would constitute a major assault on the scenic views which the Coastal Act is pledged to protect. Therefore, we recommend that the permit include a condition whereby the owner of the property may not in the future build a sea wall nor a retaining wall at the top or bottom of the cliff, nor may heroic measures be taken to protect the cliffs from natural recession. The Commission should also require that the applicant agree to be denied access to public funds for geological disaster control or remediation in the future.

Earthquakes

The geological report does not mention the existence of earthquake faults in the area. A PG & E map obtained by

Friends of Schooner Gulch clearly shows 4 faults within a mile of the property. An important and named fault, the Iverson Fault, crosses from north to south about 200 feet from the project. It is a fault in the San Andreas system.

Clearly, a fault in the immediate vicinity of the parcel would have a distinct bearing on the geologist's report. The geologist does say that earthquakes are one of the things that could hasten cliff subsidence, yet he makes no analysis of the local faults..

The unexplained and unexplored future effects of earthquakes on this bluff, and the potential need for sea walls to hold the cliffs when they begin to crumble, or the desire for sea walls prior to cliff failure (as a prophylactic measure) has not been addressed.

The "Schooner Gulch & Bowling Ball Beach Highly Scenic Corridor"

It is the desire of Friends of Schooner Gulch that the Commission adopt a policy regarding a prohibition of all sea walls in this Highly Scenic Area. The 3 miles from Iverson Road extending north through Whiskey Shoals (north of Moat Creek), has between 15 and 20 unbuilt cliffside lots. Many of those lots are marginally stable and will someday fail. In several places, where homes have already been built, cliffs have partially failed due to accelerated erosion and saturation of soils.

This lot is just one of many on which we will request that future sea walls be prohibited. The area is an exceptional View Area, allowing clear views of the cliffs in both directions from the Highway.

This area is probably the most photographed and admired coastline on the entire South Mendocino Coast. It is a rare day that you will drive along the cliffs here and not see a tourist taking a picture or just enjoying the view. This area provides 2 major tourist destinations, Bowling Ball Beach and Schooner Gulch Beach, and several minor ones. Both beach accesses are owned by State Parks and are easily accessible to the public. Tourist serving facilities such as bed and breakfasts, motels and campgrounds frequently send their clients here for the day. And the parking areas along the Highway are often filled with visitors.

We know of only a few areas like this on the entire Northern California coast—where the tourist and local citizen can actually view cliffs, whitewater, bluewater, State Park, headlands and landscape directly from the Highway, and all this for several minutes as they pass through.

Because this application is the first of several we will be seeing on the cliffs here and to the immediate north, and because of the extreme scenic sensitivity of this area, we are very concerned by the precedents being set. Whatever happens on this property will set the tone for the development of this most beautiful area.

The Visual Blight of Future Sea Walls

One would assume that if the cliff retreats even a few feet into the setback, then the owner would want to build a sea wall to protect the house at that time. The cliff could retreat that amount 2 years from now, or 20, or 150 years from now. A sea wall in this location would be visible from the adjoining properties, and from the Highway, from the Cal-Trans Vista Point, and from our State Park named "Schooner Gulch and Bowling Ball Beaches State Park". A sea wall would not be subordinate to the character of its setting, as required by the Mendocino County Coastal Element.

The same Mendocino County Coastal Element requires developments to protect views to and along the ocean and scenic coastal areas (a sea wall would not protect those views), to minimize the alteration of natural land forms (a sea wall would not minimize alteration of natural land forms), and to be visually compatible with the character of surrounding areas (a sea wall would not be visually compatible with the area), and where feasible to restore and enhance visual quality in visually degraded areas (a sea wall would not restore or enhance visual quality). There is no way that a sea wall can meet the requirements of the Coastal Act in this area.

One thing certain is that the sea will not stop gnawing at the land, and the cliff will recede at some unknown time in the future. And the cumulative impact of driveway and roof runoff, and septic saturation, will accelerate the cliff recession rate of the past. Therefore the problem of a future sea wall will not go away.

The restriction regarding future sea walls or other cliff armoring should also include retaining walls, abutments, drainage structures, and stairways.

Proof of Water

This lot has no proven on-site water. No acceptable well has been drilled, there is no community water system, and there are no springs available. The applicant has taken out a permit for a test well, but that permit has expired. This is a known area of insufficient water. The house plans show two large water tanks, and the applicant may wish to import water by truck. If this permit is allowed, and insufficient water exists on the property, then a serious precedent will be set for future developments on the headlands to the north, and many other places in Mendocino County.

Please refer to two letters in the Commission's files regarding "Water Supply Requirements in the Coastal Zone," and dated February 27, 1997. The first is written by Steven Scholl and is directed to the Mendocino County Board of Supervisors. The second is written by Jo Ginsberg and is directed to the Mendocino County Department of Public Health.

Those letters specifically reference this subdivision and the requirements of the Coastal Act, and conclude that any new Coastal residence approved without proven on-site water would not be consistent with the County's LCP. Therefore, this project may not be approved by the County. It would require an LCP amendment to grant this permit without the proof of on-site water.

Conclusion

At the Permit Administrator's hearing, we objected to many things about the development, but we were prepared to exercise a little give and take with the applicant. We felt that our original objection about the height (4' over limit) could be dropped because the applicant was willing to meet the color and landscaping requests called for by the LCP.

As you can see, we have no objection to a house on this parcel. We primarily want to assure that there will be no sea walls in the future, and, to a lesser degree, that on-site water will be provided. We feel it is appropriate for the owner to accept responsibility for building so close to

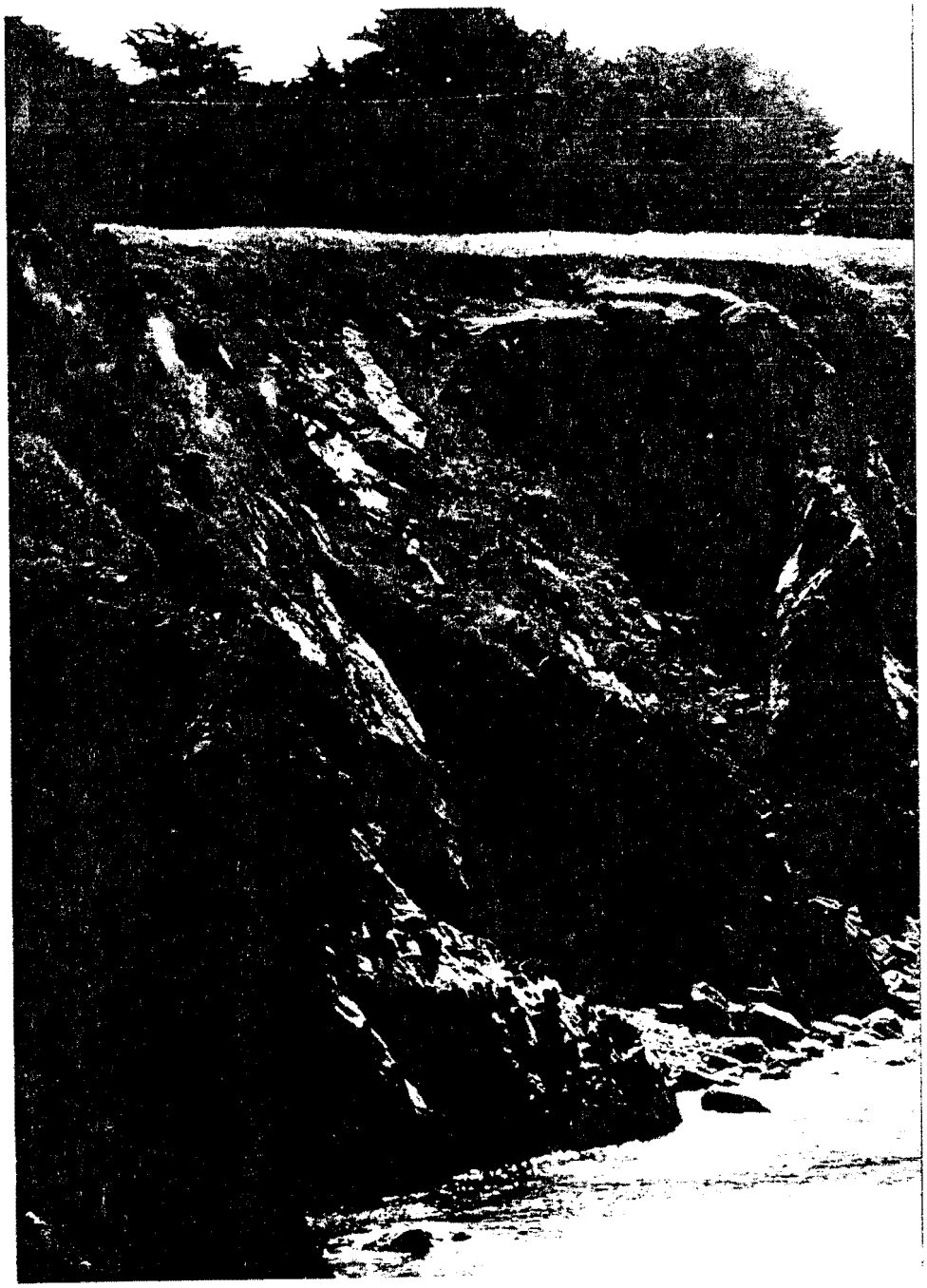
the cliff, and to accept responsibility for cleaning up the debris if and when the cliff falls away in the future.

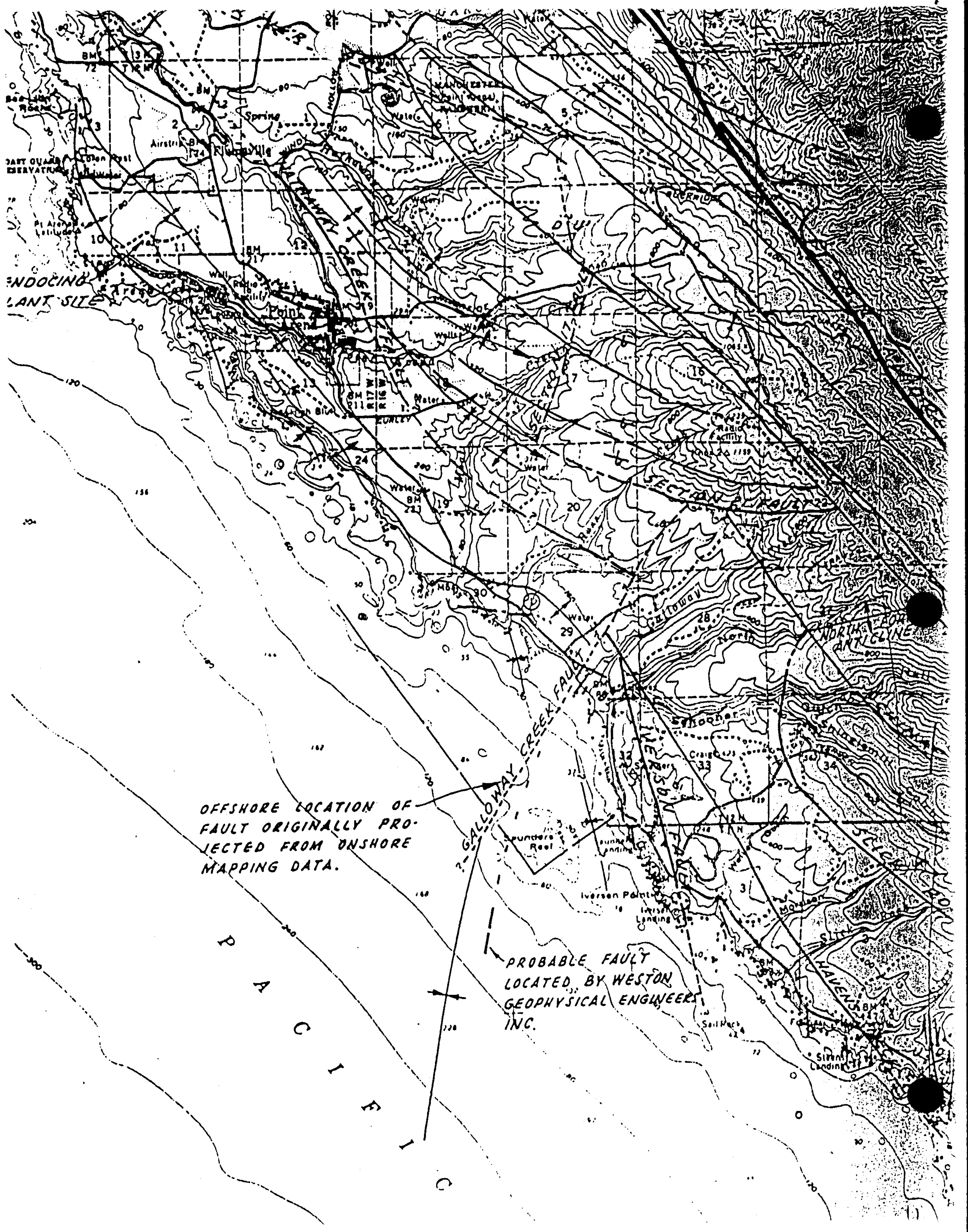
Obviously, if a sea wall permit were included in this application now, it would not be permitted, and for many very good and legal reasons. Still, the applicant wants to develop this marginally safe lot, and should be willing to accept responsibility for the development.

Sincerely,

Peter Reimuller
Corresponding Secretary
Friends of Schooner Gulch

Enclosure: PG&E fault map
View of cliffs on parcel




ENDOCINO
LANT SITE
GALLOWAY CREEK FAULT
OFFSHORE LOCATION OF FAULT ORIGINALLY PROJECTED FROM ONSHORE MAPPING DATA.
PROBABLE FAULT LOCATED BY WESTON GEOPHYSICAL ENGINEERS INC.
P A C I F I C
Saunders Reef
Iverson Point
Schooner
Spring
Airstrip

1-MEN-98-334

RAYMOND HALL
DIRECTOR

COUNTY OF MENDOCINO
DEPARTMENT OF PLANNING AND BUILDING SERVICES
MAILING ADDRESS:
790 SO. FRANKLIN
FORT BRAGG, CA 95437

TELEPHONE
(707) 964-5379

April 6, 1999

RECEIVED
APR 09 1999
CALIFORNIA
COASTAL COMMISSION

NOTICE OF FINAL ACTION

Action has been completed by the County of Mendocino on the below described project located within the Coastal Zone.

