

CALIFORNIA COASTAL COMMISSION

NORTH COAST DISTRICT OFFICE
 710 E STREET, SUITE 200
 EUREKA, CA 95501
 VOICE (707) 445-7833 FAX (707) 445-7877

**APPEAL FROM COASTAL PERMIT DECISION OF LOCAL GOVERNMENT**

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

SECTION I. Appellant(s)

Name: Richard and Judith Turnlund

Mailing Address: 2276 Great Highway

City: San Francisco

Zip Code: 94116

Phone: 415 665 6274

SECTION II. Decision Being Appealed

1. Name of local/port government:

Mendocino County Coastal Permit Administrator

2. Brief description of development being appealed:

Permit CDP #51-2008 Construct a two-story single family residence on a bluff-top lot with 1950 sq ft living space plus 350 sq ft garage. Install sewage pump tank and connect to off-site septic system, connect to community water, retaining walls, LPG tank, generator, on-site drainage infrastructure. Install a driveway through an easement on 38458 Robinson Reef Drive.

3. Development's location (street address, assessor's parcel no., cross street, etc.):

38454 Robinson Reef Drive, Gualala, CA. APN 145-161-27

4. Description of decision being appealed (check one.):

- Approval; no special conditions
- Approval with special conditions:
- Denial

RECEIVED

MAY 20 2009

CALIFORNIA
 COASTAL COMMISSION

EXHIBIT NO. 12

APPEAL NO.

A-1-MEN-09-023

WERNETTE

APPEALS (1 of 16)

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-09-023

DATE FILED: 5/20/09

DISTRICT: North Coast

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

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

- Planning Director/Zoning Administrator
- City Council/Board of Supervisors
- Planning Commission
- Other

6. Date of local government's decision: April 23, 2009

7. Local government's file number (if any): CDP # 51-2008

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:

George Wernette and Jeri Wernette, applicants; Frank Wernette, Agent

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) Judith Tunlund, Duane Hines verbally. Letters from Duane Hines, Richard and Judith Turnlund, Gualala Municipal Advisory Council.

(2)

(3)

(4)

2 of 16

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

SECTION IV. Reasons Supporting This Appeal

PLEASE 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.
- 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.)
- This 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.

We own the property at 38450 Robinson Reef Drive in Gualala, directly adjacent to the east property line of the proposed building location. We are concerned about protecting the cliff and the endangered wild flowers. The application proposes building a house too large for the existing buildable site, raises concerns over its effect on the stability of a sensitive cliff, raises concerns about fire protection, and is not in compliance with the programs in place for preservation of rare plant life.

This is the Wernette's third application for a permit to build a house which is unsuitable for the lot. Previous applications, CDP 57-98 and CDP 96-02 were denied by the Mendocino Board of Supervisors and Mendocino Coastal Permit Administrator, respectively. The proposed structure does not adhere to regulations; therefore applicants sought waivers to some critical restrictions in order to build the large home that they want. Why have restrictions and regulations if waivers are granted so a property owner can build a nonconforming house?

Erosion and sloughing along the northern cliff edge is a continuous process. A lot shown in the Plat Map of the subdivision and directly to the north of the subject property is gone now, as is the northern end of the Wernette lot. More slippage has been discovered at the north end recently and another piece of land appears ready to fall (see attached photos). The building site in the new proposal is 30' closer to the eroding area than the site in the previous applications.

The cliff rises on a nearly vertical alignment from the tidal area to about 100 feet above sea level. There is little that can be done to counteract continuous wave erosion at the cliff base and runoff erosion on the cliff face. Additional weight and ground disturbance near the cliff increases risk of slides and the magnitude of slippage. We have first-hand experience with slippage. In the 1980s we owned a bluff top home in Pacifica, CA when 30' of our lot slid into the ocean. The home later went over the cliff due to erosion.

ESHA set back at the North end of the property does not comply with regulations. Local Coastal Programs (LCP) require a 100' setback, or not less than 50' in special circumstances. The proposed building site leaves only a 20' buffer. The number of plants in that area has doubled from earlier reports, demonstrating that this location is clearly a viable location for the coastal morning glory and an ESHA. The mitigation proposed will not ensure the plants are protected and transplanting these wild flowers is extremely unlikely to succeed.

The building site is about 150 feet from a public street and can only be accessed by a 14'

3 of 16

easement through a neighboring driveway with a steep slope. Applicants have obtained waivers of seven sections of the Uniform Fire Code and State Fire Code. Those provisions are in place to prevent fires from spreading. The fire department is voluntary, thus cannot respond quickly to fires. As evidence, the Old Milano Hotel, within ¼ mile and within sight of the proposed building (under this volunteer department's jurisdiction) burned to the ground a few years ago. A fire to the west of our property would doom our home and others because strong prevailing winds are from the west.

An early report from Jim Glomb, consulting geological engineer retained by Wernettes, stressed that surface water runoff should be diverted from the building site. The proposed runoff control routes the surface drainage under the building. This seems unsound given the bluff top location of the property.

Expensive and extensive construction techniques and supervision necessitate hiring professional civil and geologic engineers to oversee the construction. The construction requires close monitoring. There is no legal mechanism for enforcing these costly requirements. Mendocino County lacks adequate staff and resources to assure requirements are met every step of the way.

In EIR procedures, evaluations by independent experts are used. The experts involved in developing this plan are all hired by the applicants. Independent evaluations should be required to evaluate the feasibility and viability of this plan.

The draft of Deed Restrictions proposed by applicants (section I) does not protect the buffer area at the north end of the property or adjacent property owners. A number of sophisticated and untested elements are included in the plan. In the event that the proposed drainage system, retaining wall, pile driving or other aspects of the construction create unforeseen problems, there is no protection to adjacent property owners.

Given the limitations of the building site, a large house is not appropriate. A small building that fits in the buildable space is the only feasible use of the parcel.

4916

APPEAL FROM COASTAL PERMIT DECISION OF LOCAL GOVERNMENT (Page 4)

SECTION V. Certification

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

Signature on File _____ Signature on File _____
Signature of Appellant(s) or Authorized Agent _____
Date: 5/17/09

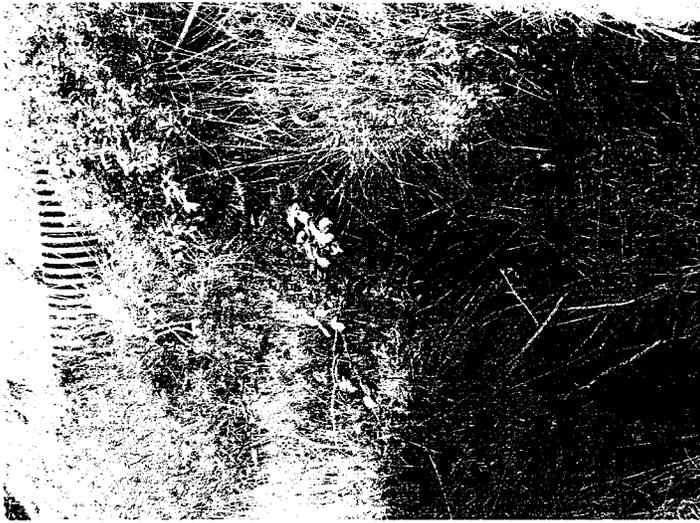
Note: If signed by agent, appellant(s) must also sign below.

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: _____

5916



P4230001 Gualala land slippage.JPG
04/23/2008



P4230009 Result of slippage under tree roots.JPG
04/23/2008

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P4230011 Area of slide.JPG
04/23/2008



P4230011 Area of slide.JPG
04/23/2008

Cliffside erosion 38454 Rob Reef

CALIFORNIA COASTAL COMMISSION

NORTH COAST DISTRICT OFFICE
710 E STREET, SUITE 200
EUREKA, CA 95501
VOICE (707) 445-7833 FAX (707) 445-7877



APPEAL FROM COASTAL PERMIT DECISION OF LOCAL GOVERNMENT

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

SECTION I. Appellant(s)

Name: Dunne Hives Richard Yuenlong
Mailing Address: 415 Coloma St
City: Sausalito Ca Zip Code: 94965 Phone: 415-298-3565

SECTION II. Decision Being Appealed

- 1. Name of local/port government:
Mendocino County
- 2. Brief description of development being appealed:
CDP #51-2008 Mendocino County zoning Administrator decision of 4/23/09
- 3. Development's location (street address, assessor's parcel no., cross street, etc.):
38454 Robinson Red Drive
GUAYAMA, Ca (APN 145-161-27)
- 4. Description of decision being appealed (check one.):
 - Approval; no special conditions
 - Approval with special conditions: 4/23/2009
 - Denial

RECEIVED

MAY 22 2009

CALIFORNIA COASTAL COMMISSION

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:	<u>A-1-MEN-09-023</u>
DATE FILED:	<u>5/19/09</u>
DISTRICT:	<u>North Coast</u>

Faxes 5/19/09

70916

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

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

- Planning Director/Zoning Administrator
- City Council/Board of Supervisors
- Planning Commission
- Other

6. Date of local government's decision: 4/23/2009

7. Local government's file number (if any): CDP #51-2008

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:

Frank Wauvette
3041 Sunrises Blvd.
Rancho Cordova, Ca 95740

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) See attached list.

(2)

(3)

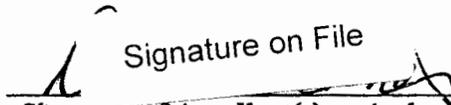
(4)

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APPEAL FROM COASTAL PERMIT DECISION OF LOCAL GOVERNMENT (Page 4)

SECTION V. Certification

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

 Signature on File

Signature of Appellant(s) or Authorized Agent

Date: _____

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: _____

9/4/16

Duane M. Hines
415 Coloma Street
Sausalito, California 94965

May 19, 2009

California Coastal Commissioner
710 E Street, Suite 200
P.O. Box 4908
Eureka, CA 95501-1885

ATTN: Coastal Permit Administrator

RE: CDP #51-2008

We wish to appeal the decision of the Mendocino County Zoning Administrator regarding CDP #51-2008 on the following basis:

We believe that this project attempts to place a structure on a very delicate (geologically and environmentally) parcel. The area has been subject to many large land slides over the years. The parcels to the north and south have lost the entire old railway right of way, and there are substantial signs of others expected in the near future. We believe that an independent geotechnical review should be made which would include core samples and other evaluations regarding stability of saturated soil.

Regarding the 50' Environmentally Sensitive Habitat area, we believe that the existence of sensitive species is a fact and therefore qualifies as an ESHA. Speculation that they are in the wrong area to proliferate, and that they may not survive, does not change the fact that the plants are present, and that they are the basis to declare an ESHA area.

To allow encroachment of 30' into such an area is against the law.

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California Coastal Commissioner
May 19, 2009
Page 3

It should be noted that there have never been core samples taken below 7' deep in order to measure soil conditions.

Mr. Glomb's letter of August 13, 2002 contains similar recommendations.

On November 6, 2008, the GMAC recommended:

Drainage:

The Council believes the drainage plan needs to be fully reviewed and include a comprehensive study of the water flow and debris on the pervious driveway and parking area as well as the grid of perforated pipe underneath the house over multiple storm events (and throughout the rainy season) to insure that the proposed system will be able to process the runoff load during similar periods.

The expert comments above leave serious doubt about the drainage system operation and effect on the stability of the soil below the foundation when saturated. Over time the accumulated groundwater would encourage an avalanche effect as water travels to the sloped rock subsurface encouraging slippage.

There is a question as to where the water flow through the pervious driveway goes. Is there a grid system proposed in order that the flow can reach the under house grid? It appears that the pervious concrete is directly on the soil and that the underlying soil will not absorb the water at the rate it comes through the pervious concrete.

We believe that these concerns should be resolved through a complete design that would preclude a potential major failure of the hillside as a result of water saturation.

It is interesting that the findings on page seven of Mr. Wernette's letter find that the plants in the southern area of the parcel are ESHAs but the ones to the north are not!

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California Coastal Commissioner

May 19, 2009

Page 4

ESHA

It is our contention that the existence of endangered plants is the basis to declare the area an ESHA. Arguments that the plants are not important, or that they are growing in the area, does not change that the plants exist there and have been there for years. That alone is the basis to declare a 100' and 50' buffer area. It is pure speculation that plants are atypical in the area and that their survival is unlikely. The plants exist, and therefore an ESHA exists.

The proposed structure encroaches 30' into the 50' buffer. It is unrealistic to think that construction activity would take place in the remaining 20' regardless of declared mitigation measures.

The argument that there is no other feasible location on the parcel is not valid because even after the revised setback measurement (40'), the area (attached) representing the last proposal is available. The area shown on Fig. 5 Construction Zone would measure 40' x 38'. Extending the erosion setback by 25 feet should not reduce the previously available area by 50%.

Construction in that area would preclude the requirement to encroach upon the 50' ESHA to the north.

The proposed structure would encroach on the ESHA leaving approximately 1200 sq. ft. of unrestricted ground space unused -- a bonus for the applicant and an invasion of the ESHA.

Conclusion:

There should be considerably more development and description of the details of the drainage system and an evaluation of the design by an independent soils engineer to determine the effect upon the bluff stability.

There is no justification to move the house footprint to a place on the parcel that violates the 50' ESHA law when there is another feasible location to build elsewhere on the parcel. There is a 38' x 40' area free of

California Coastal Commissioner

May 19, 2009

Page 5

restraints which is sufficient to build a small residence. That is all the parcel will allow after all setbacks, etc. are considered.

There is enough area to build, therefore no taking is required.

An applicant's desire for a larger house is not justification to encroach on an ESHA, particularly when there are other alternatives.

We believe the Coastal Commission should decide in favor of the environmental laws rather than accommodating a larger house for an individual applicant.

Thank you for your consideration of this matter.



Duane Hines
415-298-3565

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SUBMIT ONE COPY ONLY

MAILING LIST

List all property owners within 300 feet, and occupants within 100 feet along with the corresponding Assessor's Parcel Number for each owner/occupant.