CASE#: CDP #52-98
OWNER: Rosemarie Klute
AGENT: Ed McKinley
REQUEST: Construction of a 2,146 square foot single family dwelling and 576 square foot attached garage on a blufftop parcel, maximum building height to be 17.75 feet. Construction of a 576 square foot guest cottage over the garage, maximum building height to be 22 feet. Installation of a septic system and a crushed rock driveway; connection to existing power and well; use of a temporary trailer during construction.
LOCATION: Approximately 5 miles S of Pt. Arena, W side of Highway One, approximately 200 feet N of its intersection with Iverson Road (CR #503) at 29950 South Highway One (APN 142-031-03).
PROJECT COORDINATOR: Doug Zanini

HEARING DATE: March 25, 1999

APPROVING AUTHORITY: Coastal Permit Administrator

ACTION: Approved with Conditions.

See staff report for the findings and conditions in support of this decision.

The project was not appealed at the local level.

The project is appealable to the Coastal Commission pursuant to Public Resources Code, Section 30603. An aggrieved person may appeal this decision to the Coastal Commission within 10 working days following Coastal Commission receipt of this notice. Appeals must be in writing to the appropriate Coastal Commission district office.

EXHIBIT NO. 6
APPLICATION NO. A-1-MEN-99-26 KLUTE
Notice of Final Action
Page 1 of 4

COASTAL PERMIT ADMINISTRATOR ACTION SHEET

CASE#: CDP #52-98 HEARING DATE: March 26, 1999

OWNER: Rosemarie Klute

ENVIRONMENTAL CONSIDERATIONS:

____X____ Categorically Exempt, Class 3a

_____ Negative Declaration

_____ EIR

FINDINGS:

____X___ Per staff report

_____ Modifications and/or additions

ACTION:

____X____ Approved

_____ Denied

_____ Continued _____

CONDITIONS:

____X____ Per staff report and

____X____ Modifications and/or additions:

See Special Conditions #1 - 7, attached

Signed: Coastal Permit Administrator

COUNTY OF MENDOCINO
DEPARTMENT OF PLANNING AND BUILDING SERVICES

MEMORANDUM

TO: Doug Zanini, Planner II
FROM: Raymond Hall, Director
SUBJECT: CDP #52-98, Klute
DATE: March 26, 1999

At today's continued Coastal Permit Administrator hearing I approved CDP #52-98 (Klute) with conditions.

Prior to approving the project I:

1. Found proper notice
2. Found the project Categorically Exempt, Class 3(a) under CEQA.
3. Made the findings contained in the staff report.

The project was approved with the following conditions:

A. All standard conditions contained in the staff report.

B. Special Conditions:

1. Prior to the issuance of the Coastal Development Permit, the applicant shall submit for the review of the Coastal permit Administrator, a letter from Earth Science Consultants indicating the current project layout has been reviewed and recommendations have been updated accordingly. The applicant shall incorporate all recommendations within the Earth Science Consultants Investigation including any updated recommendations into the design and construction of the proposed residence.

2. Prior to issuance of the Coastal Development Permit, the applicant shall submit for the review and approval of the Coastal Permit Administrator, a drainage plan satisfying the requirements of the geotechnical investigation and the County Zoning Code.

3. The exterior of the residence and all exterior exposed wood shall be stained with Duckback Superback DB1907 Canyon Brown or equal as approved by the Coastal Permit Administrator. The applicant and future owners shall not repaint or stain the house with products which will lighten the color of the house as approved.

4. Prior to issuance of the Coastal Development Permit, the applicant shall submit for the review and approval of the Coastal Permit Administrator, a landscape plan, prepared by a qualified professional, indicating tree plantings along the eastern and southern boundaries of the proposed residence which would help to blend the residence into its surroundings as viewed from the public view turnout to the north

and the highway to the east. In addition to the five proposed cypress trees indicated on the site plan, a minimum of three additional trees shall be plated to the west of the proposed driveway. Specifications shall be included to indicate species, size, and establishment techniques (e.g., irrigation, fertilization, etc.). All existing trees within the construction area which screen the proposed residence from Highway One and the public view area shall be protected during the construction phase with construction fencing. All screening trees shall be retained. In the event that the screening trees die during the life of the project, they shall be replaced with similar species in the same location. All required landscaping shall be established prior to the final inspection of the dwelling, or occupancy, whichever occurs first.

5. Prior to issuance of the Coastal Development Permit, the applicant shall submit for the review and approval of the Coastal Permit Administrator, lighting fixture specifications that shall be shielded or shall be positioned in a manner that will not shine light or allow light glare to exceed the boundaries of the parcel on which it is placed.

6. This permit authorizes the temporary use of a construction trailer while actively building the residence. Prior to final inspection, the trailer shall be removed from the building site.

7. All fencing north of the residence shall be eliminated. The trash enclosure area and the propane tank shall be relocated to the area around the water tanks.

For the record, at today's meeting, the agent, Ed McKinley stated that the applicants object to any condition regarding future shoreline protective measures. I did not require a "seawall prohibition" condition because there was not evidence in the record that blufftop retreat at this site was a substantial issue.

RH:ng

STAFF REPORT FOR
STANDARD COASTAL DEVELOPMENT PERMIT

CDP# 52-98
March 25, 1999
CPA-1

EXHIBIT NO. 7
APPLICATION NO. A-1-MEN-99-26 KLUTE
County Staff Report
Page 1 of 8

OWNER: Rosemarie Klute
PO Box 652
Forrest Falls, CA 92339

AGENT: Ed McKinley
237 Morrow Street
Fort Bragg, CA 95437

REQUEST: On a blufftop parcel, construction of a 2,146 square foot single family dwelling with a 576 square foot attached garage. Maximum height to be 16 ½ feet. Construction of a 576 square foot guest cottage over the garage. Maximum height to be 22 feet. Construction of a septic system and a crushed rock driveway. Connection to existing power and well.

LOCATION: Approximately 5 miles south of Point Arena, on the west side of Highway One, approximately 200 feet north of its intersection with Iversen Road (CR#503) at 29950 South Highway One (APN 142-031-03).

APPEALABLE AREA: Yes

PERMIT TYPE: Standard

TOTAL ACREAGE: 1 Acre ±

ZONING: RR:L-5 [RR]

GENERAL PLAN: RR-5 (1)

EXISTING USES: Vacant (well)

SUPERVISORIAL DISTRICT: 5

GOV'T CODE 65950 DATE: August 5, 1999

ENVIRONMENTAL DETERMINATION: Categorically Exempt, Class 3 (a)

OTHER RELATED APPLICATIONS: CDP# 10-98 was granted for a well.

PROJECT DESCRIPTION: The project is located on a blufftop lot. It includes the construction of a 2,146 square foot single family dwelling with a 576 square foot attached garage. Maximum average building height would be 16 ½ feet. The project also includes the construction of a 576 square foot guest cottage over the garage with a maximum height of 22 feet. Secondary improvements include the construction of wood decking, screening fences around the water tanks, propane tank and trash area., a sand filter septic system, a crushed rock driveway and connection to existing power and well.

LOCAL COASTAL PROGRAM CONSISTENCY RECOMMENDATION: The proposed project is consistent with the applicable goals and policies of the Local Coastal Program as described below.

Land Use. Single family residences are a Principal Permitted Use in the Rural Residential (RR) Zoning District. Setbacks for parcels less than 5-acres within the RR:L-5 [1] Zoning District are 20 feet from the front property line and six feet from the side yards. The required setback from the bluff's edge is 20 feet as required by the geotechnical report. In addition, a 40 foot corridor preservation setback measured from the centerline of Highway One applies. The closest portion of the structure is approximately 90 feet from the centerline of the highway. Therefore, the project, as proposed, meets all required land use requirements and setbacks..

Public Access. No mapped public access is indicated along the subject parcel. The nearest public access points are the Hearn Gulch shoreline access approximately 1/8 mile to the north and the Island Cove shoreline points approximately ¼ mile to the south. According to the County land use maps, both of these access points are not currently developed. Public access to the coast is available at the Caltrans "vista point" approximately ¼ mile to the north and at the Schooner Gulch State Park approximately 1 mile to the north. Therefore, no access conditions have been applied to this permit.

Hazards. Section 20.500.020 (B) (1) of the Mendocino County Coastal Zoning Code states:

> *"New structures shall be setback a sufficient distance from the edges of bluffs to ensure their safety from bluff erosion and cliff retreat during their economic life spans (75 years). New development shall be setback from the edge of bluffs a distance determined from information derived from the required geological investigation..."*

Policy 3.4-9 states:

> *"Any new development landward of the blufftop setback shall be constructed so as to ensure that surface and subsurface drainage does not contribute to the erosion of the bluff face or to the instability of the bluff itself."*

A Geotechnical Investigation was performed by Earth Science Consultants on January 22, 1998. The Investigation concluded that the proposed development is feasible from the geotechnical engineering standpoint if performed and maintained in accordance with the Investigation's recommendations. The summarized recommendations are as follows:

1. The development should be built to conform with existing site grade as much as practical. Existing vegetation should be left in an "as is" condition and should not be disturbed.

2. A maximum local bluff recession rate is less than or equal to 3.16 inches per year for a 75 year local maximum bluff regression amount of 19.7 feet. A minimum setback of 20 feet should be maintained from bluff edge.

3. The proposed house and garage may be placed upon drilled pier and grade beam foundations gaining their support from the underlying sandstone bedrock formation or by the use of stiffened and deepened continuous spread footings arranged in a grid type pattern.

4. Drainage should be dispersed in as natural a manner as possible and not concentrated and should not be discharged adjacent to or near the bluff area.

The Investigation was performed for the original project. The new design places the house in locations that were not analyzed in the Investigation. Therefore, prior to issuance of the Coastal Development Permit, the applicant should update the Investigation and provide a letter from Earth Science Consultants stating whether the conclusions and recommendations of the January 22, 1998 Investigation still stand or whether other measures are necessary.

Special Condition #1 requires that the project adhere to the recommendations within the Geotechnical Investigation to ensure consistency with the Coastal Element and the Coastal Zoning Code. To assure that drainage is adequately addressed, Special Condition #2 is recommended to require that the drainage plan is reviewed and approved by the Coastal Permit Administrator prior to issuance of the Coastal Development Permit.

Visual Resources: The proposed project lies within a designated "highly scenic" area and is subject to the visual resource policies within the Mendocino County Coastal Element and Chapter 20.504 of the County Zoning Code.

Policy 3.5-1 of the Mendocino County Coastal Element states:

> *"The scenic and visual qualities of Mendocino County coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas designated by the County of Mendocino Coastal Element shall be subordinate to the character of its setting."*

The location of the residence is dictated by the required location of the septic system and the well. According to the applicant's agent, other locations for the septic system were considered however, none were found to be feasible. Therefore, the siting of the residence is limited to the proposed location. Prior designs that were proposed included a two-story structure which was taller than the surrounding structures and was highly visible from the view area to the north. Another design option that was proposed, spread the structures out across the site and created an architecturally dominant view from the highway. The revised proposal maintains a low building height with all structural components under the 18 foot height limit except for the guest cottage over the garage. The low profile design, natural materials and dark colors help to blend the project into its surroundings. The building is approximately the same size and height of the other residences on Iversen Point and is therefore considered to be in character with surrounding development.

Policy 3.5-3 states:

> *"Any development permitted in [highly scenic] areas shall provide for the protection of ocean and coastal views from public areas including highways, roads, coastal trails, vista points, beaches, parks, coastal streams, and waters used for recreational purposes.*
>
> *...In addition to other visual policy requirements, new development west of Highway One in designated highly scenic areas is limited to one-story (above natural grade) unless an increase in height would not affect public views to the ocean or be out of character with surrounding structures...New development shall be subordinate to the setting and minimize reflective*

surfaces. Variances from this standard may be allowed for planned unit development(s) that provides clustering and other forms of meaningful mitigation."

The project is visible from the highway and from the public view area to the north. The majority of the project is limited to one-story except for the two-story guest cottage over the garage. Reflective surfaces are minimized through material selection. Special Condition #3 has been applied to the project to require that non-reflective glass be used. The project includes a proposal to plant three Leyland cypress trees between the residence and the highway and two cypress trees at the southwest end of the building. In addition, staff would recommend tree planting to the north of the building to break up the lines of the architecture and further camouflage the building. Special Condition # 4 has been applied to this project to ensure that the project complies with this requirement.

The above policies are codified in Section 20.504.015 et. al. of the Coastal Zoning Code. Therefore consistency with these policies results in consistency with the corresponding sections of the Zoning Code.

Colors/Materials: The materials/colors proposed for the exterior of the residence are: 1 x 12 vertical board and 1x4 vertical batt re-sawn redwood. No painting is proposed. Roofing to be Elk Class A asphalt roof, weathered wood (brown) color, 25 year shingle. The selected materials are dark in color and help to blend the residence within the setting.

The applicant erected story poles at the location and height of the proposed building. Staff has viewed the story poles from both the road and from the public view area to the north. Although the building would be visible from both locations, the visibility has been minimized by lowering the westernmost portion of the building to an average height of 16 ½ feet, using mansard roofs, natural wood for the siding, and dark roofing materials, locating the residence against existing vegetation, and proposing additional vegetation for screening.

The portion of the building which is two stories, is located on the eastern portion of the building and would only be slightly visible from the public view area to the north and from Highway One. However, it will be no taller than surrounding buildings in the Iversen Point and will not break the horizon as viewed from the north as do the residences on Iversen Point.

The project site is highly constrained. The only measures which would lessen the visual predominance of the project beyond conditions recommended in this report, would be to eliminate the second story and reduce the square footage of the development. Even with a reduction in size, any building would be partially visible from the public view area and the highway. Staff concludes that the project, as proposed and conditioned which, although not perfect in preserving natural viewsheds, is a reasonable solution considering of the constraints of this site, the relatively modest of the size of the proposed residence, and the building's context within the surrounding built environment.

Section 20.504.035 of the (A) (2) Coastal Zoning Code states:

"Where possible, all lights, whether installed for security, safety or landscape design purposes, shall be shielded or shall be positioned in a manner that will not shine light or allow light glare to exceed the boundaries of the parcel on which it is placed."

Special Condition # 5 ensures compliance with this policy.

Natural Resources. A Botanical Survey was prepared by Mary Rhyne, Botanical Surveyor, on June 28, 1998. Ms. Rhyne concluded that there was no evidence of rare plants or wetlands on this property. No other natural resource issues were identified.

Archaeological/Cultural Resources. The Northwest Information Center of the California Historical Resources Information System recommended further study of potential archaeological resources on the site. On September 9, 1998, the County Archaeological Commission determined that an archaeological survey is not required for this project. Standard Condition #8 advises the applicant of the County's "discovery clause" which establishes the procedures to follow in the event that archaeological or cultural resources are uncovered during site preparation and construction activities.

Groundwater Resources. The site is located within an area mapped as critical water resources (CWR). The site is to be served by an existing well. The proposed septic system is a sand filter system which, according to Environmental Health, provides a much greater filtration than a traditional system before sewage reaches the groundwater table. Therefore, no additional conditions to protect groundwater resources are necessary.

Transportation/Circulation. The property is accessed from Highway One. A new encroachment is proposed at the north end of the parcel. The applicant has already obtained an encroachment permit from Caltrans. The project would contribute incrementally to cumulative traffic volumes on Highway One and other local roadways. These traffic impacts, were considered and accepted with the approval of the LCP in 1985. Therefore, no mitigation is required.

Zoning Requirements. The project complies with the zoning requirements for the Rural Residential District set forth in Section 20.376, et. seq., and with all other zoning requirements of Division II of Title 20 of the Mendocino County Code.

PROJECT FINDINGS AND CONDITIONS: Pursuant to the provisions of Chapter 20.532 and Chapter 20.536 of the Mendocino County Code, staff recommends that the Coastal Permit Administrator approve the proposed project, and adopts the following findings and conditions.

FINDINGS:

1. The proposed development is in conformity with the certified Local Coastal Program; and

2. The proposed development will be provided with adequate utilities, access roads, drainage and other necessary facilities; and

3. The proposed development is consistent with the purpose and intent of the applicable zoning district, as well as all other provisions of Division II, and preserves the integrity of the zoning district; and

4. The proposed development, if constructed in compliance with the conditions of approval, will not have any significant adverse impacts on the environment within the meaning of the California Environmental Quality Act; and

5. The proposed development will not have any adverse impacts on any known archaeological or paleontological resource; and

6. Other public services, including but not limited to, solid waste and public roadway capacity have been considered and are adequate to serve the proposed development.

7. The proposed development is in conformity with the public access and public recreation policies of Chapter 3 of the California Coastal Act and Coastal Element of the General Plan.

STANDARD CONDITIONS:

1. This action shall become final on the 11th day following the decision unless an appeal is filed pursuant to Section 20.544.015 of the Mendocino County Code. The permit shall become effective after the ten (10) working day appeal period to the Coastal Commission has expired and no appeal has been filed with the Coastal Commission. The permit shall expire and become null and void at the expiration of two years after the effective date except where construction and use of the property in reliance on such permit has been initiated prior to its expiration.

   To remain valid, progress towards completion of the project must be continuous. The applicant has sole responsibility for renewing this application before the expiration date. The County will not provide a notice prior to the expiration date.

2. The use and occupancy of the premises shall be established and maintained in conformance with the provisions of Division II of Title 20 of the Mendocino County Code.

3. The application, along with supplemental exhibits and related material, shall be considered elements of this permit, and that compliance therewith is mandatory, unless an amendment has been approved by the Coastal Permit Administrator.

4. That this permit be subject to the securing of all necessary permits for the proposed development from County, State and Federal agencies having jurisdiction.

5. The applicant shall secure all required building permits for the proposed project as required by the Building Inspection Division of the Department of Planning and Building Services.

6. This permit shall be subject to revocation or modification upon a finding of any one (1) or more of the following:

   a. That such permit was obtained or extended by fraud.

   b. That one or more of the conditions upon which such permit was granted have been violated.

   c. That the use for which the permit was granted is so conducted as to be detrimental to the public health, welfare or safety or as to be a nuisance.

d. A final judgment of a court of competent jurisdiction has declared one (1) or more conditions to be void or ineffective, or has enjoined or otherwise prohibited the enforcement or operation of one (1) or more such conditions.

7. This permit is issued without a legal determination having been made upon the number, size or shape of parcels encompassed within the permit described boundaries. Should, at any time, a legal determination be made that the number, size or shape of parcels within the permit described boundaries are different than that which is legally required by this permit, this permit shall become null and void.

8. If any archaeological sites or artifacts are discovered during site excavation or construction activities, the applicant shall cease and desist from all further excavation and disturbances within one hundred (100) feet of the discovery, and make notification of the discovery to the Director of the Department of Planning and Building Services. The Director will coordinate further actions for the protection of the archaeological resources in accordance with Section 22.12.090 of the Mendocino County Code.

SPECIAL CONDITIONS:

1. Prior to issuance of the Coastal Development Permit, the applicant shall submit for the review of the Coastal Permit Administrator, a letter from Earth Science Consultants indicating the current project layout has been reviewed and recommendations have been updated accordingly. The applicant shall incorporate all recommendations within the Earth Science Consultants Investigation including any updated recommendations into the design and construction of the proposed residence.

2. Prior to issuance of the Coastal Development Permit, the applicant shall submit for the review and approval of the Coastal Permit Administrator, a drainage plan satisfying the requirements of the geotechnical investigation and the County Zoning Code.

3. All exterior building materials and finishes shall match those specified in the coastal development permit application. Windows shall be made of non-reflective glass.

4. Prior to issuance of the Coastal Development Permit, the applicant shall submit for the review and approval of the Coastal Permit Administrator, a landscape plan, prepared by a qualified professional, indicating tree plantings along the eastern and southern boundaries of the proposed residence which would help to blend the residence into its surroundings as viewed from the public view turnout to the north and the highway to the east. In addition to the five proposed cypress trees indicated on the site plan, a minimum of three additional trees shall be planted to the west of the proposed driveway. Specifications shall be included to indicate species, size, and establishment techniques, (e.g. irrigation, fertilization, etc.). All existing trees within the construction area which screen the proposed residence from Highway One and the public view area shall be protected during the construction phase with construction fencing. All screening trees shall be retained. In the event that the screening trees die during the life of the project, they shall be replaced with similar species in the same location. All required landscaping shall be established prior to the final inspection of the dwelling, or occupancy, whichever occurs first.

3. Prior to issuance of the Coastal Development Permit, the applicant shall submit for the review and approval of the Coastal Permit Administrator, lighting fixture specifications that shall be shielded or shall be positioned in a manner that will not shine light or allow light glare to exceed the boundaries of the parcel on which it is placed.

Staff Report Prepared By:

3/17/99
Date

Doug Zanini
Coastal Planner

Attachments: Exhibit A- Location Map
Exhibit B- Site Plan
Exhibit C- Roof Plan
Exhibit D- Elevations

Appeal Period: 10 days
Appeal Fee: $555

EARTH SCIENCE CONSULTANTS
SOIL • FOUNDATION AND GEOLOGICAL ENGINEERS

P. O. BOX 3410/SAN RAFAEL/CALIFORNIA 94912-3410/ (415) 383-0935

January 22, 1998
Job No. 983357

William Klute
Rosemarie Jones
P. O. Box 69
Trinity City, CA 96091

Geotechnical Investigation
Proposed Klute Residence
A.P. 142-031-03-05
Iversen Landing Subdivision
Iversen Point
Mendocino County, California

INTRODUCTION

This report presents the results of the geotechnical investigation we recently performed at the above site.

We understand that it is desired to construct a medium-sized, two story, single family residence with wood joist floors in the southeastern portion of the site as indicated to us by the owner and David Cooke-COBA. We also understand a detached two-car garage with studio above is planned. We understand the building plans are still in the preliminary phase of design.

The purpose of our work was to perform a visual site observation and reconnaissance of exposed surface features, review existing soil and geologic data of the area, log representative exploration test pits and provide our opinion in the form of conclusions and recommendations as they relate to our specialty field of practice, geotechnical engineering.

Our scope of work was oriented towards meeting the requirements of the California Coastal Commission and the County of Mendocino. During the last 20 years we have performed numerous studies along the California coast in the area of the San Andreas fault and ocean bluff areas under the jurisdiction of the California Coastal Commission, including studies at Big Sur, Muir Beach, Stinson Beach, Inverness, Point Reyes, Marshall, Tomales Bay, Dillon Beach, Bodega Bay, Jenner, Gualala, Anchor Bay, Point Arena, Irish Beach, Albion, Elk, Little River, Mendocino, Caspar, and Fort Bragg.

Our scope of work included only subsurface conditions within the actual proposed structures and did not include accessory areas such as sidewalks, porches, decks, landscaping, garden and yard areas.

SITE CONDITIONS

The modest-sized parcel of land is located adjacent to and southwest of Highway 1, about 325 feet northwest of the intersection of Iversen Road with Highway 1 as shown on the Site Location Map, Plate 1, and Site Plan, Plate 2.

The site consists of a former ancient wave cut marine terrace sloping slightly towards the west with an inclination of about 5 degrees. The site appears to be at natural grade and contour that mostly consisted of dense grass cover with some local areas of medium-sized to small Monterey cypress trees adjacent to Highway 1 and also in the southeastern portion of the property.

Located in the western portion of the property is the somewhat irregular top-of-ocean bluff line, generally trending in a northeasterly direction. The top of the bluff is about 78 feet from the front northern property corner and is about 225 feet or more from the front southeastern property corner. The slope and steepness of the bluff is somewhat variable ranging from as gentle as 38 degrees in the northern portion of the site to 59 degrees in the southern portion of the site as shown on the plotted bluff profiles, Plates 6, 7 and 8. The bluff generally exposes about 3 feet to 8 feet of surficial soils and marine terrace alluvium underlain by primarily sandstone bedrock materials. Most of the bluff bedrock consists of massive light gray and locally light brown sandstone that is generally hard and is medium hard where surface weathering has occurred. The slope of the bluff is governed by the stike and dip of the sandstone bedding with the inclination of the bluff being the same as the angle of inclination of the dip-strike of the sandstone beds.

A 7.5 minute geologic map of the Saunders reef quadrangle has not been prepared by the California Division of Mines and Geology. However, the nearby geologic map of the Gualala Quadrangle prepared by the California Division of Mines and Geology in 1984 by C. Davenport that begins about 1 mile to the east and 1 mile to the southeast and extrapolation of the geologic data therein would infer that the site is underlain by sedimentary bedrock materials of the German Rancho Formation (Pgr) of Paleocene-Eocene geologic age that is described as: "Consolidated, moderately hard, coarse grain sandstone interbedded with minor mudstone and less common conglomerate; overlain in many places by undifferentiated marine terrace sands." The geologic map indicates that the overlying soil materials above the underlying bedrock is plotted as consisting of marine terrace deposits (Qmts) of Quaternary geologic age.

Observation of the "Geologic Map of the Santa Rosa Quadrangle, Regional Geologic Map Series," compiled by D. Wagner and E. Bortugno of the California Division of Mines and Geology in 1982, indicates that the site is plotted as being underlain by sedimentary bedrock materials of the German Rancho Formation (Pgr) of Paleocene geologic age consisting of marine sandstone and mudstone with the outer portions of the protruding points and land in the general area plotted as consisting of the Iversen basalt (Mib) of Miocene geologic age.

The base of the bluff at the Klute property is moderately well sheltered by the adjacent protruding land points to the south and north that are of the harder Iversen basalt and also is further protected by the abundant large sea rocks and sea mounts moderately close to close to the base of the bluff area varying from about 40 feet to 75 feet across that tends to significantly

dissipate wave energy prior to reaching the rocky beach area at the base of the bluff. On the Site Location Map, Plate 1 that is a copy of a portion of the U.S. Geological Survey topographical map of the Saunders Reef 7.5-Minute Quadrangle, the abundant sea mounts and sea rocks are plotted.

The subsurface conditions were investigated by one deeper backhoe excavated exploration test pit performed at the location shown on the site plan, Plate 2. The test pit was logged by our geotechnical engineer who recorded the various materials encountered. The log of the exploration test pit is presented on Plate 3 and the Unified Soil Classification Chart which was used to describe the various materials encountered is presented on Plate 4. Due to the wet winter conditions and soft upper soils, the backhoe was able to only gain access to Test Pit 1. However, the subsurface conditions in other portions of the site can be extrapolated as the adjacent bluff generally exposes about 6 feet to 8 feet of surficial soils and marine terrace alluvium, except for the bluff area in the outer southwestern portion of the property where as little as 3 feet of marine terrace alluvium is exposed and then sandstone bedrock with 2 areas of surface bedrock outcrop within the site present moderately nearby that location.

The exploration test pit encountered about 2 feet of sandy silt surficial soil materials underlain by about 3 feet of sandy clay soil materials. Below a depth of about 5 feet sandy silt marine terrace alluvium was encountered that became sandy by a depth of about 9 feet with the surface of the underlying siltstone bedrock materials encountered at a depth of about 12.5 feet that were dark gray, massive, weathered and of medium hardness. The dark surface soils were wet and the underlying soils were only medium stiff to just barely stiff even at depths of 3 feet to 4 feet below the

ground surface. The perched ground water level was encountered at a depth of about 4.6 feet below the ground surface and moderate caving of the test pit occurred below 2 feet from the ground surface.

In order to help evaluate the expansion potential of the plastic clayey site soils, a Uniform Building Code expansion test was performed, as shown on Plate 5. The expansion test revealed an expansion index of 0, which is classified as very low expansion potential under Table 18-I-B of the Uniform Building Code.

CONCLUSIONS

Based on the results of our geotechnical investigation, our principal conclusions in the form of geotechnical engineering opinions are as follows:

1. It is our opinion that the proposed development is feasible from the geotechnical engineering standpoint if performed and maintained in accordance with our recommendations.

2. We recommend that in general the proposed development be built to conform with the existing site grade as much as practical, and cutting and filling generally be minimized as much as practical so as not to upset the existing gross site equilibrium.

3. Based upon our review of a 1967 aerial photo of the area, and the current observed and measured site features, we observed that no apparent bluff regression has occurred during the past 31 years, likely due to the harder bedrock and favorable bedding of the bedrock and reasonably well sheltered location. However, we have found during our 32 years of coastal experience that bluff recession may remain dormant for many years, then a significant local amount may occur during a severe storm or severe winter or earthquake. Therefore, for planning purposes we would recommend a maximum local bluff recession rate to be equal to or less than 0.0263 feet per year or 3.16 inches per year or 0.080 meters per year for a 75 year local maximum bluff regression amount of 19.7 feet or 6.0 meters.

4. The site soils at the time of our investigation were generally soft and weak in the upper portions and then below that only of modest strength. In general, the surface of the underlying sandstone bedrock formation appears to vary from about 6 feet to 12.5 feet over the site with the bedrock as shallow as 0 to 3 feet in the outer southwestern portion of the site.

5. It is our opinion that the proposed new house and garage-studio may be placed upon drilled pier and grade beam foundations gaining their support from the underlying sandstone bedrock formation or by the use of stiffened and deepened continuous spread footings arranged in a grid type pattern.