AP# 000-000-00 LAST NAME, FIRST NAME STREET ADDRESS/P.O. BOX CITY, STATE ZIP	148-182-11-00 ACTIVE TROST MICHAEL K 1316 PINWOOD CT DIXON CA 95820	148-181-09-00 ACTIVE WERNETTE GEORGE J & JERRI 1038 MOUNTAIN AIR CT RENO NV 89511
148-182-04-00 ACTIVE TALAMMI OREG H & MICHELE E PO BOX 13 FAIRFAX CA 94978	148-182-12-00 ACTIVE GREEN VIVIAN MARITA PO BOX 388204 WAIKOLA HI 96738	148-181-10-00 ACTIVE GRUSSO GARY A & TONYA H PO BOX 687 CLOVERDALE CA 95428
148-182-01-00 ACTIVE CLEMENT LIBBLEY AMN 2208 J ST SACRAMENTO CA 95818	148-182-13-00 ACTIVE JARVIS STEPHEN J PO BOX 838 GUALALA CA 95448	148-181-11-00 ACTIVE MARNELL WILLIAM M & THERESA PO BOX 881883 ST LUCIE FL 34908
148-182-02-00 ACTIVE HINBS DUANE W & DARLENE D 427 MARINA BLVD SAN FRANCISCO CA 94123	148-181-02-00 ACTIVE SHINN WARD B PO BOX 1087 GUALALA CA 95448	148-181-12-00 ACTIVE WOLK PETER J 1481 RIM ROCK DR CHICO CA 95928
148-182-03-00 ACTIVE ROSENBERG RUSSELL A & SOPHIA 804 BUTTER ST #614 SAN FRANCISCO CA 94102	148-181-03-00 ACTIVE FISCHER ADELE VINCENT PO BOX 1414 GUALALA CA 95448	148-181-25-00 ACTIVE SHINN SHIRLEY A PO BOX 4867 MISSOULA MT 59801
148-182-07-00 ACTIVE SIMONS BONNIE J PO BOX 848 GUALALA CA 95448	148-181-04-00 ACTIVE BOBBA CLAUDE JOSEPH SR & MATILDA HELEN 1228 LINDBELL DR WALNUT CREEK CA 94595	148-181-30-00 ACTIVE SHINN SHIRLEY A PO BOX 4867 MISSOULA MT 59801
148-182-08-00 ACTIVE FORD JON E & VIKKI ANNE PO BOX 680 GUALALA CA 95448	148-181-05-00 ACTIVE SCHREEDERS WILHELM H A & BARBARA J 840 88A SPRAY LN #111 FOSTER CITY CA 94404	148-181-31-00 ACTIVE BROWN KENNETH S & MARIAN V 434 W 12TH ST CLAREMONT CA 91711
148-182-09-00 ACTIVE FORD JON E & VIKKI ANNE PO BOX 688 GUALALA CA 95448	148-181-06-00 ACTIVE TUANLUND RICHARD W & JUDITH R 2278 GREAT HWY SAN FRANCISCO CA 94118	148-181-34-00 ACTIVE HOPKINS CLYDE M 1730 GREEN ACRES LN BRENTWOOD CA 94813
148-182-10-00 ACTIVE NEALY FRANCIS J & LORETTA I PO BOX 1587 GUALALA CA 95448	148-181-08-00 ACTIVE STEIN WILLIAM D & JANICE M 1200 CALIFORNIA ST #10A SAN FRANCISCO CA 94103	

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RECEIVED BY GMAC: 12/20/2007

orig

Duane M. Hines
415 Coloma Street
Sausalito, California 94965

July 28, 2009

EXHIBIT NO. 13
APPEAL NO. A-1-MEN-09-023 WERNETTE CORRESPONDENCE POST-APPEAL (1 of 38)

California Coastal Commission
710 E Street, Suite 200
P.O. Box 4908
Eureka, CA 95501-1885

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JUL 29 2009

CALIFORNIA
COASTAL COMMISSION

ATTN: Coastal Permit Administrator

RE: CDP #51-2008 (Wernette)

Please accept this addendum to our appeal regarding the above-referenced CDP.

It has come to our attention that there has been a significant increase of the protected Morning Glory species on the site, both in the existing northerly ESHA, and on the adjoining property to the north (Hines) there are numerous plants (15) on the Hines parcel, some of which are within 20' of the property line dividing the Wernette parcel. A 50' ESHA would extend from the Hines parcel over the Wernette parcel. This establishes a new ESHA not previously shown in documentation.

There are also two new plants located in the existing northern ESHA, as described in Fig. 5, Fig. 4, and C-8 of the application presentation by Wernette.

This increase in the number of plants in the ESHA proves that the area supports rare plant growth and that construction in this area is not consistent with the law.

At one time in the application process, Wetland Research Associates found that a wetland existed on the property. Subsequently in a later report that wetland no longer existed. It was observed that species of plants now exist on the site which only grow in a wetland environment.

California Coastal Commission

July 28, 2009

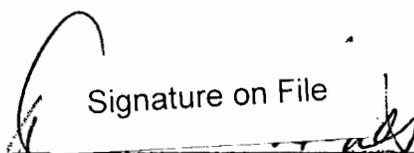
Page 2

In light of these fresh observations, we believe the previously documented northern ESHA area has expanded and supports further growth of endangered species. In addition, new ESHA areas have been developed on adjacent properties whose 50' zones extend onto the Wernette property and should be considered in site planning.

Inasmuch as wetland species exist on the property, we believe that the wetland area should be reevaluated for plant and hydric soils presence.

We have enclosed photographs to assist in your evaluation in the staff reports.

Thank you for your consideration.

 Signature on File

Duane Hines
415-298-3565

7/28/09

Richard and Jeanne Jackson
Post Office Box 1029
Gualala, Ca 95445
Phone 707 884-1760

July 29, 2009

Robert Merrill and Commissioners
California Coastal Commission
710 E Street, Suite 200
Eureka, CA 955501

RECEIVED

Re: Appeal No. A-1-MEN-09-23
Wernette property

JUL 29 2009

CALIFORNIA
COASTAL COMMISSION

Dear Mr. Merrill and Commissioners,

We have recently had a chance to view the site where George and Jerri Wernette propose to build a two-story single-family home. This project is on a parcel that is a remnant of an old railroad right-of-way, which was along the bluff. Many of the adjacent portions of the right-of-way have fallen away due to bluff erosion. This parcel should be reviewed by a soils engineer to determine the viability of building any kind of structure as this parcel looks extremely susceptible to erosion.

There appears to be a severe drainage problem that has not been adequately addressed. The proposal to drain excess water flow directly beneath the house seems inappropriate, if not dangerous. This could also negatively affect the neighboring properties just to the east.

There appears to be a wetland on the property and several endangered plants have been found and marked. The Wernette's plans encroach on the required setback for the endangered plants. The possibility of a wetland needs to be explored. Much of this parcel looks to be an ESHA.

With all the above concerns, we ask that you find substantial issue and take a new look at this project.

Yours truly,



Signature on File

(Richard and Jeanne Jackson)

Signature on File

Francis Drouillard, PE
2021 Shady Lane
Novato, CA 94945
(415)898-6500

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AUG 03 2009

CALIFORNIA
COASTAL COMMISSION

August 13, 2009 Hearing
Thursday Item 5a
FIND SUBSTANTIAL ISSUE

July 29, 2009

California Coastal Commission
710 E Street, Suite 200
Eureka, CA 95501

Re: Appeal No. A-1-MEN-09-23, Wernette, Mendocino County

Dear Mr. Merrill and Commissioners,

I had an opportunity to view the site for the single family residence proposed by George and Jerri Wernette on Saturday, July 25, 2009. In my view, the site is not well suited for the type of development proposed by the applicant. My opinion is based on the extensive presence of Coast Morning Glory (calystegia) on the subject property as well as neighboring properties, the presence of wetlands, and the geologic instability that results from the proposed surface drainage scheme.

The proposed development provides a 20-foot ESHA buffer, which is far less than the required minimum of 50 feet. The proposed development also requires the fill of wetlands, which meet the definition of wetlands used by the Coastal Commission, and possibly the more strict definition used by the US Army Corps of Engineers.

The geologic stability of the parcel is also questionable. Parcels to the north and south on this old RR grade have already been lost to bluff erosion. The proposed drainage scheme – which consists of a 5-foot deep matrix of drain rock and drain pipe to collect, store and disburse runoff – will serve to increase bluff instability. The reasons should be obvious. Even if this dubious drainage scheme works as claimed it results in a substantially higher surcharge on the parcel and more highly saturated subsurface soils, both of which will increase the likelihood of bluff erosion.

With respect to the grounds on which the appeal was filed, the Commission should find substantial issue with the project and initiate a de novo review. That is the only way to review these issues and other project shortcomings in order to make the project consistent with the Local Coastal Program.

Signature on File

Francis Drouillard, PE
California C 042040
Expires 3/31/2010

July 23, 2009

Robert Merrill and Commissioners
California Coastal Commission
710 E St., Suite 200
Eureka, Ca 95501

RECEIVED
AUG 03 2009
CALIFORNIA
COASTAL COMMISSION

RE: Appeal No. A-1-MEN-09-23, Wernette

Dear Mr. Merrill & Commissioners,

I am writing to encourage the Commission to find substantial issue with Appeal No. A-1-MEN-09-23, Wernette. I first became involved with the project in 1998 when the Wernette's first sought a coastal development permit from Mendocino County. I served on the Gualala Municipal Advisory Council from 1997-2006 and was a Mendocino Planning Commissioner from 2006-2008 prior to attending law school where I am currently in my second year.

In 2001, the Wernette project came before the Mendocino County Board of Supervisors on appeal from the Coastal Permit Administrator (CPA). The CPA approved the project with special conditions. Of significance, one of the special conditions related to a potential jurisdictional wetland found on the property. A wetland had been delineated and the CPA approved the project on condition that its destruction be mitigated by placing funds into a wetland restoration project at the Wages Creek Campground, 60 miles north in Ft. Bragg. On appeal, the Board of Supervisors denied the project and it would be a few more years before the Wernette's would again request a permit from the County.

When the Wernette project returned for permitting, the prior once delineated wetland had vanished. A subsequent botanical and wetland report by Wetlands Resource Institute, the firm that initially delineated the wetland on the property, found the wetland no longer existed. I have never been able to understand how a bluff wetland would simply no longer exist.

Again, I encourage you to find substantial issue with A-1-MEN-09-23 and review the project de novo. At a minimum, I hope the County has provided you with the historical wetland reports related to the project for your review. Given the project's history, I believe the project should be independently analyzed for potential wetlands as well as an adequate delineation of the Environmentally Sensitive Habitat Area (ESHA).

Signature on File

Elizabeth Britt Bailey

Friends of Schooner Gulch

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

Executive Committee:
Peter Y. Dobbins
Peter Reimuller

RECEIVED

AUG 03 2009

CALIFORNIA
COASTAL COMMISSION

July 31, 2009

Mr. Bob Merrill and Commissioners
California Coastal Commission
710 E Street, Suite 200
Eureka, CA 95501

Re: Appeal No. A-1-MEN-09-23 Wernette

Dear Commissioners:

At our most recent regular meeting, Friends of Schooner Gulch agreed to contact you regarding the Wernette appeal.

We fail to see how the drainage solution (under the house) will solve the problem of erosion. In fact, the supersaturation of the soils in the area, by concentrating them under the house, will likely exacerbate the problem.

As such, the precedent for future drainage and erosion of this wetland is not acceptable. In effect, the project engineer recommends building a porous rock-lined swimming pool under the structure to concentrate the problem just where it is not wanted. The geological study needs to be re-calculated with the supersaturated soils thrown into the mix.

Clearly, this remnant parcel is not buildable, and should remain forever a remnant parcel. Just because there is a tongue of land there does not mean it has to or should be built on.

Please approve the appeal and deny the permit.

Sincerely, 

Signature on File 

Peter Reimuller
Corresponding Secretary

From: foglark@mcn.org
 Subject: Wernette letter for Hines
 Date: Thu, July 30, 2009 11:21 am
 To: bmerrill@coastal.ca.gov
 Cc: mkraemer@coastal.ca.gov, pdouglas@coastal.ca.gov

Julie A. Verran
 Botanical Consulting and Coastal Permit Assistance
 707 884-3740
 P.O. Box 382, Gualala, CA 95445
 Office, 35503 South Highway 1, East Tower, Anchor Bay

July 28, 2009

Robert Merrill, District Manager
 California Coastal Commission, North Coast
 710 E. Street, Suite 200
 P. O. Box 4908
 Eureka, CA 95501-1885

RECEIVED

AUG 03 2009

CALIFORNIA
 COASTAL COMMISSION

Re: Mendocino County CDP #51-2008, Wernette

Dear Mr. Merrill,

Please ask the Coastal Commission to find Substantial Issue in the appeals of this project, and defer the De Novo hearing for further information. A review by a neutral botanist, such as Melissa Kraemer of your staff, would be appropriate. Please include me in any such site visits.

At the request of Mr. and Mrs. Hines, appellants, I reviewed the botanical aspects of the Wernette proposal. We viewed the project site from their yard and deck on July 26, 2009, and I checked it again today, using a 60 power spotting scope. In light of my research on the List 1B (rare in California and not found elsewhere) coastal bluff morning glory, *Calystegia purpurata* ssp. *saxicola*, I believe the plant is more prevalent on the subject lot than the project botanical reports indicate. It persists and blooms in the contiguous Hines yard even where it has been mowed for many years, as well as in the scrub between their house and the Wernette property. It was visible in bloom in at least 4 locations within 50 feet of the current Wernette building envelope, and its leafy vines were visible near the red flags and elsewhere.

WRA (February 23, 2009) state they eliminated many of the *Calystegia* plants they found from consideration as the subspecies *saxicola* by deeming them hybrids with the more widespread ssp. *purpurata*. All specimens found on a coastal bluff can be considered ssp. *saxicola* (personal communication, Barbara Ertter quoting Richard Brummitt.) In Brummitt's new Jepson Manual treatment of the genus *Calystegia*, which he originally separated from the genus *Convolvulus* in the 1960s, he solves the subspecies identification conundrum elegantly by putting reniform (kidney-shaped) leaves in the Genus description. That means they can be found in many taxa within the genus and are not diagnostic. Previously, reniform leaves were thought to identify ssp. *saxicola*.

My research, still in progress, seeks where, and with which native plants,

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coastal bluff morning glory occurs in Mendocino County. When I consulted her about this research, Coastal Commission botanist Melissa Kraemer asked me to find a way to tell the subspecies apart. I presented my hypothesis as poster at a scholarly botanical conference in January, 2009; where I discussed it with Ms. Kraemer, and gave her a small copy.

Basically, *ssp. purpurata* is much more robust than *ssp. saxicola*, has a different growth habit, different coloring, and grows near permanent streams. Botanists who have reviewed my work include Jon Thompson and Michael Bower.

Using the criterion that Ms. Kraemer used in the Coastal Commission appeal of the Gualala Elementary School in 2008 (A-1-MEN-07-044), that a special-status plant must be functioning as part of its plant community to warrant the full 100-foot ESHA buffer required by the Mendocino County Local Coastal Plan, it is clear that the Coastal Bluff Morning Glory on the Wernette lot does warrant a 100-foot buffer. It is functioning as part of the plant communities it grows in elsewhere nearby, which are identified on the Wernette lot by WRA as coastal scrub, coastal bluff scrub, coastal terrace prairie.