Specific recommendations are presented in the remainder of this report.

RECOMMENDATIONS

Development Scheme - We recommend that the proposed development generally be built in conformity with the existing site grade so as not to upset the existing site equilibrium. Generally all site grading, including cutting and filling, should be avoided or minimized as much as possible. We recommend that the existing site vegetation should generally be left in an "as is" condition and should not be disturbed.

It is especially important that no site disturbance of any sort be performed within about 20 feet of the bluff top location. It is also especially important that no waste fill materials or anything of any sort be performed within 20 feet of the existing bluff top.

Bluff Set-Back and Rate of Bluff Recession - Based upon our observation of a 1967 aerial photograph of the area obtained from Pacific Aerial Surveys, Photo No. AV-784-12-06, flown on February 20, 1967, and comparison with the existing site topographical features, we observed no regression of the top of the bluff during that time. However, for planning purposes, we are recommending an average maximum local bluff recession rate to be equal to or less than 0.263 feet per year or 3.16 inches per year or 0.08 meters per year, for a 75-year estimated bluff recession rated amount of about 19.7 feet, or 6 meters.

We have found that aerial photos obtained from Pacific Aerial Surveys are taken closer to the ground and are more readily available with respect to time as compared to U.S. Geological Survey photos, which are taken from higher altitudes and, thus, show less detail.

Based upon our site observation, review of an older aerial photo of the area as well as our 32 years of geotechnical engineering experience along the northern California coast, we are recommending a minimum bluff set-back of at least 20 feet for a minimum 75 year structure life so as to fulfill the intent of the requirements of the California Coastal Commission. However, so as to take advantage of the wind sheltering effect of the trees, the owner plans to place the house in the southeastern portion of the property much more removed from the bluff area than required.

Foundations - Our foundation recommendations are based on the assumption that the proposed house and garage-studio will be located in the southeastern portion of the property, moderately close to the road area and well removed from the bluff area as indicated to us in the field. However, if the proposed house is located in closer proximity to the 75 year minimum bluff set-back, then only deeper and stronger drilled pier and grade beam foundations may be used in that area.

In the two following sections of this report we have provided foundation recommendations for deeper drilled pier and grade beam foundations bottoming well into the underlying sedimentary bedrock materials that we have indicated as Foundation Alternate I, and the use of deepened and stiffened spread footing foundations as Foundation Alternate II.

Because the site soils are quite soft and weak in the upper several feet, we recommend that habitable portions of the proposed house be provided with wood joist floors.

In the following two portions of this report we are providing foundation recommendations for Foundation Alternate I and Foundation Alternate II.

Foundation Alternate I, Drilled Piers Into Bedrock - The proposed structure may be placed upon drilled pier and grade beam foundations extending into the underlying sandstone bedrock. In general, the bluff area exposes about 6 to 8 feet of soil materials, including marine terrace aluvium, underlain by sandstone bedrock materials. Test Pit 1 encountered up to about 12.5 feet of soil materials consisting mostly of marine terrace aluvium underlain by siltstone bedrock materials at a depth of 12.5 feet.

The drilled piers should be at least 16 inches in diameter and drilled at least 6 feet into harder and competent well-confined bedrock materials.

For vertical loading, only the portion of the drilled pier within the underlying bedrock materials should be counted in design calculations. The portion of the drilled pier within the bedrock may be designed for total design loads of 800 pounds per square foot, skin friction.

For resistance to transitory lateral loads such as wind or seismic, the soil materials may be assumed to provide a lateral passive resistance of 100 pounds per cubic foot, equivalent fluid weight, acting upon 1.5 pier diameters with the top 1 foot of the soil materials neglected. This value may be increased to 400 pounds per cubic foot, equivalent fluid weight, acting upon 2 pier diameters, once the surface of the underlying bedrock is reached.

For vertical uplift loading, a value of 400 pounds per square foot, skin friction, may be used only for the portion of the drilled pier within the underlying bedrock. No downward or upward vertical load design allowance should be allowed for the portion of the drilled pier within the soil zone.

Wood joist floors should be used.

It is important that the pier holes be promptly poured after they are drilled. If the pier holes are not promptly poured after they are drilled, then the skin friction between the piers and the adjacent earth materials could be adversely affected resulting in a pier of lesser capacity than designed and the contactor and the owner would have to accept the fact that such not promptly poured piers could be of less than 100 percent of design effectiveness.

Minimum recommended foundation details are shown on Plate 9. However, the actual house foundation details will have to be determined by your structural civil engineer with our consultation.

The preceding drilled pier and grade beam recommendations are based upon the assumption that the proposed house and garage-studio will be located within Foundation Zone A that is well removed from the bluff set-back area. However, if portions of the proposed house are in closer proximity to the estimated maximum bluff recession location in 75 years, then the drilled pier foundation should be deeper and stronger so as to help mitigate lateral soil creep effects and conform with the minimum requirements as shown on Plate 10 for Foundation Zone B.

For Foundation Zone B, the drilled piers should be at least 18 inches in diameter and drilled at least 10 feet into harder and competent well-confined bedrock materials. The drilled piers should also be designed for lateral soil creep forces of at least 50 pounds per cubic foot, equivalent fluid weight, acting upon the top 8 feet of the piers upon 2 pier diameters. The portion of the drilled piers within the underlying bedrock may be assumed to provide a design passive lateral resistance of 400 pounds per cubic foot, equivalent fluid weight, acting upon 2 pier diameters.

All drilled piers should be connected with grade beams in both the upslope-downslope direction and the side-to-side direction.

The main advantage of the drilled pier and grade beam foundation system is that the pier holes will bottom well into the underlying sandstone bedrock formation and no or negligible settlement would occur to the house foundation. The main disadvantage of the drilled pier and grade beam foundation system is that during our investigation, the perched ground water table was encounted at a depth of about 4.5 feet and the test pit encountered moderate caving below a depth of 2 feet. If the subsurface conditions remain wet in the summer season, when we anticipate the proposed drilled pier foundation will be drilled and poured, the presence of a locally perched higher ground water table and wet conditions would require that the pier holes be promptly poured after each pier is drilled and casing might be required in the caving zone.

Foundation Alternate II, Stiffened and Deepened Continuous Spread Footings - The proposed house may be placed upon stiffened and deepened continuous spread footing foundations bottoming a minimum of 3 feet below the existing ground surface and also a minimum of 3 feet below the final ground surface. The minimum 3 foot depth is necessary so as to penetrate through the soft and medium stiff upper soils and bottom in at least just stiff soils.

Wood joist floor should be used.

Minimum recommended foundation details are shown on Plate 11. However, the actual house foundation details will have to be determined by your structural civil engineer with our consultation.

The grid type footings should be a minimum of 36 inches in depth and a minimum of 24 inches in width. The grid type footings should be very well reinforced so as to span over and help tolerate and distribute possible slight differential performance and differential settlement effects. The grid type footing should be located upon a mutually perpendicular grid pattern of no more than about 20 foot centers. The bottoms of the footings may be designed for a bearing capacity of 1,000 pounds per square foot. For resistance to transitory lateral loads, such as wind or seismic, a passive pressure resistance of 100 pounds per cubic foot, equivalent fluid weight, may be used.

The advantage of the deepened and stiffened continuous spread footings of Foundation Alternate II is that the construction excavation should not extend below the temporary perched ground water level and the foundation costs and construction procedures can be more easily estimated in advance. The disadvantage of the stiffened grid type foundation system is that some slight differential settlement and differential performance may occur. However, we believe the mitigating measure of providing significant greater than average steel reinforcement in the grid type foundation should result in a level of performance compatible with contemporary residential construction.

Drainage - Site drainage water should be dispersed in as natural a manner as possible and not concentrated and discharged adjacent to or near the bluff area.

Additional general drainage discussion is provided in Appendix 1.

Seismicity and Earthquake Hazards - Review of the state of California Division of Mines & Geology Fault Map of California (1975 and 1994) and the Alquist-Priolo Special Fault Study Zone Maps for the Gualala and Point Arena Northeast Quadrangles prepared by the California Division of Mines & Geology in 1974 indicates that the site is located about 4 miles west of the San Andreas fault and about 33 miles west of the Maacama Fault, as well as being within the zone of influence of other active faults in the greater northern California area.

Therefore, it is our opinion that the site could be subjected to strong earthquake vibrations at least once during its useful life. We recommend that all structural, architectural and mechanical details be designed to resist earthquake ground shaking. The design engineer should emphasize the principles of continuity, ductility and high energy absorption.

We trust this report provides the information you require. Please call if you have further questions.

The following are attached and complete this report:

Plate 1 - Site Location Map
Plate 2 - Site Plan
Plate 3 - Log of Test Pit
Plate 4 - Soil Classification Chart
Plate 5 - Expansion Test Results
Plates 6 thru 8 - Bluff Profiles
Plates 9 thru 11 - Foundation Details
Appendix 1 - Site Drainage
Appendix 2 - Subdrain Details
Appendix 3.1 - House Appendages
Appendix 6 - Construction Safety
Appendix 7.1 - Wind Loading

Appendix 9 - Limitations
Appendix 10 - Construction Observation
Appendix A - General Recommendations, Risks, Material Notes, Responsibility, Limitations and Related Items
Appendix C - Concrete Slabs
Appendix G - General Foundation Notes
Appendix S - Sidewalks, Curbs, Patios, Etc.
Appendix V - Vegetation Erosion Control

Yours very truly,
EARTH SCIENCE CONSULTANTS

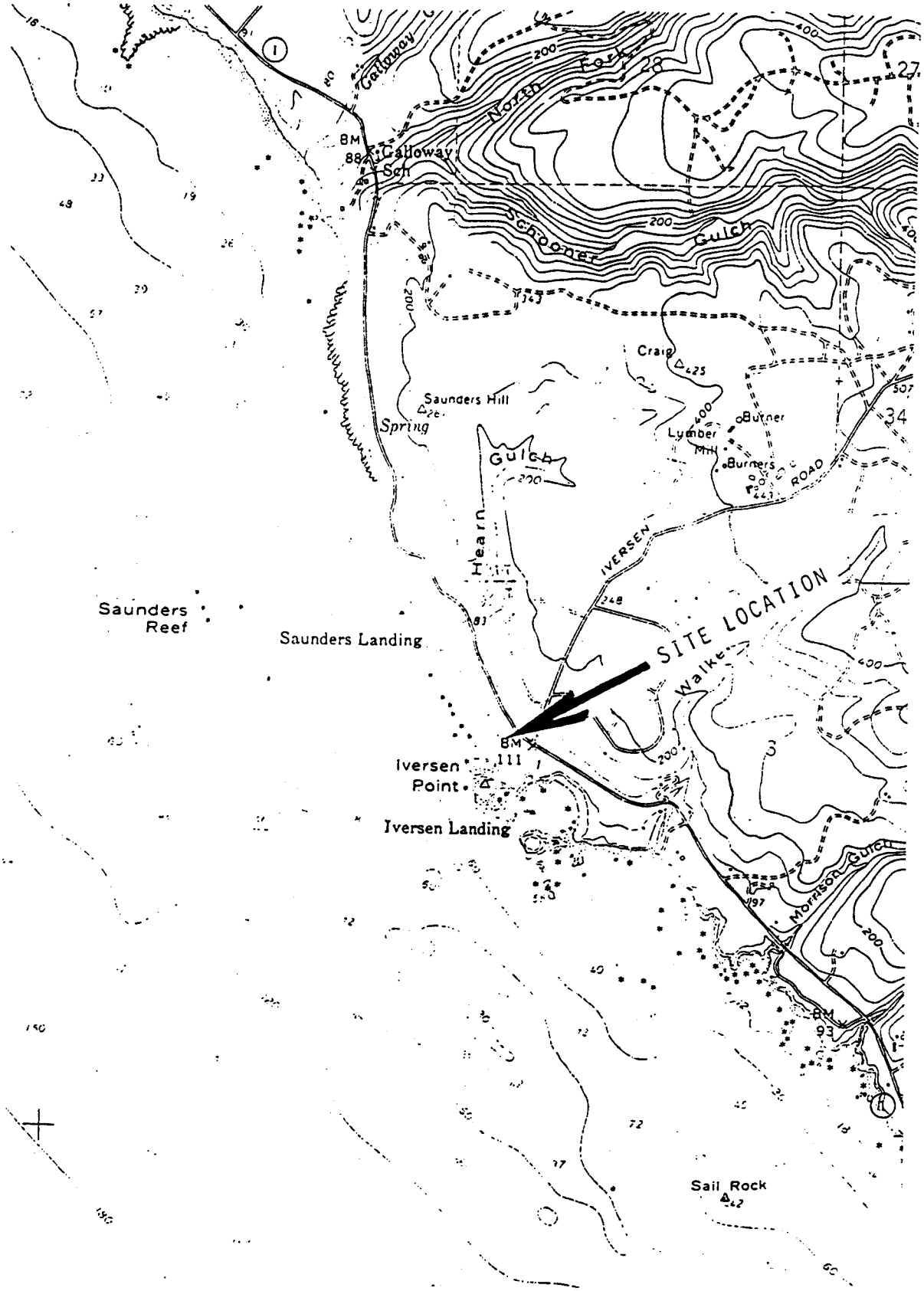
Jay A. Nelson
Principal Geotechnical Engineer
Civil Engineer - 19738, expires 9/30/01
Geotechnical Engineer 630

1 copy submitted

2cc: David Cooke/COBA
P. O. Box 652
Forest Falls, CA 92339

cc: David R. Miller, REHS
D&C Consulting Services
P. O. Box 247
Willits, CA 95490

cc: Matheson Design
P.O. Box 321
Gualala, CA 95445

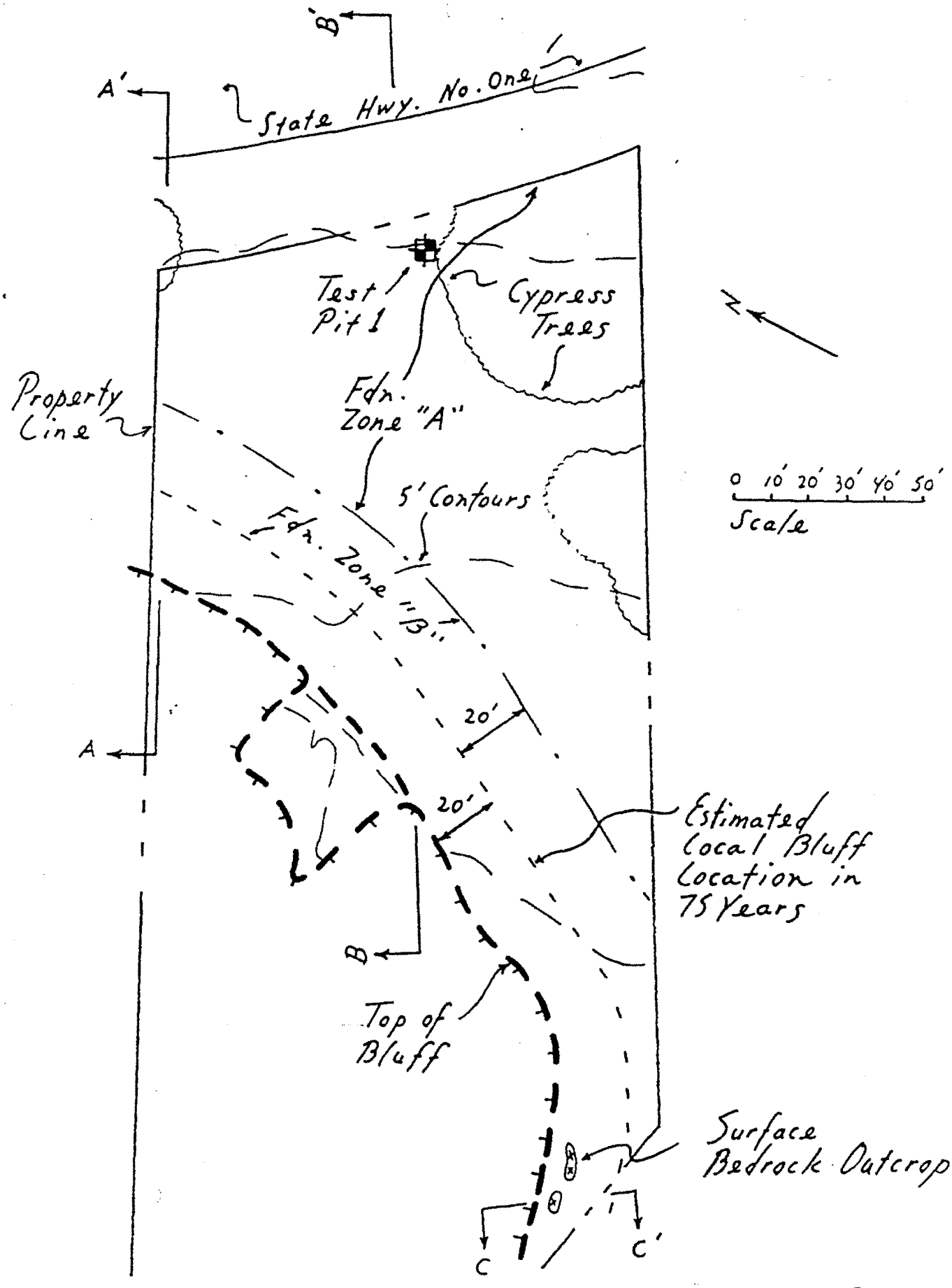


Site Location Map Plate 1

a.p. 142-031-03-05

Iversen Pt.

T.I.N. 002267



Site Plan

A.P. 142-031-03-05
Iversen Pt.

Plate

7

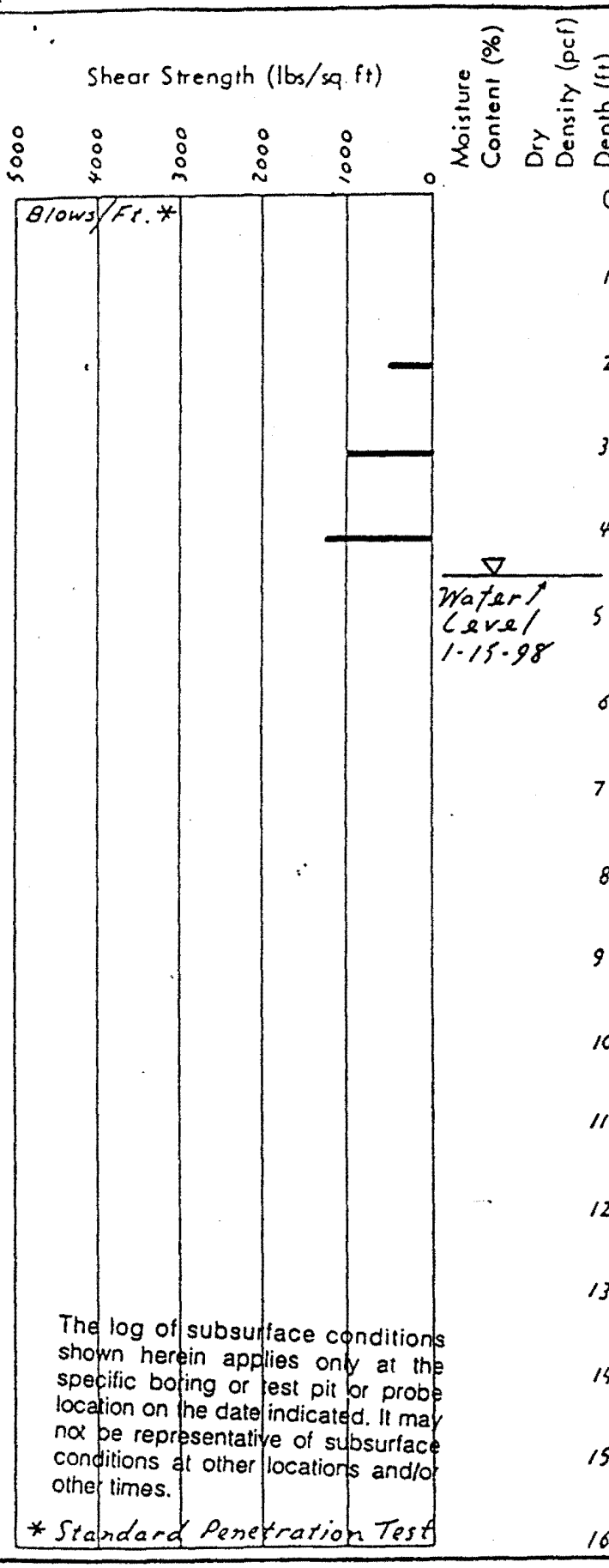
Job No. 983357 Date 1-20-99

21

LOG OF Test Pit 1

Equipment Backhoe

Elevation Exist. Gr. Date 1-15-98



BLACK SANDY SILT (ML), soft, wet (topsoil)

GRAY BROWN SANDY CLAY (CL), med. stiff, wet
Moderate caving below 2'

LIGHT GRAY BROWN & ORANGE BROWN SANDY CLAY (CL), stiff, wet

LIGHT BROWN & RUST BROWN SANDY SILT (ML), stiff, saturated, with angular & rounded small rock fragments (Qmts-Marine Terrace Alluvium)

LIGHT BROWN & RUST BROWN SILTY FINE SAND (SM), med. dense, saturated (Qmts)

LIGHT GRAY BROWN & RUST BROWN SILTY SAND (SM), med. dense (Qmts)

DARK GRAY SILTSTONE, massive, weathered, med. hard (Pgr)

The log of subsurface conditions shown herein applies only at the specific boring or test pit or probe location on the date indicated. It may not be representative of subsurface conditions at other locations and/or other times.

* Standard Penetration Test

EARTH SCIENCE CONSULTANTS
SOIL · FOUNDATION AND GEOLOGICAL ENGINEERS

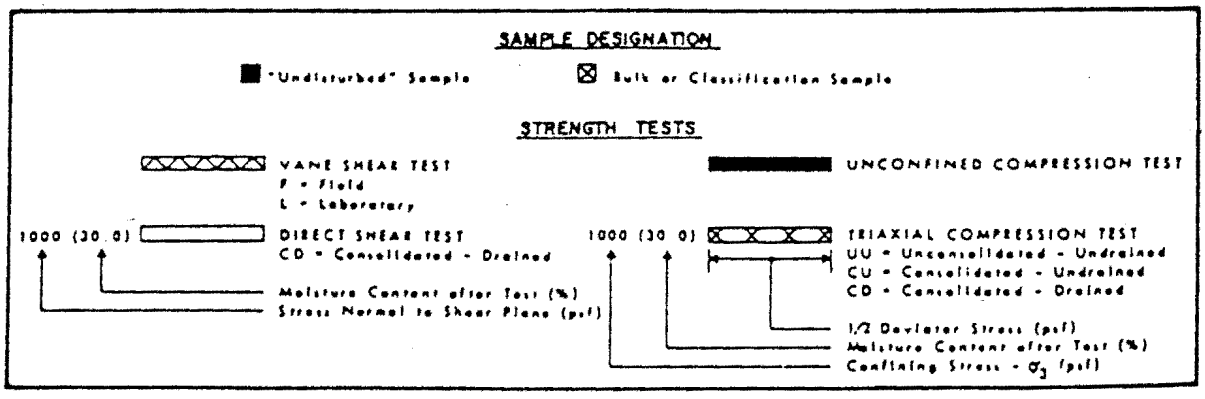
Job No 983357 Appr [illegible] Date 1-20-98

LOG OF Test Pit 1
A.P. 142-031-03-05
Iverson Pt.
Mendocino Co., CA

PLATE 3

MAJOR DIVISIONS				TYPICAL NAMES
COARSE GRAINED SOILS (MORE THAN HALF IS LARGER THAN #200 SIEVE)	GRAVELS (MORE THAN HALF COARSE FRACTION IS LARGER THAN NO. 4 SIEVE SIZE)	CLEAN GRAVELS WITH LITTLE OR NO FINES	GW	WELL GRADED GRAVELS, GRAVEL - SAND MIXTURES
			GP	POORLY GRADED GRAVELS, GRAVEL - SAND MIXTURES
		GRAVELS WITH OVER 12% FINES	GM	SILTY GRAVELS, POORLY GRADED GRAVEL - SAND - SILT MIXTURES
			GC	CLAYEY GRAVELS, POORLY GRADED GRAVEL - SAND - CLAY MIXTURES
	SANDS (MORE THAN HALF COARSE FRACTION IS SMALLER THAN NO. 4 SIEVE SIZE)	CLEAN SANDS WITH LITTLE OR NO FINES	SW	WELL GRADED SANDS, GRAVELLY SANDS
			SP	POORLY GRADED SANDS, GRAVELLY SANDS
		SANDS WITH OVER 12% FINES	SM	SILTY SANDS, POORLY GRADED SAND - SILT MIXTURES
			SC	CLAYEY SANDS, POORLY GRADED SAND - CLAY MIXTURES
FINE GRAINED SOILS (MORE THAN HALF IS SMALLER THAN #200 SIEVE)	SILTS AND CLAYS (LIQUID LIMIT LESS THAN 50)		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS, OR CLAYEY SILTS WITH SLIGHT PLASTICITY
			CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
			OL	ORGANIC CLAYS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS (LIQUID LIMIT GREATER THAN 50)		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACIOUS FINE SANDY OR SILTY SOILS, ELASTIC SILTS
			CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS
			OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS			PT	PEAT AND OTHER HIGHLY ORGANIC SOILS

UNIFIED SOIL CLASSIFICATION SYSTEM



KEY TO TEST DATA

EARTH SCIENCE CONSULTANTS
SOIL • FOUNDATION AND GEOLOGICAL ENGINEERS

Job No. 983357 Appr: JM Date 1-20-98

SOIL CLASSIFICATION CHART

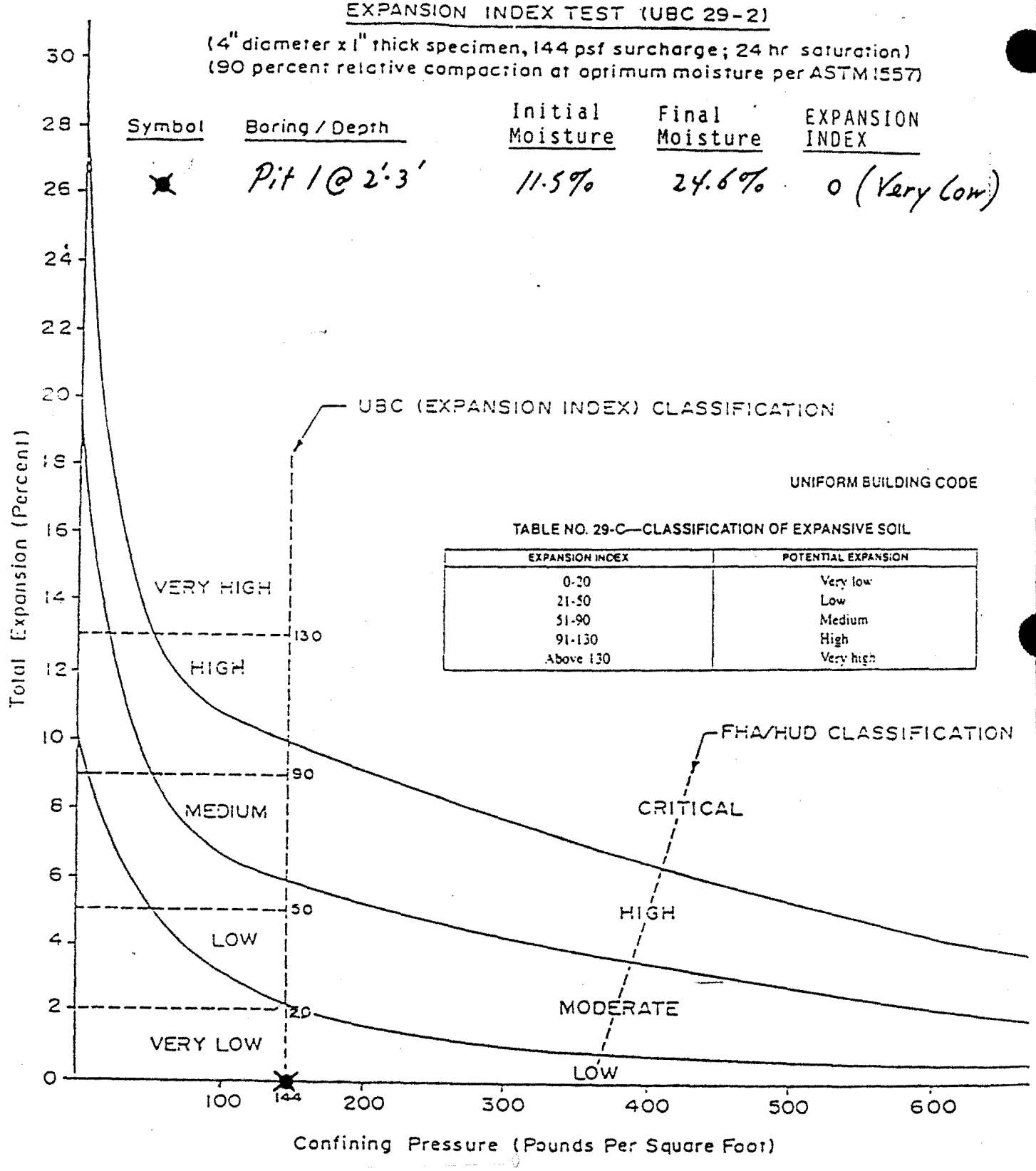
A.P. 142-031-03-05
Iversen Pf.
Mendocino Co., CA