The red-flagged morning glory occurrence is actually typical, and is not evidence that the plant is fading away. The WRA caption on Photo 2 perfectly describes typical *ssp. saxicola*: "Coastal bluff morning glory climbing up grasses and the steep rocky slope beneath trees..." It is also re-colonizing a historical railroad grade that traverses the Wernette lot. Although as WRA states, competition from some other plants suppresses the coastal bluff morning glory, in the field it does persist and will come back if weeds are removed. The Wernette property is much less weed-infested than most local un-built lots, including the ESHA portion of the Gualala Elementary School site.

In another Coastal Commission appeal, Moore (A-1-MEN-07-021) 2008, located within sight to the northwest of the Wernette lot, coastal bluff morning glory was a major issue. The lot had pre-Commission structures. The botanist for the Moore project wrote that the plant is extraordinarily persistent, and therefore a 50-foot buffer was adequate; The Commission did set that condition.

Both the Gualala School appeal and the Moore appeal, where the buffer was set at 50 feet, were brought by Coastal Commissioners. Commissioner appeals are the gold standard, with extra staff care. It would be inconsistent to reduce an ESHA buffer to less than 50 feet in this project.

Another species of concern is being ignored in this proposal. Plant lists submitted with the Wernette proposals consistently included *Ceanothus gloriosus ssp. gloriosus*, Point Reyes *Ceanothus*, a List 4 plant distinguished from other coastal *Ceanothus* by having purple flowers. Yet, it is not included on the project plant maps. In fact, mature, spreading plants are growing near the red-flagged morning glories. Together with other native bluff plants, they show that there is a functioning plant community growing there, that is, ESHA. Coastal scrub, coastal bluff scrub and coastal terrace prairie, identified by WRA, are all listed plant communities of special concern.

The whole Wernette parcel may be ESHA. Analogous to the Coastal Commission practice regarding Pygmy Forest ESHA, if a whole parcel is ESHA, a house can still be built with conditions. But there is another possibility which as a volunteer, I discussed with Frank Wernette before the local county hearing at the Gualala Municipal Advisory Council, and presented at that

hearing. Therefore, I can speak if needed at the Substantial Issue hearing, having participated in the county process.

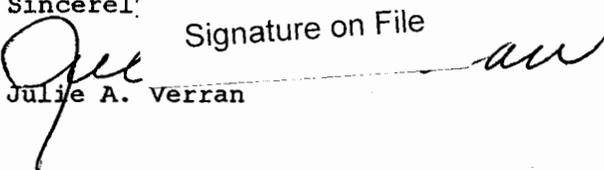
This is the alternative: The Wernettes own a house on a (barely) contiguous street-level lot inland from the subject property. They could build a house on that lot and keep the subject lot as a wild garden with paths and gazebos. The existing house is on posts and appears to be pre-Commission. A new house built on the same footprint with current drilled pier technology would have a view preserved from future building, and the advantages of being on the street.

The lot they now propose to build on may be too wet, as indicated by abundant scouring rush (*Equisetum* sp.) along the drive and in the proposed house area. This is not surprising. Across the street from the entrance to the Hines driveway is a lot containing a perched cattail bog. That is the next thing drier than a pond. The Wernette's current proposal calls for a house directly downhill from this longstanding bog, which may be fed by a spring. More consideration of hydrology is needed, since an earlier Wernette property biological report indicated a wetland.

An important historic feature, the old Gualala Mill Railroad grade, traverses the length of the Wernette parcel. Its inland edge forms the boundary with the upslope subdivision lots. During the time the Wernettes have owned the lot, created by certificate of compliance ca. 1989, the railroad grade has substantially re-vegetated. Water coming down from upslope could have made this possible.

I can send you photographs and other material on the coastal bluff morning glory if you request. You may make an appointment for me to show you its mode of living.

Sincerely:

 Signature on File
Julie A. Verran



A politicized *Calystegia* in Mendocino County: two subspecies compared

Julie A. Verran

Introduction

Coastal Bluff Morning Glory, *Calystegia purpurata* ssp. *saxicola*, is found from San Francisco Bay to the central Mendocino coast. It is listed TH (1) in California, not found elsewhere.

This poster helps tell ssp. *saxicola* from the more widespread *C. p.* ssp. *purpurata*.

After 2006, ssp. *saxicola* was included in Mendocino County permit surveys and cited as grounds for Coastal Commission appeals. Controversy centers on the two subspecies.

Richard K. Brummitt collected on a Mendocino County site owned by this writer in 2003, and later confirmed that all *Calystegia* found was ssp. *saxicola*. He later confirmed ssp. *saxicola* collected from the same site by a botanical consultant.

Method

The ssp. *saxicola* on the writer's site was the identification standard.

Using the CNDDB form as a protocol, the writer checked road rights-of-way, public access, and parks, and small private properties for ssp. *saxicola*, from the Gualala River to the Navarro Bluffs, using an AWD vehicle, a small digital camera, and hand-held GPS unit.

The ssp. *purpurata* was photographed in Mendocino and Santa Barbara counties.

Results

Both subspecies twine into woody vegetation; both may have varying leaf shapes on the same plant.

The ssp. *purpurata* is larger; its stems twine mutually and climb another plant's stem. Its leaves generally face the same direction. It was found only in riparian woodland of major streams.

The ssp. *saxicola* stems race allowing leaves to face varying directions. It lives in Coastal Bluff Scrub, Coastal Scrub, Coastal Prairie, and Northern Halfpint Pine Forest; all are plant communities of concern.

Conservation Goals

Find conservation methods and mitigations which are fair to plants as well as people.

Include commercial botanical surveys in determining plant ranges and abundance.

Protect local plants from regulation for purposes other than preservation.

Promote plant communities to reduce burden on individual plants.

Strategies

Promote standard conservation measures as part of the listing process.

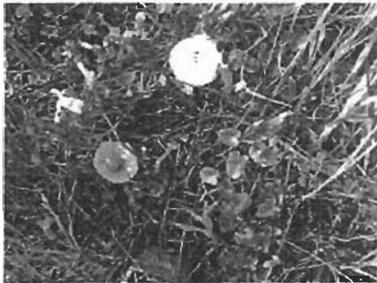
Convey commercial botanical surveys to a central accessible repository as part of the permit process.

Create a curriculum on native plants for use in schools.

Encourage landowners to use native plants in landscaping on-site in their landscaping.

Acknowledgements

Many thanks for advice and site visits to: Evelyn Melick, Richard K. Brummitt, Jim W. Hoenes, Barbara Franks, Greg Golok, Peter Ray, Michael Bowe.



Calystegia purpurata ssp. *saxicola* blooms in grass near a small stream.



Calystegia purpurata ssp. *purpurata* blooms in the riparian zone of the Garcia River. Note the straight stem behind flower.



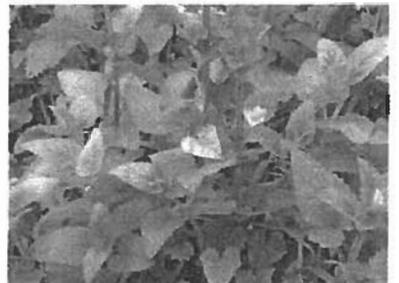
Calystegia purpurata ssp. *saxicola* climbs in poison oak.



Calystegia purpurata ssp. *purpurata* growth habit; note straight stems and neatly ranged leaves.



Calystegia purpurata ssp. *saxicola* twines on grass near a small stream.



Calystegia purpurata ssp. *purpurata* twines on nettles near the Garcia River.

Richard and Jeanne Jackson
Post Office Box 1029
Gualala, Ca 95445
Phone 707 884-1760

July 29, 2009

Robert Merrill and Commissioners
California Coastal Commission
710 E Street, Suite 200
Eureka, CA 955501

RECEIVED

AUG 05 2009

CALIFORNIA
COASTAL COMMISSION

Re: Appeal No. A-1-MEN-09-23
Wernette property

Dear Mr. Merrill and Commissioners,

We have recently had a chance to view the site where George and Jerri Wernette propose to build a two-story single-family home. This project is on a parcel that is a remnant of an old railroad right-of-way, which was along the bluff. Many of the adjacent portions of the right-of-way have fallen away due to bluff erosion. This parcel should be reviewed by a soils engineer to determine the viability of building any kind of structure as this parcel looks extremely susceptible to erosion.

There appears to be a severe drainage problem that has not been adequately addressed. The proposal to drain excess water flow directly beneath the house seems inappropriate, if not dangerous. This could also negatively affect the neighboring properties just to the east.

There appears to be a wetland on the property and several endangered plants have been found and marked. The Wernette's plans encroach on the required setback for the endangered plants. The possibility of a wetland needs to be explored. Much of this parcel looks to be an ESHA.

With all the above concerns, we ask that you find substantial issue and take a new look at this project.

Signature on File

Signature on File

Richard and Jeanne Jackson

FRANK AND LORETTA HEALY

P.O. Box 1387
Gualala, CA 95445-1387
August 12, 2009

RECEIVED

AUG 17 2009

CALIFORNIA
COASTAL COMMISSION

Robert Merrill
California Coastal Commission, North Coast
710 E Street, Suite 200
P.O. Box 4908
Eureka, CA 95501-1885

Dear Mr. Merrill:

We are writing concerning the Mendocino County CDP # 51-2008, Wernette project. We have lived across the street from the proposed site for nine years and spent two years before that building a home on the lot we have owned since 1995.

Neither my wife nor I are engineers, but we have observed one issue that concerns us about this proposal. Before building it became apparent that water runoff was an issue. Our lot had a seasonal spring that ran every winter. The lot next door was often soggy and still has cattails growing in it even though there has been below average rainfall for several years now. Lastly, while sinking piers in the ground, we noticed that the water table was high and would seep into the hole less than three feet below the surface.

It is our understanding that all the water from the street and uphill runoff drains through a ditch in front of our property and then across the proposed building site. We are concerned that without adequate mitigation, the bluff will erode and thus affect nearby structures or even the road as it has just above town on Highway 1. There are both groundwater and rain runoff considerations that could negatively affect a cliff that is not that stable in the first place.

Sincerely,

Signature on File

Frank Healy

Signature on File

Loretta Healy

Robert Merrill
District Manager
California Coastal Commission
710 E. St., Suite 200
P.O. Box 4908
Eureka, CA 95501-1885

RECEIVED
AUG 31 2009
CALIFORNIA
COASTAL COMMISSION

Re: Mendocino County CDP #51 - 2008, Wernetta

Dear Mr. Merrill,

My wife and I felt that our experience with the above listed property may be of benefit to you and the Coastal Commission.

1. In 1996, we considered buying the property in question from "Snap" Binker.
2. We obtained the services of a civil engineer to review the property and provide us his opinion.
 - on the day of the lot inspection it was raining
 - water from the upslop and surrounding area poured into the lot
 - the easement road into the property was like a water canal
 - a culvert on the north end of the lot was severely coroded and spill over water contributed towards eroding effects of the north end of the lot
3. Seeing the amount of water that accumulated on the lot during the rain, caused further concern that the west ocean side would also be of erosion concern. Obviously, this would contribute to a reduction in the size of the lot due to sloughing of land into the ocean.
4. Steepness of the easement drive was also concerning. I drove my truck partially down the easement to the lot and due to wetness, could not gain enough traction to drive out. This required my calling AAA to be rescued.
5. Upon the engineer's recommendation and our experience of the area during rain conditions, we felt it unwise to further investigate purchase of the lot. We have never regretted our decision.
6. The other factor that dissuaded us from considering pruchase of the lot was that a short time previous to 1996 there were north and south adjacent land masses to the lot that had sloughed into the ocean. The possibility of the lot undergoing a similar fate provoked us to discontinue any thoughts of buying the property.

Sincerely,

Signature on File

Signature on File

Jon and Vikki Anne Ford
38457 Robinson Reef Dr.
Gualala, CA 95445

Duane M. Hines
415 Coloma Street
Sausalito, California 94965

February 2, 2010

Robert Merrill
California Coastal Commission, North Coast
710 E Street, Suite 200
P.O. Box 4908
Eureka, CA 95501-1885

RE: Wernette
CDP #51-2008

RECEIVED

FEB 08 2010

CALIFORNIA
COASTAL COMMISSION

Dear Mr. Merrill:

As a follow-up to our recent conversation, I would like to offer some historical information regarding the Wernette project.

On the question of a potential "taking," Attachment #1 shows the area which is not affected by ESHA constraints (proposed building site). This area is approximately 60' x 50' of gross building area. The subsequent site plan under appeal shows the proposed building site encroached 33' into the northernmost ESHA area. The net effect of the relocation takes ESHA area and leaves available a section unencumbered for open space to be used by the applicant.

How can it be justified to encroach into an ESHA when it is not necessary due to other available (legal) space?

A taking should not be needed if there is legal space available.

Erosion

It should be noted that the bluff measurements for predicted erosion are several years old and caving has been observed in at least two areas of the bluff. This changes the actual remaining setbacks and should be updated to reflect today's actual bluff.

Robert Merrill
February 2, 2010
Page 2

Drainage Considerations

I have attached copies of the Recommendation section of Mr. McGlomb's Geological Reports (1991, 1992, 1999, 2000), which all conclude that drainage water should be directed away from the house footprint.

Also attached is a Mendocino County Staff Report (Jan. 24, 2008) which recommends that surface water should be directed away from the site except that which flows into the wetlands or the south side of the residence.

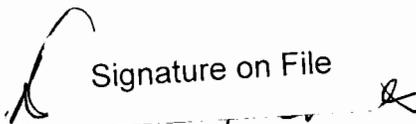
The proposed pervious surface and associated leech line below the house are in direct opposition to those recommendations made in the previous engineering reports. The new approach encourages saturation of the underlying soil of the house and its foundation.

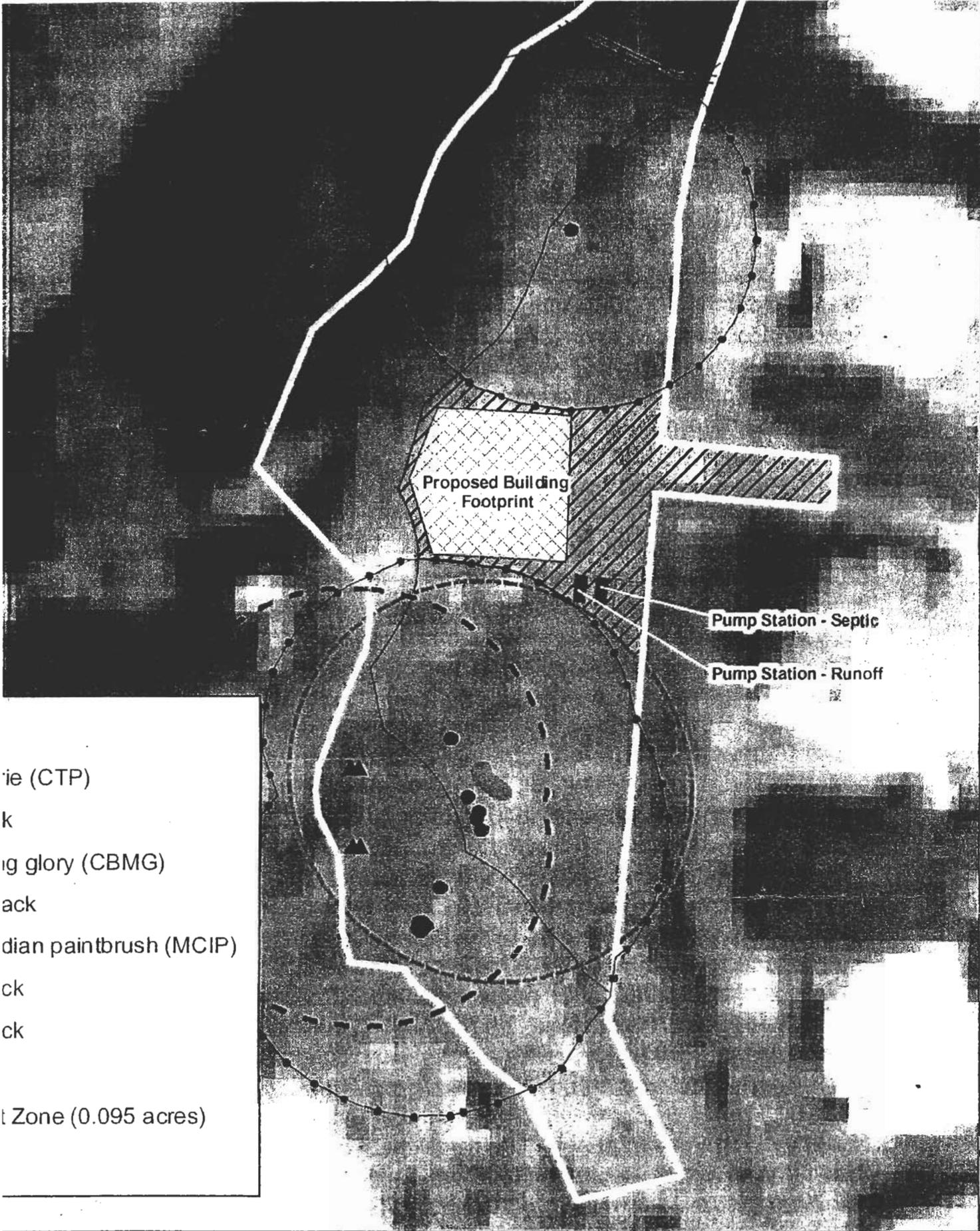
This information, along with the points made in my letter of July 27, 2009, all point to the fact that there are substantial questions regarding the project, and that data should be updated (engineering and botanical).

We also strongly believe that this project data has become obsolete and that a complete independent assessment should be conducted. There have been contradictions in findings by both the engineering and environmental consulting, all employed by the applicant.

Thank you for your consideration of the comments above.

Sincerely,


Signature on File
Duane M. Hines



- ie (CTP)
- k
- ig glory (CBMG)
- ack
- dian paintbrush (MCIP)
- ck
- ck
- t Zone (0.095 acres)



- in the amount of surface drainage directed over the seacliff; the presence of thin (± 10 feet) terrace deposits at the cliff top; a talus protected cliff face at Section 1-1; protection of the bluff from wave action by prominent bedrock sea stacks; and a relatively stable bedrock condition within the sea cliff.
3. The pier foundations that are planned for the residence will act as soldier piles that will have a stabilizing effect on sea cliff stability.
 4. Seismic forces from a nearby maximum credible earthquake in the future are likely to accelerate sea cliff retreat. Therefore, the weathered terrace sands and the weathered, fractured bedrock on the outer portion of the cliff face could fail during such an event. However, we concluded that the potential for earthquake-induced cliff retreat to the tentative building footprint is low.
 5. The wetland area will be maintained and in our opinion will not cause geotechnical impacts on the planned residential construction, particularly due to the planned construction of deep pier foundations that will not be affected by surface soil moisture.

Our recommendations regarding the proposed construction at the property are as follows:

1. Surface drainage systems (including roof drains) should be installed to intercept surface runoff, except that which flows into the wetlands on the south side of the residence. Drains should outlet so as not to cause sea cliff erosion.
2. The proposed residence should be founded on bedrock or properly compacted engineered fill.
3. We recommend that pier foundations embedded well into bedrock be utilized to support the residence.
4. The engineering geologist or geotechnical engineer should be present on site to observe foundation excavations during construction.

Staff is satisfied that the stability of the site and the drainage has been adequately addressed by the Glomb and Paoli studies. However, since on-site drainage is dependent on a pressurized, pumped water system and since the stability of the site is dependent on the proper functioning of the engineered drainage system, staff recommends that the Coastal Permit Administrator require that a back-up generator be installed. This will ensure that the drainage system continues to function should the electricity go out during a storm event. Special Condition Number 2 requires that a back-up pumping system be installed prior to occupancy or the final building inspection, whichever comes first.

Based on the Coastal Commission's practice, the County applies a deed restriction for all projects within 100 feet from the edge of the coastal bluff prohibiting the construction of seawalls in perpetuity with the requirement that the structures be removed from the property if threatened by bluff retreat. The restriction also requires that the landowner be responsible for any clean up associated with portions of the development that might fall onto a beach or into the ocean. It is anticipated that the Coastal Commission will continue to apply this deed restriction for any bluff top development. Therefore, Special Condition Number 3 is recommended to address this issue.

In addition to the geologic stability of the site, fire was raised as a potential hazard issue.

The South Coast Fire Protection District is the local fire district responsible for structural fire protection in Gualala. Fire Chief Leighton Nelsen has reviewed the project and commented that: "...Our trucks would have no problem fighting a fire at this location; we have additional water and we carry enough hose to reach the closest fire hydrant to this location."

Section 103.1.3 of the Uniform Fire Code addresses projects that have "practical difficulties". It states:

The chief [of the responsible fire district] is authorized to modify any of the provisions of this code upon application in writing by the owner, a lessee or a duly authorized representative where there are practical difficulties in the way of carrying out the provisions of the code, provided that the spirit of the code shall be complied with, public safety secured and substantial justice is done. The particulars of such modification

CONCLUSIONS

Our conclusions regarding the proposed construction at the property are as follows:

1. From an engineering geologic viewpoint it is considered feasible to construct a single-family residence at the site. The tentative building footprint is shown on Plate 1, at section 1-1'. Based on our site reconnaissances, subsurface explorations, literature review and analyses, we conclude that the seacliff at the subject property is retreating eastward at an average rate of 0.5 foot or less per year. A combined construction setback line, -SB-, from the top of seacliff, -B-, and the top of fill slope, -SL-, based on a 75-year structure life and retreat rates of 0.5 and 0.15 feet per year, respectively, is shown on the Revised Geologic Map, Plate 1. This estimate is considered conservative because the rate of erosion and retreat is expected to slow due to pumping of a portion of the surface drainage into the storm drain at the north boundary of the site. Therefore, it is our professional opinion that the footprint will most likely not be affected by sea cliff retreat over a design life of 75 years.

2. Factors favorable to future sea cliff stability adjacent to the proposed building are: reduction in the amount of surface drainage directed over the seacliff; the presence of thin (± 10 feet) terrace deposits at the cliff top; a talus protected cliff face at Section 1-1'; protection of the bluff from wave action by prominent bedrock sea stacks; and a relatively stable bedrock condition within the sea cliff.

3. The pier foundations that are planned for the residence will act as soldier piles that will have a stabilizing effect on sea cliff stability.

2. Seismic forces from a nearby maximum credible earthquake in the future are likely to accelerate sea cliff retreat. Therefore, the weathered terrace sands and the weathered, fractured bedrock on the outer portion of the cliff face could fail during such an event. However, we conclude that the potential for earthquake-induced cliff retreat to the tentative building footprint is low.

3. The wetland area will be maintained and in our opinion will not cause geotechnical impacts on the planned residential construction, particularly due to the planned construction of deep pier foundations that will not be affected by surface soil moisture.

RECOMMENDATIONS

Our recommendations regarding the proposed construction at the property are as follows:

1. Surface drainage systems (including roof drains) should be installed to intercept surface runoff, except that which flows into the wetlands on the south side of the residence. Drains should outlet so as not to cause sea cliff erosion.
2. The proposed residence should be founded on bedrock or properly compacted engineered fill.
3. We recommend that pier foundations embedded well into bedrock be utilized to support the residence.
4. The engineering geologist or geotechnical engineer should be present on site to observe foundation excavations during construction.

LIMITATIONS

This report has been prepared for the exclusive use of Mr. and Mrs. Wernette and their consultants for the property described in this report. Our services consist of professional opinions and conclusions developed by a certified engineering geologist in accordance with generally accepted engineering geologic principles and practices. We provide no other warranty, either expressed or implied. Our

Jim Glomb

Geotechnical and Environmental Consulting

152 Weeks Way • Sebastopol, CA 95472 • Phone/Fax 707/829-7258

October 5, 2000
Project 434

Mr. and Mrs. Wernette
C/o Ed McKinley
237 Morrow Street
Fort Bragg, CA 95437

RECEIVED

OCT 10 2000

PLANNING & BUILDING SERV
FOR FORT BRAGG, CA

RE: **Geotechnical Review of Seacliff Setback**
Coastal Zone Application CDP 57-98(R)
38454 Robinson Reef Drive
Gualala, California

Dear Mr. and Mrs. Wernette:

On October 2, 2000, I met with Ed McKinley at the subject site to review the seacliff setback conditions and to stake and flag the top of seacliff from which to measure the setback. I also noted the staked building envelope in relation to the top of seacliff. In accordance with Coastal Commission admin section 13577, the top of seacliff is defined as the top of bluff, which has been staked and flagged with white ribbon.

In the area seaward and adjacent to the building envelope, the top of seacliff is 37.5 feet or more from the staked building envelope. In my prior reports and letters I provided an estimated seacliff retreat rate of 37.5 feet over a projected 75 year residence life.

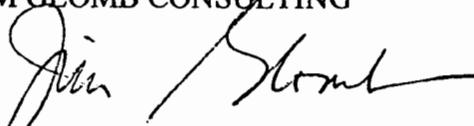
During my recent site visit, I also considered the retreat rate of an old fill slope. The top of the fill slope is referred to in the June 1, 2000 grading and drainage plan by Paoli, as the top of slope and in Coastal Commission guidelines may be referred to as the topmost riser. The fill slope is about 2 to 4 feet high and exists a minimum of 20 feet from the proposed building. The top of fill slope has been staked and flagged with green ribbon. Aerial photos flown in 1987 indicate that the fill slope, which is not a part of the seacliff, has retreated an estimated 0 to 2 feet over the past 13 years. By projecting this rate over 75 years, a total retreat of 12 feet is derived.

Based on the calculations above, seacliff and fill slope retreat over the next 75 years is not expected to encroach on the proposed building envelope and the setbacks are deemed to be appropriate.

It remains my professional opinion that the planned construction will not detrimentally effect the stability of neighboring parcels or the subject parcel. On the contrary, the capture and rerouting of driveway and house footprint drainage is expected to reduce future erosion of the fill slope and top of seacliff, thereby enhancing site stability.

I trust this provides the information you require at this time. If you have questions or wish to discuss this further, please call.

Yours very truly,
JIM GLOMB CONSULTING



Jim Glomb, Engineering Geologist, C.E.G. 1154



section 1-1'. The sea cliff adjacent to the proposed building site has retreated approximately 15 feet during the past 30 years or an average of 0.5 feet/year. Over the next 75 years a retreat of 37.5 feet is projected. This estimate is considered conservative because the rate of erosion and retreat has probably slowed since construction of the storm drain a few years ago. Therefore, it is our professional opinion that the footprint will most likely not be affected by sea cliff retreat over a design life of 75 years.

2. Factors favorable to future sea cliff stability adjacent to the tentative building are: the presence of thin (± 10 feet) terrace deposits at the cliff top, a talus protected cliff face at Section 1-1', protection of the bluff from wave action by prominent bedrock sea stacks, and a relatively stable bedrock condition within the sea cliff.
3. The proposed development is expected to have a beneficial effect on sea cliff stability due to the implementation of additional surface and subsurface drainage systems, recommended in the following section. No grading or wall excavations are planned. If pier foundations are used, they will act as soldier piles that will have a stabilizing effect on sea cliff stability.
4. Seismic forces from a nearby maximum credible earthquake in the future are likely to accelerate sea cliff retreat. Evidence from recent strong earthquakes in California indicates that narrow ridge tops may concentrate earthquake energy causing localized slope failure. This phenomena may also occur at the bluff top at the subject lot. Therefore, the weathered terrace sands and the weathered, fractured bedrock on the outer portion of the cliff face could fail during such an event. However, we conclude that the potential for earthquake-induced cliff retreat to the tentative building footprint is low.

RECOMMENDATIONS

Our recommendations regarding the proposed construction at the property are as follows:

1. Surface and subsurface drainage systems (including roof drains) should be installed to intercept surface runoff at the site and ground water flow along the base of the fill to reduce saturation and erosion of the bluff top soils and rock. Drains should outlet so as not to cause sea cliff erosion.
2. The proposed residence should be founded on bedrock or properly compacted fill.
3. Structures placed adjacent to the railroad cut slope may require slough walls.
4. Once the final building footprint location is determined a foundation investigation should be performed to develop appropriate foundation design parameters and drainage recommendations.

April 9, 1999

Regulations stated in Section 13577 (h) (2). A construction setback line from the seacliff, based on a 75-year structure life and retreat rate of ½ foot per year, is shown on the Revised Geologic Map, Plate 1.

RECOMMENDATIONS

The recommendations given in our prior report remain appropriate. We concur with foundation recommendations given by David Paoli in his report, revised 8/20/98. We further recommend that site surface drainage be routed to the storm drain at the north border of the property. In no case should focused surface runoff flow over the seacliff and drainage should not be allowed to pond on the site. The engineering geologist should be present on site to observe foundation excavations during construction.

LIMITATIONS

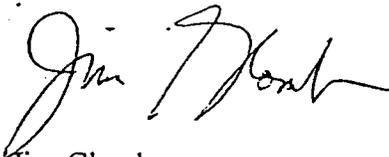
This report has been prepared for the exclusive use of Mr. and Mrs. Wernette and their consultants for the property described in this report. Our services consist of professional opinions and conclusions developed by a certified engineering geologist in accordance with generally accepted engineering geologic principles and practices. We provide no other warranty, either expressed or implied. Our conclusions and recommendations are based upon the information provided us regarding the proposed construction and professional judgment. Verification of our conclusions and recommendations is subject to our review of the project plans and specifications, and our observation of construction.