PLATE 4

EXPANSION INDEX TEST (UBC 29-2)

(4" diameter x 1" thick specimen, 144 psf surcharge; 24 hr saturation)
(90 percent relative compaction at optimum moisture per ASTM 1557)

Symbol	Boring / Depth	Initial Moisture	Final Moisture	EXPANSION INDEX
✱	Pit 1 @ 2'-3'	11.5%	24.6%	0 (Very Low)



UNIFORM BUILDING CODE

TABLE NO. 29-C—CLASSIFICATION OF EXPANSIVE SOIL

EXPANSION INDEX	POTENTIAL EXPANSION
0-20	Very low
21-50	Low
51-90	Medium
91-130	High
Above 130	Very high

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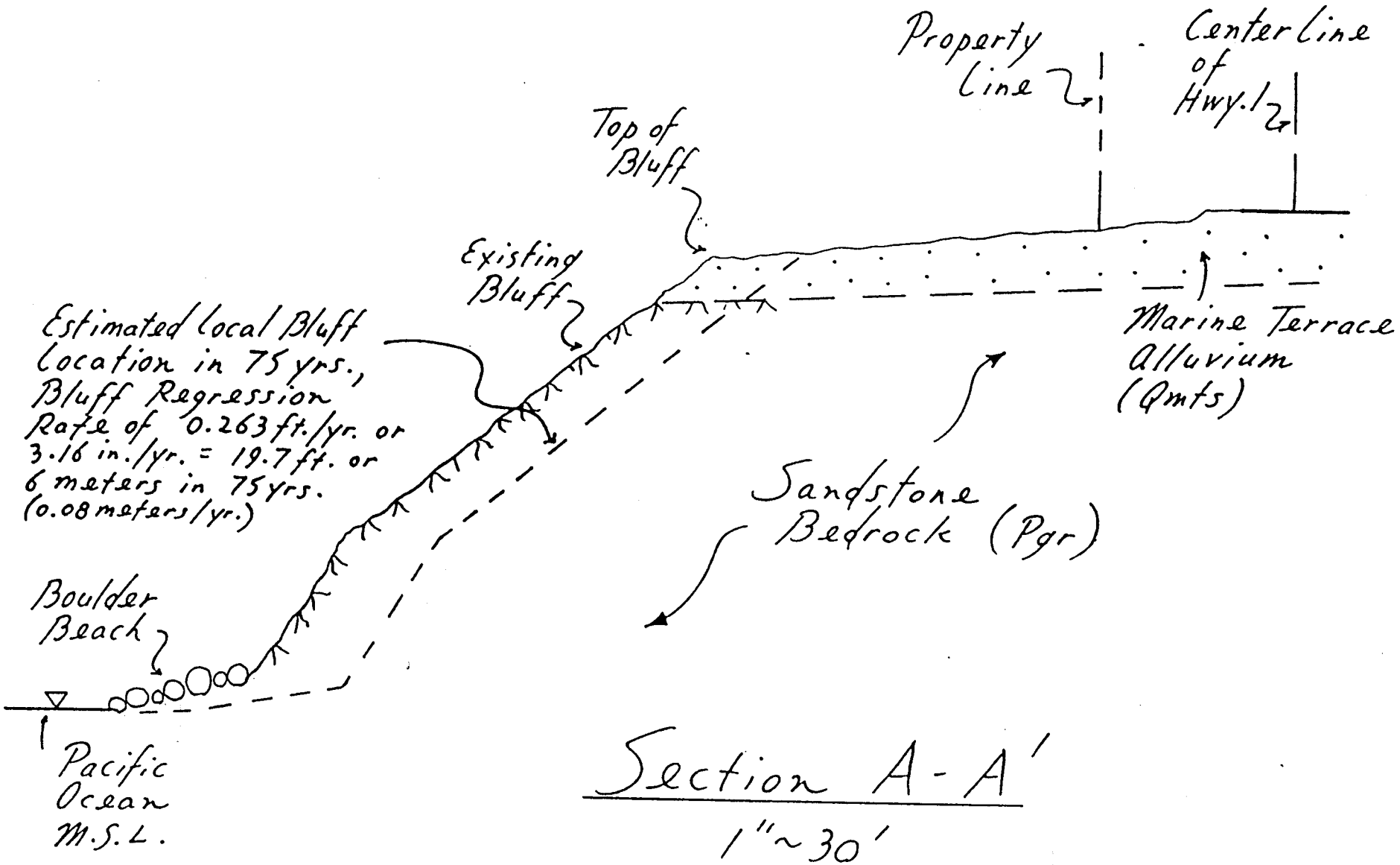
Job No. 983357 Appr: JM Date 1-20-98

EXPANSION TEST RESULTS
A.P. 142-031-03-05
Iversen Pt.
Mendocino Co., CA

PLATE 5



Section A-A'

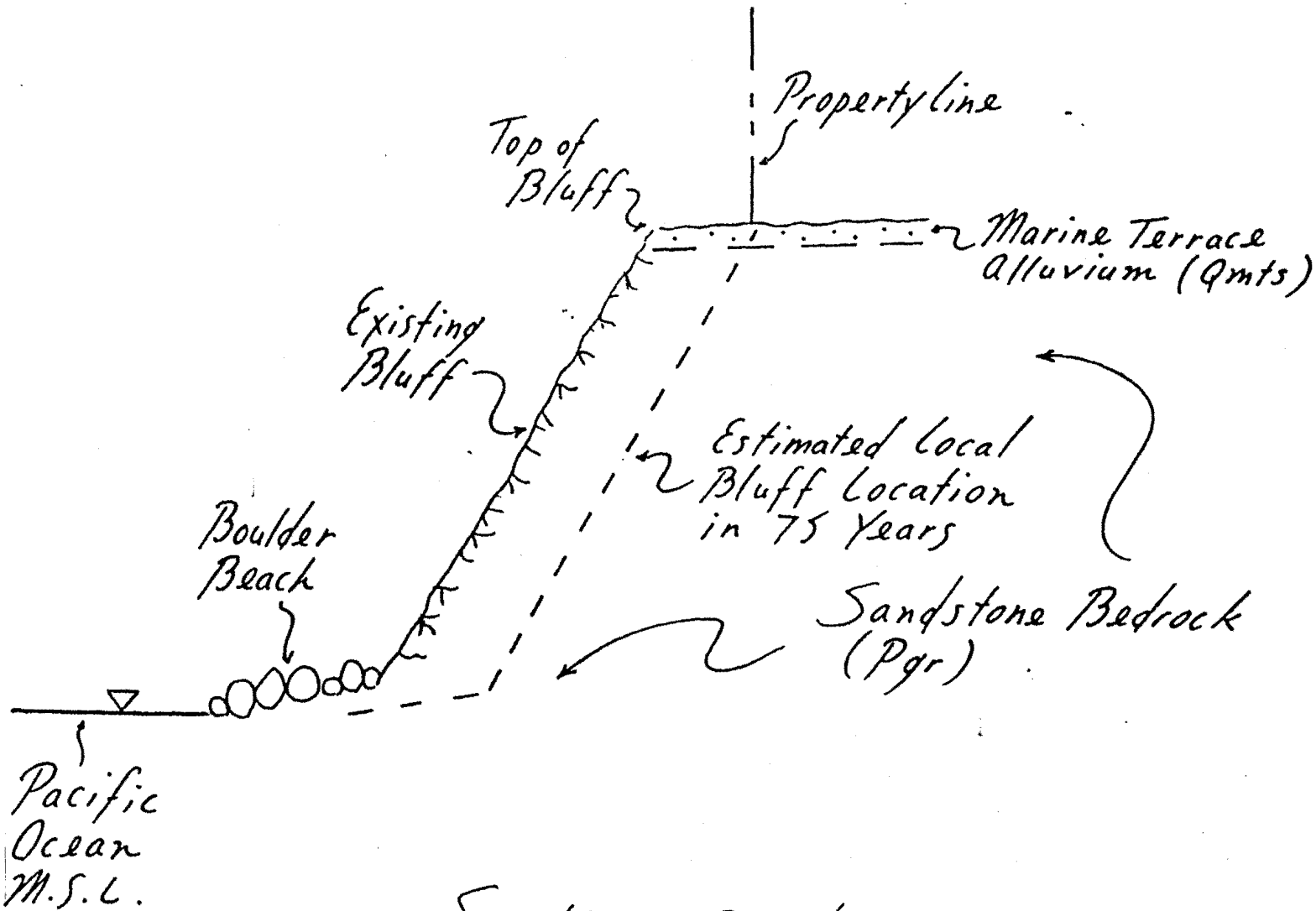
1"~30'

Bluff Profile

a.p. 142-031-03-05
Iversen Pt.
Mendocino Co., CA

Plate 6

Job No. 983357 Appr. Date 1-20-98



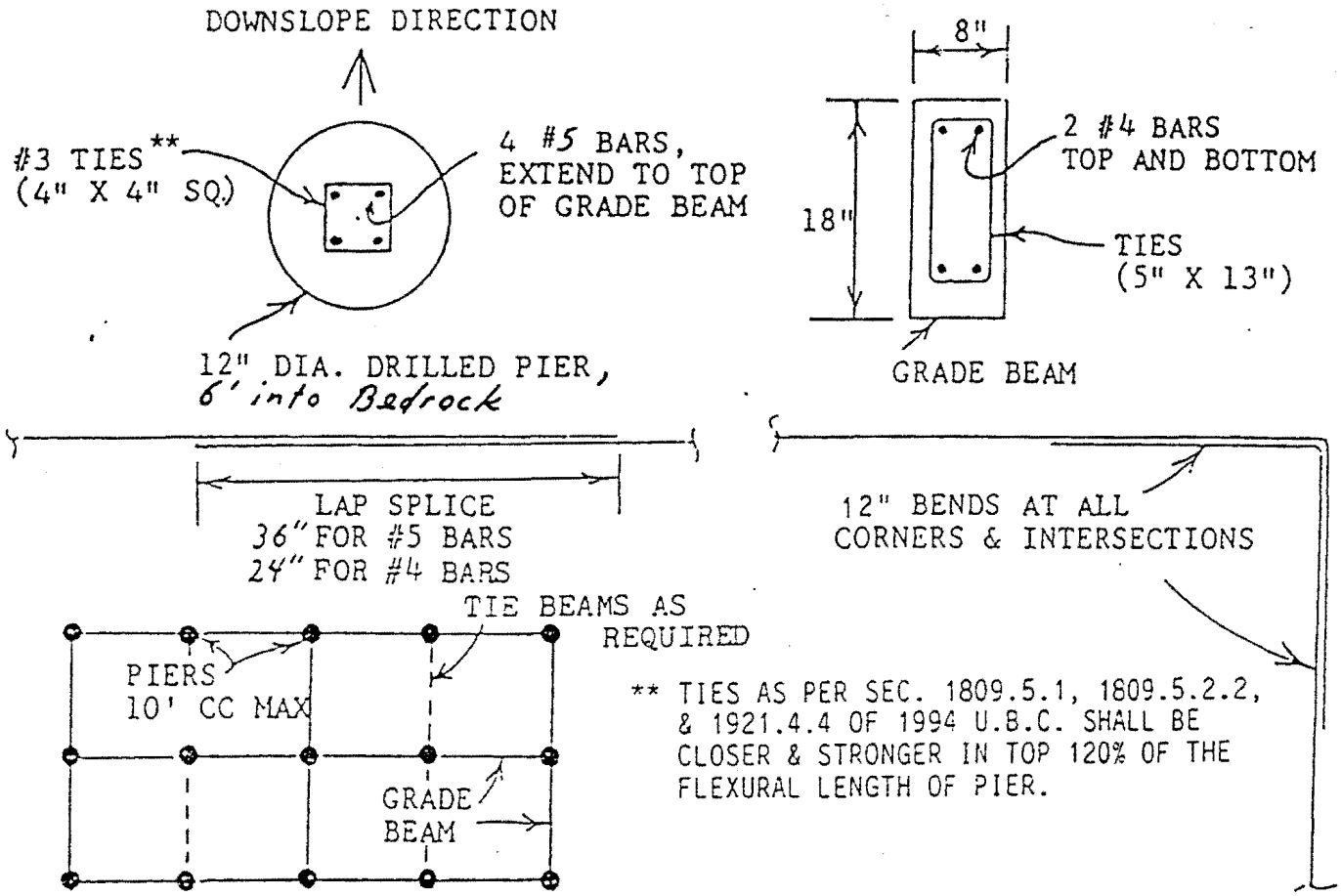
Section C-C'

1" ~ 30'

Job No. 983357 Appr. Date 1-20-98

Bluff Profile
a.p. 142-031-03-05
Iversen Pr.
Mendocino Co., CA

Plate 8

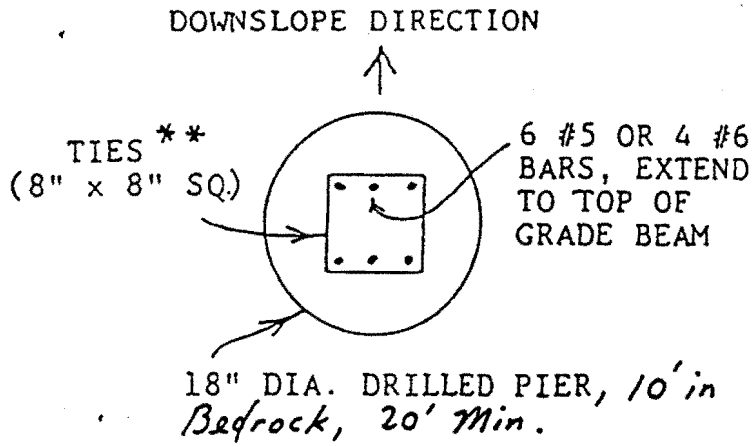


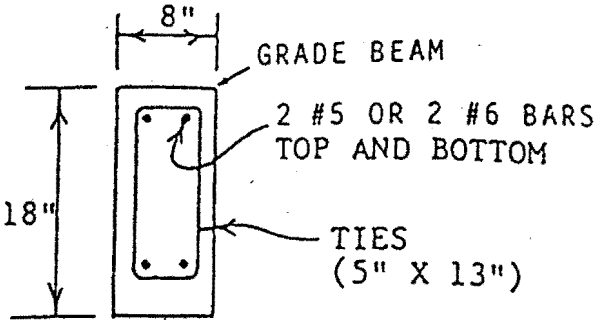
** TIES AS PER SEC. 1809.5.1, 1809.5.2.2, & 1921.4.4 OF 1994 U.B.C. SHALL BE CLOSER & STRONGER IN TOP 120% OF THE FLEXURAL LENGTH OF PIER.