Site conditions and cultural features described in the text of this report are those existing at the time of our field work and may not necessarily be the same or comparable at other times.

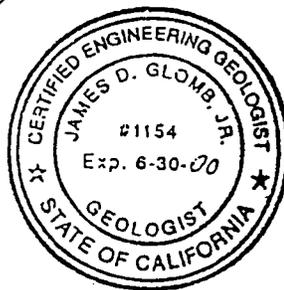
The scope of our services did not include an environmental assessment or an investigation of the presence or absence of hazardous, toxic or corrosive materials in the soil, surface water, groundwater or air, on or below, or around the site, nor did it include an evaluation or investigation of the presence or absence of wetlands.

We trust this provides the information you require at this time. If you have questions or wish to discuss this further, please call.

Yours very truly,
Jim Glomb Consulting



Jim Glomb
Engineering Geologist, C.E.G. 1154



Attachments: References
Revised Geologic Map and Geologic Cross Sections, Plate 1, in pocket
Logs of Test Pits, Plates 2, 3 and 4

July 23, 2010

To: California Coastal Commission
North Coast District Office
P.O. Box 4908
Eureka CA 95502-4908
FAX 445 7877

From: J.A. Verman
FAX } 884-3740
voice }

Re: Mr. + Mrs. Wiker's appeal of
the Wimmer project in Guadalupe

RECEIVED
JUL 23 2010
CALIFORNIA
COASTAL COMMISSION

Julie A. Verran,
 P.O. Box 382, Gualala, CA 95445-0382
 Phone and Fax (707) 884-3740
 Office: East Side Tower, Anchor Bay Village

Mr. and Mrs. D. Hines
 627 Marina Blvd.
 San Francisco, CA 94123

July 15, 2010

RECEIVED

JUL 23 2010

CALIFORNIA
 COASTAL COMMISSION

Dear Mr. and Mrs. Hines,

On July 12-15, at your request, I conducted a focused survey of the un-mowed, down-slope portions of your two residential properties on Robinson Reef Drive in Gualala, Mendocino County, for *Calystegia purpurata* ssp. *saxicola*, Coastal Bluff Morning Glory [Photo P7170237].

The plant communities present are Coastal Bluff Shrub and Coastal Scrub. Both are in very good shape for a ruderal site, with strong specimens of diverse native plants, in spite of the presence of several invasive, non-native plants.

The Coastal Bluff Morning Glory was found occurring abundantly on your property. All the plants observed were the rare subspecies. This plant is listed as 1B, meaning rare in California and not occurring in other states. It is currently in bloom throughout its local range.

Your two properties on Robinson Reef Drive comprise the richest site for this plant that I have seen, while observing it in bloom on scattered sites from Bodega Head to Navarro Bluffs. One significant role of the Coastal Bluff Morning Glory is supporting native bees, which are significant pollinators and at risk [Photo P7150184]. This and subsequent photos will follow by mail.

Using binoculars and a 60-power spotting scope, I observed the Coastal Bluff Morning Glory in bloom on the property below yours which is proposed for a residence, across the old railroad grade from concentrations of the plant on your properties. These may have been one population until the railroad was graded and built ca. 1860. [Photo P7150179]

The revegetation of the railroad grade since 1972 can be seen on the California Coastal Records Project website, www.californiacoastline.org, by entering the 2009 image number, 200904572 on the home page, and clicking on "Time Comparison." The site will show a range of photos for each year's series. The best images for this site are: 2005 image, 200504147; 2002 image, 12090; 1993 image, 199300159008 near bottom of image; 1987 image, 8716025; 1979 image, 7917031; 1972 image, 72100228.

The first botanist to list Coastal Bluff Morning Glory on a Gualala permit survey was Jon Thompson, former Manager of the USDA Forest Service plant nursery at Magalia. He found it growing primarily within the coastal scrub on a property northwest of yours, and he advised local CNPS members to look for it in similar brushy sites.

I am familiar with the plant. It occurs on my property located about a quarter-mile south of yours, which I manage for the morning glory. I presented an original poster on the plant at the

2.

California Native Plant Society Conservation Conference in Sacramento in January, 2009, showing three ways to distinguish the rare subspecies from the common one.

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On your southern property, to facilitate photography, orange surveyor's tape was tied to a taller plant near each appearance of the fragile-stemmed Coastal Bluff Morning Glory. The plant may have multiple stems to an individual. Each flag was placed near two or three stems visible in the upper layer of the brushy vegetation. More stems may be present within the taller portions of the brush. [P7160199]

Eighty tape flags were placed, located in two distinct patches with a stand of taller, dense brush in between them, where the Coastal Bluff Morning Glory may also occur, twining beneath the woody plants. There are an estimated 200 stems of the plant in the un-mowed portion of your southern property, and more in the mowed portion. The position of the main concentration of Coastal Bluff Morning Glory near your deck was delineated as you requested on a copy the applicant's map of the site.

The northwestern property you own is more impacted by invasive weeds and spreading horticultural plants, but it is still a rich site for Coastal Bluff Morning Glory, which occurs in the mowed area and also in a stand of blooming *Kniphofia waria*, Red-hot Poker. Here survey flags were placed marking the appearance of the Coastal Bluff Morning Glory at the edge of the mowed area. To show up next to the *Kniphofia* blooms, six-foot wooden stakes wrapped with blue survey tape mark groups of Coastal Bluff Morning Glory stems within the *Kniphofia* clumps. [Photo P160193]

Survey flags and taped stakes line up with each other, and some also line up with the Marin County firm's white survey flags on the far side of the old RR grade on the ocean front property [Photo P7170205]. There appears to be a significant rare plant ESHA which has persisted on these three properties across time and space. [Photo P7150176]. There is a boundary marker in the *Kniphofia* near the larger concentration of Coastal Bluff Morning Glory on your property. This was used as a basis for an ESHA delineation you requested. If the applicant's ESHA 50-foot

3.

circles were included on this map, they would overlap.

A licensed Wildlife Biologist familiar with local conditions should evaluate all these properties for special-status animals. In the bluff scrub which faces northwest-north grow numerous healthy plants of several native species in the carrot family [Photo P7150184]. Such slopes are classic habitat for the Federal Endangered Species, *Aplodontia nixa nigra*, Point Arena Mountain Beaver, which is anecdotally present in the area, and which historically extended its range to Point Reyes.

The application includes a letter stating that no such determination need be made because the area is outside the known range of the animal. In my opinion, this view is incorrect, since it does not give animals a chance to extend their range, as they well may do in response to climate change, fires, and other factors. Current thinking is that rare species which are holding their own or expanding their range have priority for preservation and mitigation.

Food plants for two endangered butterflies occur near your properties and may be present: *Viola adunca*, Early Blue Violet, is the food plant of the Behrens Silverspot Butterfly. *Lotus formosissimus*, Harlequin Lotus, is the food plant of the Lotus Blue Butterfly. [Photos of those plants blooming elsewhere are available.]

When a two-box load of Ice Plant was removed for photographic purposes from the cinder block wall that marks the property line [Photo P7150178] on the southeast side of the proposed access drive, two native side-band snails, with their shells sealed for the summer, fell out. The genus is probably *Helminthoglypta*, some members of which are listed as rare. A snail expert would be needed to identify them to the required level. In the meantime, avoid treading in the brush or using snail poison. Remove by hand and destroy French snails from newly-purchased potted plants. A provisional snail ESHA is delineated using the cinder block corner as reference point.

The summer portion of a full botanical survey of your two properties may be carried out next week. The other two bloom periods are spring and fall. Ideally, all should be done.

Yours sincerely, [^]

 Signature on File 

Julie A. Verran

Duane M. Hines
415 Coloma Street
Sausalito, CA 94965

July 19, 2010

Robert Merrill
California Coastal Commission
710 E Street, Suite 200
PO Box 4908
Eureka, CA 95501-1885

RECEIVED
JUL 30 2010
CALIFORNIA
COASTAL COMMISSION

Re: Wernette Appeal

Dear Mr. Merrill:

Enclosed, you will find a detailed Botanical study with plant species maps for our properties adjacent to the Wernette parcel.

Through the history of this case all botanical studies have been conducted by WRA consultants under commission by the Wernettes. None of these studies were conducted on the adjacent properties.

We have now completed a Botanical study on our parcels and have discovered 80-90 listed species of the type found on the Wernette reports. The attached botanical map shows numerous locations where the required ESHA circles for the plants located on the Hines' property extend onto the Wernette property and in some cases they overlap others previously ~~descended~~^{identified} by the WRA survey on the Wernette parcel. All plants have been located by stakes.

By this letter, we request that our study be evaluated by the Coastal Commission staff and that your botanical expert consider the habitat without consideration of property lines. Photographs will be provided under separate cover.

We believe that all parcels combined create a substantial ESHA.

Thank you for your consideration.

Signature on File

Duane M. Hines

Hines exhibit.

letter July 19, 2010

The Wernette Project in Gualala, CA

SECTION D: Site Topography

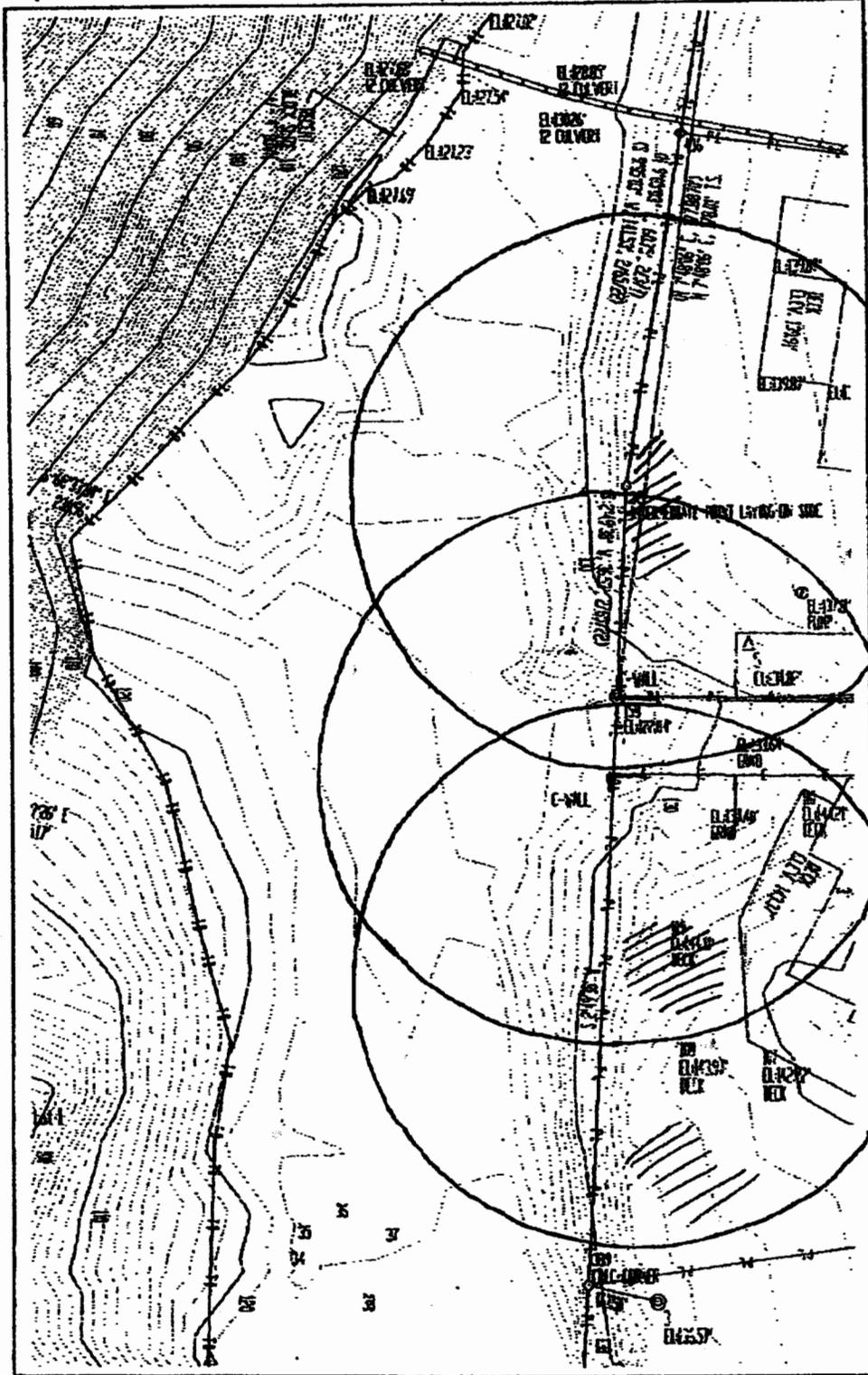
PLANT: *Calystegia purpurata* ssp. *saxicola* (CAPUS); SNAIL: *Helminthoglypta*

Sp. ?

THE WERNETTE PROJECT
GUALALA, CALIFORNIA
Figure D-2 Topographic Map - 2

suggested ESHA delineated by J.A. Verran; submitted by D&D Hines

July, 2010



From: foglark@mcn.org
To: dewey415@aol.com
Subject: 2 revised text
Date: Mon, Jul 19, 2010 12:15 pm

Sorry, first try sent by mistake, this continues revised text. JAV

Dear Mr. and Mrs. Hines,

This is a revision, please use it.

You may also set it up with fonts and type size as you like, and fax me a copy for signature. This is the best I can do with current tech limitations. Please center the letterhead for printing. My favorite font is Verdana for obvious reasons. Please put Latin names back in Italics.

sincerely,

Julie V.

Julie A. Verran, P.O. Box 382, Gualala, CA 95445-0382
Phone and Fax (707) 884-3740
Office: East Side Tower, Anchor Bay Village

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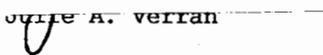
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Signature on File

 Julie A. Verran

Coastal Commission Appeal A-1-MEN-09-023 - Table of Issues- August 19, 2010

The issues presented in California Coastal Commission Appeal A-1-MEN-09-023 have been raised repeatedly for over ten years at the county level by Mr. Duane Hines and Mr. Richard and Dr. Judith Turnlund. The applicant responded to those concerns by:

- Redesigning and reducing the size and height of the home to address aesthetics and neighborhood conformance issues; the project is a now a modest sized, two story home with a first floor footprint of only 1,200 square feet that is appropriate for the constrained conditions of the project parcel.
- Revising the home's location, selecting a foundation design, and using a refined approach for addressing surface and subsurface drainage to reduce erosion of the bluff face, ensure geologic stability of the proposed project, and protect the applicant's neighbors' properties.
- Incorporating a comprehensive conservation strategy to protect and enhance the project parcel's natural resources by setting aside a dedicated conservation area representing 40% of the parcel, incorporating an invasive plant program, and implementing mitigation measures to avoid or offset project impacts on ESHA found on the property.