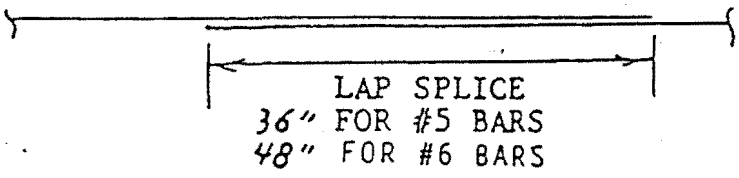
TYPICAL FOUNDATION LAYOUT

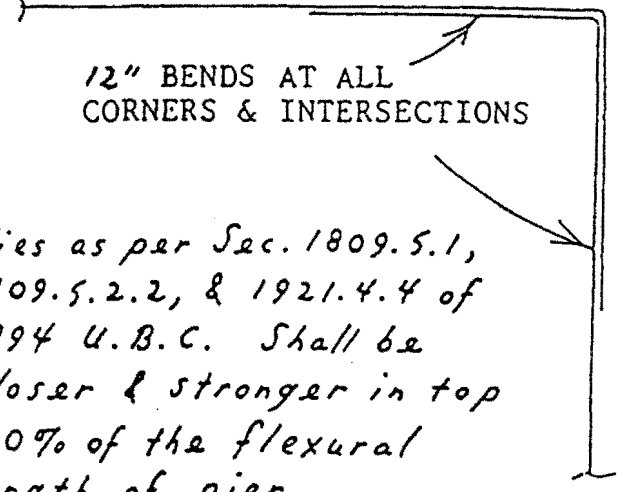
1. RECOMMENDED MINIMUM FOUNDATION DETAILS FROM THE CONCEPTUAL GEOTECHNICAL ENGINEERING STANDPOINT. HOWEVER, THE ACTUAL FOUNDATION DETAILS WILL HAVE TO BE DETERMINED BY THE STRUCTURAL CIVIL ENGINEER.*
2. THE FOUNDATION SHOULD ALSO BE DESIGNED TO RESIST THE MINIMUM LOADS AS REQUIRED BY THE UNIFORM BUILDING CODE.
3. REINF. STEEL SHOULD BE #40 GRADE, ASTM A615-40 OR BETTER.
4. WOOD JOIST FLOORS SHOULD BE USED.
5. SOIL ENGINEER SHOULD PERIODICALLY OBSERVE DRILLING OF PIER HOLES.
6. FOUNDATION STRUCTURAL ENGINEER SHOULD OBSERVE STEEL & FORMS PRIOR TO CONCRETE POURS.

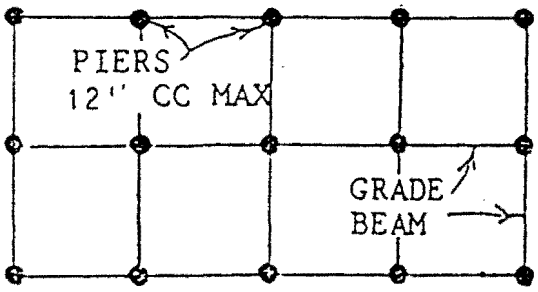
* Unless approved by geotechnical engineer with supplemental consultation











** Ties as per Sec. 1809.5.1, 1809.5.2.2, & 1921.4.4 of 1994 U.B.C. Shall be closer & stronger in top 120% of the flexural length of pier.

TYPICAL FOUNDATION LAYOUT

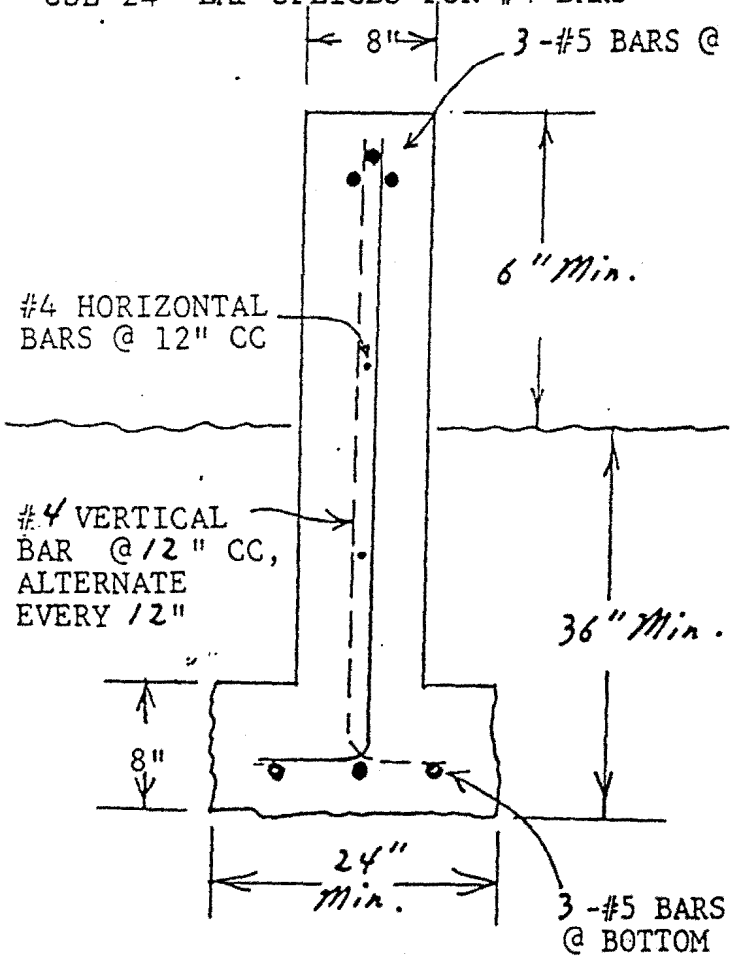
1. RECOMMENDED MINIMUM FOUNDATION DETAILS FROM THE CONCEPTUAL GEOTECHNICAL ENGINEERING STANDPOINT. HOWEVER, THE ACTUAL FOUNDATION DETAILS WILL HAVE TO BE DETERMINED BY THE STRUCTURAL CIVIL ENGINEER.*
2. THE FOUNDATION SHOULD ALSO BE DESIGNED TO RESIST THE MINIMUM LOADS AS REQUIRED BY THE UNIFORM BUILDING CODE.
3. REINF. STEEL SHOULD BE #40 GRADE, ASTM A615-40 OR BETTER.
4. WOOD JOIST FLOORS SHOULD BE USED.
5. SOIL ENGINEER SHOULD PERIODICALLY OBSERVE DRILLING OF PIER HOLES.
6. FOUNDATION STRUCTURAL ENGINEER SHOULD OBSERVE STEEL & FORMS PRIOR TO CONCRETE POURS.

* Unless approved by geotechnical engineer with supplemental consultation

ALL EXTERIOR AND INTERIOR FOUNDATIONS SHOULD BE CONTINUOUS AND NO ISOLATED FOOTINGS SHOULD BE USED SO AS TO HELP CONTROL DIFFERENTIAL SETTLEMENT EFFECTS.

USE 24" MIN. BENDS @ ALL CORNERS AND INTERSECTIONS

USE 36" LAP SPLICES FOR #5 BARS
USE 24" LAP SPLICES FOR #4 BARS



ADEQUATE CRAWL SPACE ACCESS & CROSS VENTILATION SHOULD BE PROVIDED AS REQUIRED BY *Latest Edition* OF THE UNIFORM BUILDING CODE.

PLACE ABOVE FOUNDATIONS IN BOTH DIRECTIONS NO MORE THAN 20' APART

*For Zone "A" Only

EARTH SCIENCE CONSULTANTS
SOIL • FOUNDATION AND GEOLOGICAL ENGINEERS

Job No. 983357 Appr. Date 1-20-98

FOUNDATION DETAILS · Alt. II*
A.P. 142-031-03-05
Iversen Pt.
Mendocino Co., CA

PLATE 11

EARTH SCIENCE CONSULTANTS
SOIL • FOUNDATION AND GEOLOGICAL ENGINEERS

P. O. BOX 3410/SAN RAFAEL/CALIFORNIA 94912-3410/(415) 383-0935

June 4, 1999
Job No. 993357

Rosemarie Jones
P.O. Box 69
Trinity Center, CA 96091

RE: Clarification of Certain
Geotechnical Considerations
Klute/Jones Residence
A.P.142-031-03-05
Iversen Landing Subdivision
Iversen Point
Mendocino, California

INTRODUCTION

The purpose of this correspondence is to clarify certain geotechnical considerations with respect to the proposed residence.

I previously have performed a geotechnical investigation report at this site that summarized the physical surface and subsurface conditions dated January 22, 1998.

Between 1960 and 1965 I attended the University of California at Berkeley and since 1966 to the present have been continuously employed as a geotechnical engineer in Northern California. In late 1966 I performed a geotechnical investigation in the coastal area of Mendocino County and since that time I have performed numerous studies along the California coast in the area of the San Andreas fault and ocean bluff areas under the jurisdiction of the

California Coastal Commission, including studies at Big Sur, Muir Beach, Stinson Beach, Bolinas, Inverness, Point Reyes, Dillon Beach, Bodega Bay, Jenner, Gualala, Anchor Bay, Point Arena, Irish Beach, Albion, Whiskey Shoals, Elk, Little River, Mendocino, Caspar, Fort Bragg and Eureka.

I grew up in Martinez and attended the local schools there prior to entering the University of California. I worked for the larger firm of Harding-Lawson Associates from 1966 to 1973 and since that time I have been self-employed. I am married with 3 sons, ages 20, 22 and 24. I perform geotechnical peer review of reports of other geotechnical engineers for the Town of San Anselmo. In addition to working for private clients, I have provided geotechnical services for the City of Tiburon, Town of Belvedere, City of Petaluma, City of Oakland, San Quentin Prison, Leggett Justice Court District, and the U.S. Army. Over the years I have performed a few hundred geotechnical evaluations pertaining to disputes between property owners pertaining to stability and land subsidence considerations and have testified in the Superior Courts of Marin County, San Francisco County and Alameda County and have given numerous depositions in these matters.

BACKGROUND AND DISCUSSION

Based upon my recent telephone conferences with the owner of the property and her planning-construction consultant, I understand a group of local property owners have expressed their concerns in their correspondence dated April 21, 1999. I was also told that the house location and design has been re-done 4 times in response to planning and the opposition of local property owners. I recently was provided with house Site Plan No. 4 as prepared by Matheson Design.

When I performed the geotechnical investigation in early 1998, the owners indicated to me that they only had a general vague idea as to the house location and design and my investigation was performed with respect to the physical surface and subsurface conditions of the site and not with respect to a particular design or location.

From my vantage point, during the last several years generally throughout the greater Bay Area and Northern California, most residential house projects and additions are frequently opposed by the local property owners and this phenomena occurs not only in high profile or scenic areas, but also upon routine and average sites in typical residential areas. Generally most of the opponents to the proposed house projects upon which I work attack projects for a number of reasons and generally always include site instability. Also, I occasionally perform geotechnical evaluations to be used by individuals or groups that are opposed to certain construction. Thus, I have found that opposition documents and appeal of projects beyond the planning and planning commission level to be ordinary and average generally in the Bay Area and Northern California where I practice and generally it is unusual for the neighboring property owners and property owner groups to not be in opposition.

My geotechnical studies and evaluations are performed from a neutral standpoint, based solely upon the site physical surface and subsurface conditions.

RATE OF BLUFF EROSION-REGRESSION

About 20 years ago I became aware that the California Coastal Commission desired an estimated structural life of 75 years for structures located within their jurisdiction along the California coast. The 75 year requirement was not determined by me and I used the 75 year value in my evaluation of the Iversen Point property as mandated by the California Coastal Commission.

About 8 years ago the County of Mendocino Planning Department added a requirement of the geotechnical consultant estimating the rate of bluff regression in meters and/or inches per year based upon the recommended procedure of utilizing aerial photos and/or other appropriate methods. Up until that time the providing for an estimated 75 year structural life was based upon the professional opinion of the consultant based upon the quality and hardness of the bedrock, its geologic age, its inclination and visual evidence or lack of evidence of recent deterioration and erosion, sloughing and/or sliding and providing a reasonably conservative bluff setback and providing foundation recommendations consisting of deeper and stronger drilled piers.

With respect to aerial photos, I have found that aerial photos obtained from the U.S. Geological Survey generally are taken from a much higher elevation and it is more difficult to determine an appropriate rate of bluff regression. However, on one occasion — about 32 years ago in 1967, Pacific Aerial Surveys of Oakland flew most of the northern California coast at an elevation considerably lower than the ordinary and average U.S. Geologic Survey aerial photos and I have found that those aerial photos when viewed under magnification varying from 6x to 22x and also enlarged and comparison with the current site geometry provide a reasonably reliable method of determining whether the bluff has significantly

regressed during that time. It should be realized that before about 1950 aerial photos generally were not flown and generally are not available.

As I recollect, over many years of performing numerous studies along the California coast, older lot maps accurately indicating the location of the bluff top, at the time the map was performed, generally are not available for most lots and therefore the aerial photograph method is the ordinary and average method of determination of the estimated rate of bluff regression and also is the method described in literature I have previously received from the County of Mendocino Planning Department. From my recollection of many studies I have performed along the northern California coast, I can only recollect about three instances where older individual lot maps were available to me of sufficient accuracy and with sufficient survey points indicated so as to determine the top of the bluff location a considerable time in the past and then compare it with the current site topogrophy.