The following table was prepared to assist Commission staff complete their staff report given staff shortages and mandatory furlough days. It provides a summary of the appeal issues and issues that will likely need to be addressed during a *de novo* hearing, relevant LCP and Mendocino County Zoning Code sections where applicable, and information that the applicant believes supports a conclusion that the project currently conforms with the LCP and Coastal Act public access policies or, in the case of ESHA, findings can be made to ensure consistency with Coastal Act Section 30010.

Appeal Issue	Relevant LCP/Zoning Code Sections	Response
<p>Issue 1- Neighborhood Conformance: The appellants allege that the proposed house is unsuitable for the lot the applicants purchased, that a large house is not appropriate, and that the house proposed is too large for the existing buildable site. They suggest instead that a small building that fits in the buildable space they define is the only feasible use of the parcel.</p>	<p>The project site is located within portions of Gualala subject to the Development Criteria established in Section 20.504.020(C) of the Zoning Code which dictates the development criteria for projects in the Gualala Town Plan area:</p> <p>(1) <i>The scale of new development (building height and bulk) shall be within the scope and character of existing development in the surrounding neighborhood.</i></p> <p>(2) <i>New development shall be sited such that public coastal views are protected.</i></p> <p>(3) <i>The location and scale of a proposed structure will not have an adverse effect on nearby historic structures greater than an alternative design providing the same floor area. Historic structure, as used in this subsection, means any structure where the construction date has been identified, its history has been substantiated, and only minor alterations have been made in character with the original architecture.</i></p> <p>(4) <i>Building materials and exterior colors shall be compatible with those of existing structures.</i></p>	<p>The appellants' contention that the proposed home is too large for the parcel is not supported by the facts. Since the site is not within a designated highly scenic area, the height limit is 35 feet above average finished grade and the proposed 21-foot± height of the residence complies with the height limit. The proposed home does not affect public coastal views and minimizes impacts to the private views of the appellants.</p> <p>Maximum lot coverage for a lot in an SR zone is 50%. The lot is approximately 31,500 sq. ft. in size, however, the applicant recognizes that the parcel includes cliffs and steep slopes unsuitable for construction. If the area with suitable slopes of approximately 23,500 sq. ft. is considered, total coverage is less than 20%, which still complies with lot coverage limits. The living space and garage of the proposed home totals 2,300 sq. ft., which is nearly identical to the average of the 16 existing homes built on the adjacent bluff parcels (2,267 sq. ft.)</p> <p>The small building suggested by the appellants would be an infeasible project of less than 400 sq. ft. of living space. The resulting smaller home would be inconsistent with the Zoning Code because it would not be within the scope and character of existing development in the surrounding neighborhood. The alternative proposed by the appellants would also result in parking deficiencies and no turnaround for emergency vehicles.</p> <p>The proposed project, therefore, is consistent with Section 20.504.020(C) of the Zoning Code and the appeal raises no substantial issue with respect to neighborhood conformance.</p>

<p>Issue 2- Consistency with Geologic Hazard Policies:</p> <p>The appellants are concerned that the structure is proposed for a geologically sensitive parcel. They want to ensure the protection of their property, the cliff, and the railroad embankment.</p> <p>The appellants allege the area is subject to large landslides and that the building site in the new proposal is 30' closer to the eroding area in the north end of the parcel than a previously proposed building site.</p>	<p>Section 20.500.015(A)(2) of the Mendocino County Coastal Zoning Code (MCCZC) requires as follows:</p> <p><i>Geologic Investigation and Report. In areas of known or potential geologic hazards such as shoreline and bluff top lots and areas delineated on the hazard maps, a geologic investigation and report, prior to development approval, shall be required. The report shall be prepared by a licensed engineering geologist or registered civil engineer pursuant to the site investigation requirements in Chapter 20.532.</i></p> <p>Sections 20.500.020(B)(1, 3) of the Mendocino County Coastal Zoning Code require as follows:</p> <p><i>(1) 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 (seventy-five (75) years). New development shall be setback from the edge of bluffs a distance determined from information derived from the required geologic investigation and the setback formula as follows: Setback (meters) = structure life (75 years) x retreat rate (meters/year)</i></p> <p><i>Note: The retreat rate shall be determined from historical observation (aerial photos) and/or from a complete geotechnical investigation.</i></p> <p><i>(3) Construction landward of the setback shall not contribute to erosion of the bluff face or to instability of the bluff.</i></p> <p>Coastal Element policies addressing development on bluff top parcels are as follows:</p> <p>3.4-7 <i>The County shall require that new structures 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) ...</i></p> <p>3.4-8 <i>Property owners should maintain drought tolerant vegetation within the required bluff top setback. The County shall permit grading necessary to establish proper drainage or to install landscaping and minor</i></p>	<p>Geotechnical Analyses- The proposed project was specifically designed to address the geologically related concerns expressed by the appellants. The proposed project was developed in compliance with the LCP and in a manner consistent with Section 1377 (h) (2) and other relevant sections of the Coastal Commission's Administrative Regulations in defining the bluff edge, bluff setbacks, and allowable building area to ensure the project can be safely constructed and any adverse effects on adjacent properties related to implementing the project will be avoided.</p> <p>Extensive geologic evaluations have been conducted at the proposed project parcel over the last 17 years. Jim Glomb, the project's engineering geologist, performed an Engineering Geologic Investigation on June 5, 1992. A Geologic & Soils Investigation was prepared by David Paoli, civil engineer, on August 13, 1997 and revised on August 20, 1998. An Updated Engineering Geologic Investigation report was prepared by Mr. Glomb on April 9, 1999. Mr. Glomb prepared a Final Engineering Geologic Investigation Report on August 13, 2002, outlining faulting and seismicity hazards. Mr. Glomb, using approved methods, defined the bluff edge for the subject parcel. The defined bluff edge was incorporated into the latest topographic map for the proposed project. Supplemental foundation recommendations were prepared by Mr. Glomb and were outlined in his July 15, 2008 letter included in the application. The letter indicated that loose soils and unengineered fill materials overlay stable sandstone bedrock by a depth of two to seven feet at the building site. The letter outlined a detailed recommendation for supporting the structure on steel reinforced piers embedded a minimum of ten feet in the hard, strong bedrock. Special Condition Number 1 in the county's permit requires that the residence be constructed in accordance with the setback, foundation, and drainage recommendations of Mr. Glomb. The reports recommendations described above were included with the applicant's application and considered by Mendocino County in its approval of the proposed project.</p> <p>Mr. Glomb's site-specific analysis defined retreat rates determined from field reconnaissance and an aerial photograph study of the project site. He concluded that retreat rates for the subject parcel were less than 0.5 feet per year for the parcel and, in selected locations, less than 0.15 feet per year. He prepared a detailed written report in 2002 presenting a geologic map showing setback lines of approximately 37 feet and 11 feet respectively. These refined retreat rates are less than the rates the U.S. Geological Survey (USGS) reported in its Open-File Report 2007-1133. The USGS estimated that in the region in which the proposed project is located, the Russian River Region, (defined as 12 miles south of Pt. Arena southward to Tomales Point) the estimated average retreat rate was 0.2 meters (0.656 feet) per year (http://pubs.usgs.gov/of/2007/1133/of2007-1133.pdf).</p> <p>In follow-up to the previous analysis, Jim Glomb and Don Poindexter, the project's geotechnical engineer, completed an "Updated Geotechnical and Engineering Geologic Investigation Report" for the Werneite Project at 38454 Robinson Reef Drive in Gualala, California dated Sept. 12,</p>
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<p><i>improvements in the bluff top setback.</i></p> <p>3.4-9 <i>Any development landward of the bluff top 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.</i></p> <p>Section 20.500.020(E)(4) of the Mendocino County Coastal Zoning Code requires a special condition be attached to all coastal permits for bluff top lot residential or commercial development, prohibiting the construction of seawalls in perpetuity with the requirement that the structures be removed from the property if threatened by bluff retreat. The restriction also requires that the landowner be responsible for any clean up associated with portions of the development that might fall onto a beach or into the ocean. The applicant will record the deed restriction contained in its application that is sufficient for this purpose. The county included Special Condition Number 2 to assure the deed restriction is recorded prior to issuance of the Coastal Development Permit.</p>	<p>2009. The intent of this report was to supplement the previous geotechnical analysis to assist the Coastal Commission's geologist, Dr. Mark Johnsson, with his assessment of whether the appellants had raised a substantial issue with respect to geologic hazards. The scope of this update included a review of soil and geologic data pertaining to the site and vicinity, a review of previous exploration programs that included excavation and logging of 7 backhoe test pits, an engineering geologic analysis of field data, including construction of 3 geologic cross sections, the performance of a seacliff retreat evaluation, an evaluation of seacliff stability, including computer determination of safety factors against instability, and a determination of site-specific seismic design parameters in accordance with the 2007 California Building Code. The overall goal of this updated report was to assess factors of safety of 1.5 (static) and 1.1 (pseudostatic).</p> <p>Using the information in the previous reports and consist with the latest updated report Mr. Glomb modified the previously proposed setbacks for the current project. He proposes a 40-foot setback from the defined top of bluff. This added measure of safety was incorporated into defining the allowable building footprint because of the observed erosion at the north end of the parcel caused by drainage outfall from the existing 12" diameter culvert that discharges rainwater from properties to the east of the proposed project. This greater degree of safety was also intended to address concerns raised by neighbors, the Gualala Municipal Advisory Council, and others during past project reviews.</p> <p>The proposed project has been modified so its supporting structures fit within the allowable building area defined by applying this more conservative setback line. Supporting structures for the proposed project will not be constructed closer than 40 feet from the defined top of bluff. This approach will ensure compliance with Coastal Commission and Mendocino County regulations and address concerns raised by neighboring landowners and other stakeholders regarding bluff stability and overall geological concerns. The revised setback exceeds the minimum setback required to ensure the 75-year lifespan of the proposed structure based on recent site information.</p> <p>Dr. Mark Johnsson has evaluated our project and, following a site visit, concurred with the findings of the project's geologists.</p> <p>The appellants' claim that the proposed project is 30' closer to the eroded area on the north edge of the Wernette's parcel near the 12" culvert. On the contrary, the proposed project is nearly ten feet further away than the previously proposed project or a total of over 55' from the eroded area. In addition, there is no evidence that this area is subject to large landslides. The geologic investigations described above found no evidence to support this contention.</p> <p>In conclusion, the proposed project is consistent with Mendocino County Coastal Zoning Code and Coastal Element policies with respect to geologic hazards.</p>
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<p>Issue 3- Drainage: The appellants allege that the proposed drainage system is inadequate, that the pervious concrete and drainage system is prone to failure and will saturate soil, increase drainage flows and erosion to the south, and pond water under the home. The appellants contend that more development and description of the details of the drainage plan is needed.</p>	<p>Pertinent parts of Section 20.492.025 of the MCCZC address storm water runoff:</p> <p>(A) <i>Water flows in excess of natural flows resulting from project development shall be mitigated.</i></p> <p>Section. 20.492.015 Erosion Standards calls for:</p> <p>(A) <i>The erosion rate shall not exceed the natural or existing level before development.</i></p>	<p>Drainage Strategy and Alternatives- The appellants mischaracterize the drainage system design in terms of its specifications and risks of failure. The pervious concrete system, using maintenance methods recommended by the EPA, will be an effective element of the drainage system. Contrary to the appellants' allegations, the drainage system will be a superior approach to addressing drainage issues for the proposed project. Mr. Glomb and Mr. Paoli have determined that the pervious concrete and the drainage system will not be prone to failure, will not saturate the soil, will not increase drainage flows and erosion to the south, and will not pond water under the home. Mr. Glomb's findings are included in his April 30, 2009 letter to Mr. Hines titled "Supplemental Geotechnical Review- Proposed Site Drainage System and Septic Tank". The planned drainage system is designed to simulate the existing drainage patterns to evenly distribute roof drainage over the entire building footprint within approximately one foot of the ground surface elevation. The project geologist determined that simulating the pre-construction drainage conditions will not only avoid an increase in geologic instability but could increase stability by eliminating concentrated storm flows associated with the existing drop structures east of the project. The drainage system is designed to avoid ponding under the home.</p> <p>Two summaries, "Drainage Overview" and "Alternative Drainage Approaches" were prepared and submitted to the Coastal Commission's geologist, Dr. Mark Johnson, to assist him in evaluating the proposed drainage program and to summarize other alternatives evaluated and rejected because of their inferior performance. For instance, an earlier design depended on a storage tank, pump, back-up generator, and piping system to transport drainage to the existing 12" diameter culvert. Adding additional concentrated outflow at that location would likely have aggravated the erosion problems currently being experienced.</p> <p>The drainage approach recommended for the proposed project will not affect slope stability, will not result in buoyant forces that would adversely affect the piers supporting the structure, and would not interfere with the lateral flows of surface runoff that exceeded the infiltration capacity of the soils underlying the pervious concrete driveway and parking areas or the foundation of the house.</p> <p>The proposed drainage plan was designed to restore natural drainage patterns to encourage natural processes, avoid concentrating drainage and the attendant concentrated erosional forces, and add to the longevity of the parcel and its ESHAs.</p> <p>Pervious concrete technology is an element of the comprehensive drainage plan for the proposed project. Pervious concrete supports flow rates that reduce storm water runoff, provides solutions in environmentally sensitive areas, and contributes to improving water quality. Flow rates from 288 to 770 inches per hour are provided which are typically higher than local soils (http://www.perviouspavement.org/engineering%20properties.htm).</p>
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<p><u>Issue 4- Conformance with ESHA Protection Policies:</u> The appellants contend that the structure is proposed for an environmentally sensitive parcel and that they are concerned about protecting the endangered wild flowers adjacent to their property.</p>		<p>Concerns have been raised by the appellants about maintaining pervious concrete, however, research has determined that 97.6 to over 99 percent of oils introduced into pervious pavements are trapped and biodegraded [Ferguson, Bruce K., (2005) <i>Porous Pavements</i>, Taylor and Francis, p. 159-160; and, Pratt, C.J., A.P. Newman, and P.C. Bond, (1999), "Mineral Oil Bio-degradation within a permeable pavement: long term observations," <i>Water Science and Technology</i>, v. 39, p. 103-109.]</p> <p>Our engineer, Dave Paoli, has found that sedimentation has not been a problem on constructed sites. He did state that it is important to keep sediment from choking the pervious concrete as well as the natural ground outside of the developed area. Because of the proposed project design and because most of the runoff onto the permeable concrete area will be across pavement, very little dirt or sediment should be present. EPA recommends that pervious concrete pavement be cleaned regularly to prevent clogging. Methods include quarterly vacuum sweeping and high-pressure washing (http://www.epa.gov/npdes/pubs/porouspa.pdf).</p> <p>Should similar cleaning recommendations be incorporated as conditions of a Coastal Development Permit, the Applicant will agree to those conditions.</p> <p>The appellants' contention that more development and description of the details of the drainage plan is needed is not supported by the facts, is likely to simply delay project implementation, and is unjustified.</p> <p>In conclusion, the proposed project is consistent with Mendocino County Coastal Zoning Code and Coastal Element policies with respect to drainage.</p> <p>Dr. Mark Johnsson has evaluated our project's drainage plan and, following a site visit, supports implementation of that proposed drainage plan.</p> <p>The applicant concurs that the project is proposed for an environmentally sensitive parcel and shares the concern of the appellants about protecting the site's natural resources. The conservation strategy employed as part of the project and mitigation measures incorporated achieve that goal.</p> <p>Mendocino County, in collaboration with the California Department of Fish and Game, found that the two isolated Coastal Bluff Morning Glory plants in the northern portion of the project parcel are not ESHA and do not warrant protection under Section 20.308.040(E)(F) or Section 20.496.020(A)(1) of the Mendocino County Coastal Zoning Code</p> <p>Mendocino County also found that the proposed 50 foot buffer area, supported by a reduced buffer analysis conducted by the project biologist, is consistent with the LCP requirements for an ESHA buffer zone in that no development is proposed within 50 feet of the resource area.</p>
<p><u>Issue 4- Conformance with ESHA Protection Policies:</u> The appellants contend that the structure is proposed for an environmentally sensitive parcel and that they are concerned about protecting the endangered wild flowers adjacent to their property.</p>	<p>Natural resource areas warranting protection under the LCP are defined as ESHA in Section 20.308.040(E)(F) of the Mendocino County Coastal Zoning Code as follows:</p> <p><i>"Environmentally Sensitive Habitat Area" means any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could easily be disturbed or degraded by human activities or developments. In Mendocino County, environmentally sensitive habitat areas include, but are not limited to: anadromous fish streams, sand dunes, rookeries and marine mammal haul-out areas, wetlands, riparian areas, areas of pygmy vegetation that contain species</i></p>	<p>Concerns have been raised by the appellants about maintaining pervious concrete, however, research has determined that 97.6 to over 99 percent of oils introduced into pervious pavements are trapped and biodegraded [Ferguson, Bruce K., (2005) <i>Porous Pavements</i>, Taylor and Francis, p. 159-160; and, Pratt, C.J., A.P. Newman, and P.C. Bond, (1999), "Mineral Oil Bio-degradation within a permeable pavement: long term observations," <i>Water Science and Technology</i>, v. 39, p. 103-109.]</p> <p>Our engineer, Dave Paoli, has found that sedimentation has not been a problem on constructed sites. He did state that it is important to keep sediment from choking the pervious concrete as well as the natural ground outside of the developed area. Because of the proposed project design and because most of the runoff onto the permeable concrete area will be across pavement, very little dirt or sediment should be present. EPA recommends that pervious concrete pavement be cleaned regularly to prevent clogging. Methods include quarterly vacuum sweeping and high-pressure washing (http://www.epa.gov/npdes/pubs/porouspa.pdf).</p> <p>Should similar cleaning recommendations be incorporated as conditions of a Coastal Development Permit, the Applicant will agree to those conditions.</p> <p>The appellants' contention that more development and description of the details of the drainage plan is needed is not supported by the facts, is likely to simply delay project implementation, and is unjustified.</p> <p>In conclusion, the proposed project is consistent with Mendocino County Coastal Zoning Code and Coastal Element policies with respect to drainage.</p> <p>Dr. Mark Johnsson has evaluated our project's drainage plan and, following a site visit, supports implementation of that proposed drainage plan.</p> <p>The applicant concurs that the project is proposed for an environmentally sensitive parcel and shares the concern of the appellants about protecting the site's natural resources. The conservation strategy employed as part of the project and mitigation measures incorporated achieve that goal.</p> <p>Mendocino County, in collaboration with the California Department of Fish and Game, found that the two isolated Coastal Bluff Morning Glory plants in the northern portion of the project parcel are not ESHA and do not warrant protection under Section 20.308.040(E)(F) or Section 20.496.020(A)(1) of the Mendocino County Coastal Zoning Code</p> <p>Mendocino County also found that the proposed 50 foot buffer area, supported by a reduced buffer analysis conducted by the project biologist, is consistent with the LCP requirements for an ESHA buffer zone in that no development is proposed within 50 feet of the resource area.</p>