During the last 8 years when it has been required for the geotechnical consultant to provide a numerical rate of bluff regression as mandated by the County of Mendocino Planning Department, for the numerous studies I have performed along the Mendocino county coast during that time, I generally have used the lower elevation 1967 Pacific Aerial Survey photos that can be obtained from the Pacific Aerial Surveys near the Oakland airport for a fee of about $75.00 each. I obtain the aerial photo of the area of the coast where I am performing a study prior to visiting the site so that I can try to determine and locate prominent landmarks and physical features that are easily evident on the

aerial photo and also easily observable during my visual observation. The most common prominent landmark with respect to the location of the bluff top is from the center of Highway 1. By observing the aerial photo with aerial photo magnifying glasses varying from 6 power to 22 power and also enlarging the aerial photo of the property and viewing the enlargement with magnifying glasses and obtaining a horizontal linear scale by determining the distance between 2 easily recognizable points (such as the intersection of a particular road with a main road and a side road that is shown on the U.S. Geological map of the area and is shown on the older aerial photo and also is measurable in the field), I have found that it is possible to determine with an accuracy of a few feet as to how much the bluff has receded between 1967 and present.

I have performed 5 geotechnical evaluations within the older 14 lot subdivision located adjacent to the bluff at Whiskey Shoals where the bluff bedrock is younger and weaker and more exposed and by using the enlarged magnifying analysis of aerial photos as previously described, generally I can locate within a property or nearby where a portion of the bluff has receded about 8 feet to 16 feet since the ariel photo was flown in 1967. Then in the field I can observe the bluff and locate the areas of more recent bluff erosion and regression that correlates with that observed on the aerial photo and perform tape measurement from the center line of Highway 1 to the edge of the bluff in the area in question and thus can determine an approximate rate of bluff regression as indicated by the County of Mendocino Planning Department of meters per year and/or inches or feet per year.

I can recollect that during the last 8 years for northern California coastal sites I have found that by observing the aerial photos and enlarged aerial photos under higher magnification and comparing that with the field measurement of the current site topography, that the rate of bluff erosion calculated generally

varies from 3 to 4 inches and locally 6 inches and occasionally no regression has occured. The areas where the bluff recedes faster is where the underlying bedrock is younger and weaker and more directly exposed to wave action. Those areas where I find no evidence of bluff regression since 1967 are those areas where the underlying bedrock materials are older and stronger and harder and less exposed to the prevailing waves and storm waves due to the orientation of the bluff with respect to the sea and the presence of adjacent points, peninsulas and the presence of sea mounts or sea stacks. Sea mounts or sea stacks are in essence very hard erosion resistant rock that have not weathered and washed away that consist of small rocky islands adjacent to the coast.

In my 1998 geotechnical evaluation report for this property, I indicated on page 4 that "Observation of the 'Geologic Map of the Santa Rosa Quadrangle Regional Geologic Map Series,' compiled by D. Wagner and E. Bortugno of the California Division of Mines and Geology in 1982, indicates that the site is plotted as being underlain by sedimentary bedrock materials of the German Rancho Formation (Pgr) of Paleocene geologic age consisting of marine sandstone and mudstone with the outer portions of the protruding points and land in the general area plotted as consisting of the Iversen basalt (Mib) of Miocene geologic age."

At the end of page 4 and at the beginning of page 5 of my previous geotechnical evaluation report I indicated that "The base of the bluff at the Klute property is moderately well sheltered by the adjacent protruding land points to the south and north that are of the harder Iversen basalt and also is further protected by the abundant large sea rocks and sea mounts moderately close to to the

base of the bluff area varying from about 40 feet to 75 feet across that tends to significantly dissipate wave energy prior to reaching the rocky beach area at the base of the bluff. On the Site Location Map, Plate 1 that is a copy of a portion of the U.S. Geological Survey topographical map of the Saunders Reef 7.5-Minute Quadrangle, the abundant sea mounts and sea rocks are plotted.

The geological literature of the area indicates that the site is underlain by bedrock materials of Paleocene geologic age that is about 65 to 54 million years of age. In contrast, the weaker and more erodable rocks at Whiskey Shoals were by field observatation, aerial photo analysis and review of an older accurate available survey map of one lot revealed calculated average bluff erosion rates of 3 inches to 6 inches per year. The bedrock materials at Whiskey Shoals are of Miocene geologic age and vary from about 7 to 26 million years of age.

I have performed 2 geotechnical evaluations at Bolinas in Marin County where the combination of younger and weaker bedrock materials and high exposure to both ordinary and average prevailing waves and southwesterly storm waves result in a calculated average rate of bluff regression of about 12 inches per year.

During the El Nino storm season I visited the bluff area in Pacifica where a number of houses were beginning to fall off the bluff top due to bluff erosion. I observed that the bluff materials were very young Pliocene and Pleistocene deposits and consisted of lightly cemented sandy deposits of no more that 3 to 4 million years of age.

In summary, the rate of bluff along the northern California coast

is quite variable and is primarily a function of the age and hardness of the underlying bedrock materials and the exposure to both normal and storm wave erosion. In those areas where my aerial photo analysis and field observations have revealed higher rates of bluff erosion, the bedrock materials have been younger and weaker and more exposed. However, in those areas where the underlying bedrock materials are older and harder and less exposed, both my aerial photo observation and field observations have revealed no evidence of historically recent bluff regression. Thus, I have found a high correlation between my aerial photo analysis and the age and exposure of the geologic formation and the presence and/or absence of areas of visually observable recent bluff regressions.

At the Iversen Point property in question, my aerial photo analysis based upon 2 typical representative cross sections that were also field measured and visually observed revealed no noticeable bluff regression since 1967. This correlates with the older and harder and less exposed bedrock materials and thus correlates with the absence or presence of recent bluff regression with respect to other geotechnical evaluations I have performed. For comparision purposes, I find that about 1/3 to 1/4 of the geotechnical evalations I performed along the California coast show no apparent bluff regression in the last 32 years while about 2/3 to 3/4 of the sites due show evidence of noticeable bluff regression.

It should be realized that the availability of aerial photos is much more limited for a rural forested area such as Mendocino County and it is my opinion that the results of my aerial photo analysis are as best as I can perform due to the unavailability of older lower aerial photos.

At the Iversen Point property in question, by using the method of bluff regression calculation as indicated by the County of Mendocino Planning Department, the measured amount of bluff regression was 0 and therefore the bluff setback could have been 0 feet based solely upon geotechnical engineering considerations. However, based upon my more than 30 years of geotechnical experience, I made the engineering judgement that it would be prudent to have a 20 foot minimum top of bluff setback so as to account for possible regression of the outer portion of the bedrock materials that gradually weather with time. It should be noted that when I performed my geotechnical evaluation in 1998, the house location had not been determined and the building and bluff setbacks as indicated in that report and as indicated on the Site Plan-Plate 2, and cross sections were based upon the actual site physical and bedrock conditions and my considerable experience along bluff areas not only along the California coast, but also with a great number of bluff evaluations of the bay front bluffs of Tiburon, Belvedere and Point Richmond.

The reason that the house No. 4 Site Plan reveals a 20 foot minimum top of bluff setback is that in January of 1998 I recommended a 20 foot minimum bluff setback as indicated in the report before the plans had been drawn and thus the bluff setback was determined by me, then the plans drawn and not vice-versa as the local property owners association has alleged.

The local property owners association attacks the use of the 75 year structure life as used in the report, but as indicated earlier in this correspondence, that amount of time is the amount required by both the California Coastal Commission and the County of Mendocino Planning Department. The 75 year value was not determined by me.

SEA WALLS

The local property owners association makes reference to the visual blight of future sea walls.

Along the California coast, sea walls have been constructed when older houses were placed in closer proximity of bluff area, during an era of lesser controls prior to regulation by the California Coastal Commission, where the underlying bedrock materials are younger, weaker and more exposed.

I have found by personal observation and personal experience that sea walls have not been required or necessary or installed where the bedrock materials are older and harder and the site is not well exposed to the prevailing and storm waves and where the houses have been reasonably set back from the edge of the bluff area in consideration of the underlying geology.

With respect to the Iversen Point site in question, the underlying bedrock materials are older, harder and relatively well protected and therefore the concern for the visual blight of a future sea wall is moot as no future sea wall will be necessary.

In summary, sea walls will not be necessary at this site due to the older, harder and relatively well protected bedrock materials.

FAULTING

The requirements of the Alquist-Priolo Fault-Rupture Hazard Zone Act mandate that the California Division of Mines and Geology determine the approximate location of active faults in California and publish 7.5 minute topographical maps indicating the approximate locations of such active faults and fault zones and provide regulations and requirements with respect to building upon or near such active faults.

Observation of the Alquist-Priolo special fault study zone maps for the Gualala and Point Arena northeast quadrangles indicates that the site is located about 4 miles west of the San Andreas fault zone.

By definition, an active fault is defined as a fault that has experienced displacement during historic time (200 years before present) or during Holocene time (10,000 years before present). Faults that have experienced displacement during Pleistocene (10,000 years before present to 1.6 million years before present) are not considered active faults by the California Division of Mines or the U.S. Geological Survey.

Also, observation of the published Fault Activity Map of California prepared by the California Division of Mines and Geology as Geologic Data Map No. 6 in 1994 as compiled by C. Jennings, indicates that the only plotted active fault within this coastal area of northern California is the San Andreas fault.

Thus, the California Division of Mines and Geology and the legal definition of an active fault in California indicates that no active faults are present within 4 miles of this site.

Furthermore, Division 2, Chapter 7.5 of the California Public Resources Code under Section 2621.6 (a) indicates that single family residences that do not exceed 2-stories in height and that are not part of a new development of 4 or more dwellings are exempt from the requirements of the Alquist-Priolo Special Fault Studies Act.

In summary, no legally defined active faults are near the site and even if there was a legally defined active fault as indicated upon the published official maps of the state of California, California Division of Mines and Geology, it would still be legal and permitted to build a 2-story residence. Also, the Alquist-Priolo Act allows construction and/or subdivision of more than 4 properties if the fault is located at least 50 feet or more away from the actual house location. The local property owners association have indicated that they have reviewed a private unpublished map that indicates that the Iversen fault trace is located about 200 feet north of the property. However, the Iversen fault is likely one of many tens of thousands to hundreds of thousands of old inactive faults within California that are not considered to be active by the California Division of Mines and Geology that has been given the legislation legal mandate to determine where active faults are present. However, even if the Iversen fault was active and was shown on the Alquist-Priolo Special Fault Studies Map, it would still be legal and permissable to build upon the property in question as it allows one to build as close as 50 feet from an active fault and also exempts single family residences 2-stories or less in height.

In summary, it is my opinion that the objection argument raised by the local property owners association has no merit with respect to the issue of faulting.

Also, the bedrock materials in the bluff were harder and competent and did not exhibit any evidence of shearing, crushing or slickensides that are present in active fault areas.

POSSIBLE RISING SEA LEVEL

As of this date, I have not been required and I know of no governmental, legal, or professional requirement to consider the possible very slow and slight rise in sea level during the next 100 years. Even for filled sites adjacent to San Francisco Bay, consideration of long term global sea level rise has not required consideration. For example, in 1997 I performed an investigation for seven bay front lots and in 1998 I performed another investigation for six bay front lots in Marin County that were upon older previous reclaimed marshland fill adjacent to the tidal waters of San Francisco Bay. Those two projected sites were closely scrutinized by the local planning department, Army Corps of Engineers, BCDC, and concerned local property owners, and rising sea level was not brought up.

In summary, it is my opinion that the possible slight global rise of sea level of up to 4 inches during the next 100 years would have no effect upon the proposed Iversen Point house site.

It should be noted that no opposition group to a project upon which I have worked has even brought this item up before, even with high profile, controversial sites with much local opposition.

Yours very truly,
EARTH SCIENCE CONSULTANTS

Jay A. Nelson, Principal Geotechnical Engineer
Civil Engineer - 19738, expires 9/30/01
Geotechnical Engineer - 630

2 copies submitted

2cc: Matheson Design
P.O. Box 321
Gualala, CA 95445

2cc: Ed McKinley
Planning & Construction
Consultant
237 Morrow Street
Fort Bragg, CA 95437

Friends of Schooner Gulch

A Watershed Organization
P. O. Box 4, Point Arena, California 95468
(707) 882-2001, Fax (707) 882-2011

April 21, 1999

Commissioners,
California Coastal Commission,
North Coast Area,
45 Fremont, Suite 2000,
San Francisco, CA 94105

Commissioners:

We'd like to give you a very short history of our organization. Friends of Schooner Gulch has been around for almost 20 years, in several incarnations. Our biggest success in helping the coast retain its natural beauty is at Whiskey Shoals. The Coastal Conservancy wanted to substitute future development on the 72 original lots there for a 72 unit time-share condominium scheme to be built by a Tahoe developer. That was in the 1980's, and it took about 3 years of back-to-back hearings, alternate plans, and community organizing. Clearly it was one of those crazy S & L boondoggles, and just about everyone we have ever talked to agrees that it would have been a disaster. Instead, about 13 homes will be allowed there, a much better situation.

Building on that success, we lobbied hard and got State Parks to buy Bowling Ball and Schooner Gulch Beach areas as a park. There had been an application for a monstrous home on the property and that would have been the end of any possible park.

Cal-Trans realigned the Highway further inland, south of Schooner Gulch where the cliffs tumbled, and instead of leaving a buildable remainder parcel out on the bluffs, they responded positively to our request to retain it. The Vista Point which was created by Cal-Trans now serves many tourists and locals as well.

In the late 1980's we took on Louisiana-Pacific. They were proposing to overcut their 3000 acres between Schooner Gulch and Iverson Roads. We won the suit, although cutting did progress in the area.

We try to coordinate when appropriate with State Parks, California Board of Forestry, and Moat Creek Managing Agency. We have participated in several rather expensive stream clearance projects for the re-establishment of salmon on the streams in this area.

Our operating board currently is Charles Peterson, formerly Mendocino County Supervisor and a long time member; Sarah Flowers, who is a Resource Interpretive Specialist for State Parks (her participation is totally independent of her state job); Alan Mohr, licensed forester; and myself, a business consultant.

The "bowling balls" are an extremely unique and visually curious geological feature. They are only found here and one place in New Zealand. Many folks come to experience and photograph them.

If you were to walk the beach areas, you would feel the solitude, intricate beauty, photographability, and drama of them. Another uniqueness about our area here is the "reciprocal vistas." That means you can see the cliffs and beaches from the highway while traveling in both directions, and the highway is right out on the edge of the cliffs for over a mile. It is one of the most highly photographed stretches of scenery on the south Mendocino Coast, and is an exceptional touristic resource for our slim economy.

The daily interplay of light and waves always leaves us, and many others, in awe. We are dedicated to the preservation of this coast.

Sincerely,

Peter Reimuller

Peter Reimuller
Corresponding Secretary
Friends of Schooner Gulch