<p>The appellants allege that the approved project is not in compliance with the programs in place for preservation of rare plant life. They contend that the two Coastal Bluff Morning Glory plants and other morning glory plants now growing in the northern portion of the project parcel are ESHA, that the ESHA set back at that location does not comply with regulations, and that allowing the project to intrude into 50-foot ESHA buffers is against the law.</p>	<p><i>of rare or endangered plants, and habitats of rare and endangered plants and animals.</i></p> <p>The LCP has provisions for protection of ESHAs with a buffer zone. Section 20.496.020(A)(1) of the Mendocino County Coastal Zoning Code outlines protocol for the establishment of ESHA buffer areas as follows (pertinent part):</p> <p><i>(A) Buffer Areas. A buffer area shall be established adjacent to all environmentally sensitive habitat areas. The purpose of this buffer area shall be to provide for a sufficient area to protect the environmentally sensitive habitat from degradation resulting from future developments and shall be compatible with the continuance of such habitat areas.</i></p> <p><i>Width. The width of the buffer area shall be a minimum of one hundred (100) feet, unless an applicant can demonstrate, after consultation and agreement with the California Department of Fish and Game, and County Planning staff, that one hundred (100) feet is not necessary to protect the resources of that particular habitat area from possible significant disruption caused by the proposed development. The buffer area shall be measured from the outside edge of the Environmentally Sensitive Habitat Areas and shall not be less than fifty (50) feet in width. New land division shall not be allowed which will create new parcels entirely within a buffer area. Developments permitted within a buffer area shall generally be the same as those uses permitted in the adjacent Environmentally Sensitive Habitat Area.</i></p>	<p>Mendocino County and DFG agreed that 100 feet is not necessary to protect the ESHAs in the southern portion of the parcel from possible significant disruption caused by the proposed development, given the proposed mitigation measures outlined in the biological report.</p> <p>In its latest field evaluation and report, WRA mapped an additional 50 Coastal Bluff Morning Glory plants and individuals displaying hybrid characteristics on the Wernette property. Applying 50-foot buffers around all Coastal Bluff Morning Glory plants on the project would preclude any home being built on the parcel since we have already sited the home in the only available location consistent with ESHA protection and geological safety.</p> <p>The redesigned proposed home results in a modest sized home with a footprint of 1,200 sq. ft. that is appropriate for the constrained conditions of the project parcel. This is less than the average 1,736 sq. ft. footprint of the 30 existing homes in the vicinity of our proposed project. This will minimize any adverse impacts on ESHA.</p> <p>Our project incorporates a comprehensive conservation strategy to protect and enhance the parcel's natural resources. Invasive species management will improve conditions for rare plants and mitigation measures will result in construction impacts being avoided.</p> <p>The location of the home will avoid direct impacts to special status species and habitats because over 90% of the project would be constructed on non-native vegetation; no Coastal Bluff Morning Glory plants would be directly impacted by the project.</p> <p>As currently defined, we believe a finding can be made that no ESHA will be significantly degraded by the proposed project, that the project represents the least environmentally damaging feasible alternative, and that all feasible mitigation measures capable of reducing or eliminating project related impacts have been adopted.</p>
<p>Issue 5- Conformance with the Uniform Fire Code:</p> <p>The appellants raised concerns about fire protection contending that the proposed structure is not in conformance with restrictions and objected to the applicant obtaining waivers to seven sections of the Uniform</p>	<p>Section 20.500.025 Fire Hazard - Development Standards of the Mendocino County Coastal Zoning Code requires that:</p> <p>(A) Fire hazard areas shall be identified using the California Department of Forestry's Fire Hazard Severity Classification System which classifies hazards into three categories: moderate, high or extreme hazard.</p> <p>(B) Land Use Restrictions.</p> <p>(1) All new development shall be sited taking</p>	<p>The proposed project is consistent with LCP hazard policies and is located in an area with a "Moderate" fire hazard according to the CalFire hazard severity rating system. This is the lowest rating (least hazardous) assigned to any site. Both CALFIRE and the Chief of the South Coast Volunteer Fire Department have concluded that the project does not raise fire hazard concerns and that fire department staff can safely fight a fire at the proposed project site. The applicant did request a waiver from seven sections of the Uniform Fire Code because geologic and access limitations and required environmental safeguards restricted the allowable building footprint to such an extent that those code sections posed significant barriers to implementing the project. The applicant acknowledged that the waiver would ensure that the spirit of the code would be complied with and public safety secured.</p> <p>Section 103.1.3 of the Uniform Fire Code addresses projects that have "practical difficulties". It provides that the chief of the responsible fire district may modify, using the defined manner, any</p>

<p>Fire Code and State Fire Code.</p>	<p>into consideration the fire hazard severity of the site, the type of development and the risk added by the development to the fire hazard risk. Where feasible, areas of extreme high risk should be avoided for development except agricultural and open space uses. (<i>Ord. No. 3785 (part), adopted 1991</i>)</p>	<p>of the provisions of the fire code under specified conditions that secure public safety. Section 902.2.1-3 of the 1999 Uniform Fire Code further states that when there are not more than two Group R, (single-family residences) the access requirements of the fire code may be modified by the chief.</p> <p>Pursuant to these sections, in July 2008, the applicant requested a waiver, of the following provisions of the code due to the practical difficulties related to implementing the proposed Wernette Project at 38454 Robinson Reef Drive in Gualala, California; Sections 902.2.1, 902.2.2.1, 902.2.2.4, 903.2, 1223.02, 127.03, and 1273.05. In his response letter dated July 28, 2008, Chief Leighton Nielsen, South Coast Volunteer Fire Department, granted the waiver and entered his decision into his department's records.</p> <p>In addition, as requested during previous project reviews, the approved project includes a safety vehicle turnaround. Also, the North Gualala Water District recently added a new fire hydrant located approximately 700 feet from the proposed project. Prior to its installation, the closest hydrant to fight fires at the proposed house or our neighbors' homes was approximately 1,200 feet.</p> <p>In conclusion, the proposed project is consistent with the LCP hazard policies and Mendocino County Coastal Zoning Code and the appeal raises no substantial issue with respect to protecting the parcel, the proposed home, and neighboring homes from fire hazards.</p>
<p>Issue 6- Alternative, feasible building site: The appellants contend that an acceptable building area is available that would not intrude into a 50-foot buffer for the alleged northern ESHA. They suggest a 38'x40' area is available without constraints thus supporting an alleged 1,520 square foot allowable building area.</p>		<p>The appellants suggest that the building site proposed in 2002 is an acceptable site and should be used by the applicant. This contention is disingenuous because the appellant objected to that same footprint during county coastal development permit hearings. The old footprint presented a greater risk to bluff stability and it intruded into the 50' buffers protecting the ESHAs in the southern portion of the parcel. There is no requirement for a 50' buffer around the two, isolated CBMG plant in the north since the county, with the concurrence of the DFG, found that those two CBMG plants were not ESHA. If those two plants had been designated ESHA and a 50-foot buffer had been required it would have forced a reduction in the allowable building envelope to approximately 400 square feet. A structure of that size would not have conformed with the scope and character of the neighborhood, would have been inconsistent with the LCP, and would not have been a feasible project.</p>

<p align="center">Appellant Contentions that are not Valid Grounds for Appeal or for Consideration During a De Novo Hearing</p>	
<p>Issue 1- Mendocino County is unable to evaluate the project and monitor project construction: The appellants allege that Mendocino County lacks adequate staff or resources to properly evaluate the project or monitor its construction because it includes a number of sophisticated and untested elements such as the proposed drainage system, retaining wall, pile driving (sic) and other aspects of the construction.</p>	<p>The applicant believes that the appellants' allegations are inaccurate and are unrelated to the requirements of the LCP or for determining consistency with the LCP. No pile driving is proposed; retaining walls have been used for many years for projects constructed in Mendocino County; and, drilled piers have been used on the Mendocino County Coast for at least 40 years. The use of pervious concrete is a proven method for addressing storm water drainage. The proposed drainage system is likely to be more reliable and will eliminate the need for placing a large holding tank, pump, back up generator, routing pipe to another location such as the existing 12" culvert at the north end of the property which has concentrated runoff flows and accelerated erosion.</p> <p>County Planning and Building Services Department (Planning Department) staff are familiar with these construction methods and are capable of completing thorough reviews and oversight of projects using these features. Furthermore, if budget constraints and personnel shortages dictate, the Planning Department has the option of using the services of an independent, outside plan check agency or company, at the applicant's expense, if it finds that it is needed during the building permitting and construction process.</p>
<p>Issue 2- Independent review: The appellants allege that the project and its features need independent geotechnical review and a soils engineer to evaluate the drainage system design to determine its effect on bluff stability. They contend further that EIR procedures dictate that evaluations be conducted by independent experts not hired by the project proponent.</p>	<p>The applicant retained an independent, expert, licensed engineering geologist, geotechnical engineer, and civil engineer to evaluate and design a home in an intrinsically sensitive coastal bluff area. Collectively they proposed a foundation siting and design and a modified drainage approach to ensure geologic stability of the proposed project and ensure our neighbors' properties were protected. The applicant also retained an independent, expert biologist that effectively surveyed the parcel's biological resources and incorporated conservation measures to protect those environmental resources and incorporated mitigation measures to offset project related impacts.</p> <p>The LCP and Coastal Commission policy do not require review by technical experts not hired by the applicant. Contrary to the appellants' allegations, the California Environmental Quality Act also does not require evaluations by experts not hired by the project proponent.</p>

BIOLOGICAL REPORT OF COMPLIANCE FOR A MENDOCINO COUNTY COASTAL DEVELOPMENT PERMIT

WERNETTE PROJECT, GUALALA
MENDOCINO COUNTY, CALIFORNIA

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Date:

August 2008



EXHIBIT NO. 14
APPEAL NO. A-1-MEN-09-023
WERNETTE
AUGUST 2008 BIOLOGICAL REPORT (1 of 64)



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1.0 INTRODUCTION

During several surveys between 2000 and 2008, WRA, Inc. assessed biological resources at 38454 Robinson Reef Drive (APN 145-161-27) in Gualala, Mendocino County, California (Figure 1). A Study Area of approximately 0.6 acre was surveyed for potential Environmental Sensitive Habitat Areas (ESHAs), which included all but the steepest, inaccessible bluff slopes of the 0.72-acre parcel. Survey results from 2000 to 2007 were incorporated into a previous Coastal Development Permit application for a single-family residence proposed by the owners of the property, George and Jerri Wernette (WRA 2007). This report briefly describes the previous surveys and additional rare plant surveys conducted by WRA in 2008 for use in a new Coastal Development Permit application package.

Environmentally Sensitive Habitat Areas (ESHAs), including wetlands and special status plants, were mapped based on definitions contained in the California Coastal Act (CCA) and Mendocino County Local Coastal Program (LCP). The purposes of this report are to present the results of the ESHA assessments, evaluate potential impacts to ESHAs due to construction of the proposed project elements, propose mitigation measures, and analyze proposed ESHA buffers as required by the CCA and Mendocino County LCP.

2.0 SUMMARY OF PREVIOUS SURVEYS

In December 2000, WRA prepared and submitted a wetlands delineation report for the Study Area. During the October 20, 2000 site visit in which field data were collected, one potential jurisdictional wetland measuring 0.012 acre was observed in the eastern portion of the Study Area.

On August 3, 2001, the Mendocino County Coastal Permit Administrator approved the submitted coastal development permit (CDP 57-98) for the proposed development of a single family home within the Study Area. A portion of the wetland area identified by WRA would be impacted by the proposed development. However, on August 7, 2001, CDP 57-98 was appealed to the Mendocino County Board of Supervisors. The project was subsequently denied on November 13, 2001.

In 2002, 2003, and 2004, WRA performed additional site visits to re-evaluate the conditions of the potential wetland area. WRA reported that the conditions of the potential wetland area had changed since the original wetland delineation, having been colonized by several upland species and lacking clear soil or hydrological wetland indicators. It was concluded that the area did not exhibit wetland indicators under normal circumstances.

In April 2004, the applicants' agent requested that WRA determine the presence of potential areas meeting the definition of ESHAs described in the Mendocino County LCP and the CCA, including special status plants. Additionally, the applicants' agent requested that WRA update the previously submitted wetland delineation based on the more recent data collected. The July 2004 report titled *Special Status Species Plant Survey and Wetlands Evaluation* identified two rare plants that meet the definition of ESHAs. No other ESHAs, such as areas that would qualify as wetlands under the CCA were identified. In addition, the U.S. Army Corps of Engineers verified the conclusion that no Section 404 jurisdictional wetland was present in the Study Area, and issued a jurisdictional determination supporting this conclusion on March 23, 2005 (Corps 2005).

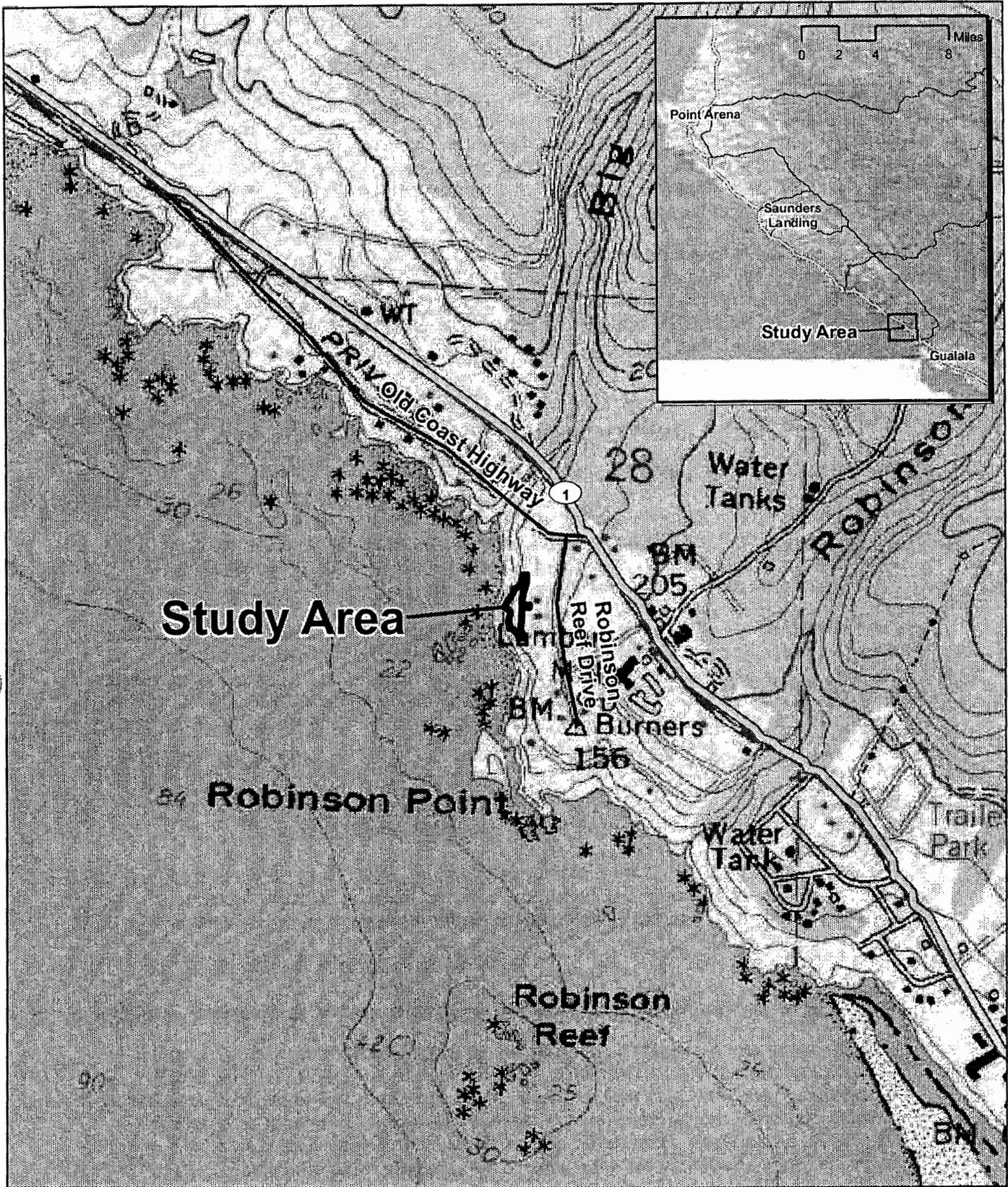


Figure 1. Location of Study Area



ENVIRONMENTAL CONSULTANTS

Date: March 2007
 Basemap: USGS Topo Quad
 Map By: Michael Rochelle
 Filepath: I:\Acad2000\10000\10083\gs\Arcmap\Location.mxd

Wernette Property
 Gualala, Mendocino County, CA

0 250 500 1,000
 Feet

Richard Arnold of Entomological Consulting Services, Ltd. performed an assessment for potential special status butterfly habitat on October 23, 2005. The Study Area was evaluated for host plants and habitat of the federal endangered Behren's silverspot butterfly (*Speyeria zerene* ssp. *behrensi*) and the federal endangered Lotis blue butterfly (*Lycaeidis idas lotis*). It was determined that the Study Area's coastal scrub and surrounding developed areas do not provide suitable habitat for either of these species.

An additional site visit was conducted by WRA on October 25, 2007 to identify potential rare natural community ESHAs in the Study Area. One small coastal terrace prairie ESHA was identified in the southern portion of the Study Area, as reported in the previous Biological Report of Compliance (WRA 2007). The application package for the new project proposal will contain electronic copies of reports associated with the previous surveys described above.

3.0 REGULATORY BACKGROUND AND ESHA DEFINITIONS

The CCA and Mendocino County LCP define an ESHA as follows:

"Environmentally sensitive habitat area' means any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments."

The Mendocino County LCP and California Coastal Commission (CCC) Guidelines contain definitions for specific types of ESHAs, including: wetlands, estuaries, streams and rivers, lakes, open coastal waters and coastal waters, riparian habitats, other resource areas, and special status species and their habitats. For the purposes of this report, WRA has taken into consideration any areas that may meet the definition of any ESHA defined by the CCA, CCC guidelines, or the Mendocino County LCP.

3.1 Wetlands

The California Coastal Act and Mendocino County LCP define wetlands as:

"Wetland means lands within the Coastal Zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens."

Public Resources Code Section 30121

CCC Administrative Regulations (Section 13577 (b)) provide a more explicit definition:

"Wetlands are lands where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes, and shall also include those types of wetlands where vegetation is lacking and soil is poorly developed or absent as a result of frequent or drastic fluctuations of surface water levels, wave action, water flow, turbidity or high concentrations of salt or other substance in the substrate. Such wetlands can be recognized by the presence of surface water or saturated substrate at some time during each year and their location within, or adjacent to, vegetated wetlands or deepwater habitats."

The CCC considers this definition as requiring the observation of one diagnostic feature of a wetland such as wetland hydrology, dominance by wetland vegetation (hydrophytes), or presence of hydric soils as a basis for asserting jurisdiction under the CCA.

In addition to the above definition, the *Statewide Interpretive Guidelines for Identifying and Mapping Wetlands and Other Wet Environmentally Sensitive Habitat Areas* (CCC 1981) provide technical criteria for use in identifying and delineating wetlands and other ESHAs within the Coastal Zone. The technical criteria presented in the guidelines are based on the CCA definition and indicate that wetland hydrology is the most important parameter for determining a wetland, recognizing that:

" . . . the single feature that most wetlands share is soil or substrata that is at least periodically saturated with or covered by water, and this is the feature used to describe wetlands in the Coastal Act. The water creates severe physiological problems for all plants and animals except those that are adapted for life in water or in saturated soil, and therefore only plants adapted to these wet conditions (hydrophytes) could thrive in these wet (hydric) soils. Thus, the presence or absence of hydrophytes and hydric soils make excellent physical parameters upon which to judge the existence of wetland habitat areas for the purposes of the Coastal Act, but they are not the sole criteria."

The Technical Criteria requires that saturation of soil in a wetland must be at or near the surface continuously for a period of time. The meaning of "at or near the surface" generally is considered to be approximately one-foot from the surface or less (the root zone), and the saturation must be continuously present for a period of time (generally more than two weeks) in order to create the necessary soil reduction (anaerobic) processes that create wetland conditions. For example, water from rain during a storm that causes saturation near the surface but then evaporates or infiltrates to 18 inches or deeper below the surface shortly after the storm does not meet the generally accepted criteria for wetland hydrology.

The presence of wetland classified plants or the presence of hydric soils (generally referred to as the "one parameter approach") can be used to identify an area as being a wetland in the Coastal Zone. There is correlation between the presence of wetland plants, wetland hydrology, and/or hydric soils occurring together, especially in natural undisturbed areas, and in many cases where one of these parameters is found (e.g., wetland plants) the other parameters will also occur. But there are situations which can result in the presence of wetland classified plants without there being wetland conditions, and these areas are not wetlands. Where these situations occur, the delineation study must carefully scrutinize whether the wetland classified plants that are present are growing there as hydrophytes in reducing (anaerobic) conditions caused by the presence of wetland hydrology or are there for some other (non-wetland) reason. Examples may include wetland-classified plants which are also salt-tolerant (e.g., alkali heath) and may be responding to either wetland conditions or saline soil conditions, but not necessarily both, and deep-rooted trees (e.g., willows) which are able to tap into deep groundwater sources and can grow in dry surface soils, but are also found in wetland conditions where surface water is present.

Hydric soils can also occur in upland areas especially in areas where historic disturbances may have exposed substratum or in densely vegetated grasslands (Mollisols). Similarly, the delineation must determine if the hydric soil indicators are a result of frequent anaerobic conditions or if there are the result of non-wetland conditions.

3.2 Estuaries

The CCA and Mendocino County LCP define estuaries as follows:

"An estuary is a coastal water body usually semi-enclosed by land, but which has open, partially obstructed, or intermittent exchange with the ocean and in which ocean water is at least occasionally diluted by fresh water runoff from the land. The salinity may be periodically increased above the open ocean by evaporation. In general, the boundary between wetland and estuary is the line of extreme low water."

3.3 Streams and Rivers

The CCA and Mendocino County LCP define streams and rivers as follows:

"A stream or a river is a natural watercourse as designated by a solid line or dash and three dots symbol shown on the United States Geological Survey map most recently published, or any well-defined channel with distinguishable bed and bank that shows evidence of having contained flowing water as indicated by scour or deposit of rock, sand, gravel, soil, or debris."

3.4 Lakes

The CCC Interpretive Guidelines define a lake as "a confined, perennial water body mapped by the United States Geological Survey on the most current 7.5 minute quadrangle series". The Mendocino County LCP does not explicitly include nor exclude lakes from its list of ESHAs, and does not provide a definition for this ESHA.

3.5 Open Coastal Waters and Coastal Waters

The CCA and Mendocino County LCP define coastal waters as follows:

"The terms open coastal waters or coastal waters refer to the open ocean overlying the continental shelf and its associated coastline. Salinities exceed 30 parts per thousand with little or no dilution except opposite mouths of estuaries."

3.6 Riparian Habitats

The CCA and Mendocino County LCP define riparian habitats as follows:

"A riparian habitat is an area of riparian vegetation. This vegetation is an association of plant species which grows adjacent to freshwater watercourses, including perennial and intermittent streams, lakes, and other bodies of freshwater."

3.7 Sand Dunes

The CCA and Mendocino County LCP define sand dunes as follows:

"Sand Dunes means naturally occurring accumulations of sand in ridges or mounds on the beach as well as landward of the beach."

3.8 Pygmy Forests

The CCA and Mendocino County LCP define pygmy forests as follows:

"Pygmy Forests means a stunted forest, with mature vegetation the majority of which is approximately two (2) to twelve (12) feet in height occurring on soils with conditions which severely limit the growth of vegetation such as Blacklock soils and characterized by Mendocino cypresses, Fort Bragg Manzanitia, Bolander pines, and pygmy Mendocino bishop pines."

3.9 Special Status Species

Special status species and their habitats are defined as ESHAs by the CCA and Mendocino County LCP. Special status species include those species that have been formally listed, are proposed as endangered or threatened, or are candidates for such listing by the U.S. Fish and Wildlife Service (USFWS) or California Department of Fish and Game (CDFG). In addition, CDFG Species of Special Concern are given special consideration under the California Environmental Quality Act (CEQA). However, these Species of Special Concern may only be protected as ESHAs if they are ranked by CDFG as imperiled globally or in California (G2S2 or higher). Plant species on California Native Plant Society (CNPS) Lists 1 or 2 are also considered special status species and are protected as ESHAs.

3.10 Other Resource Areas

The CCA and Mendocino County LCP define other resource areas as follows:

"Other designated resource areas include: State parks and reserves, underwater parks and reserves, areas of special biological significance, natural areas, special treatment areas, fishing access points, areas of special biological importance, significant California ecosystems, and coastal marine ecosystems."

Other resource areas considered ESHAs include CDFG rare natural communities, as noted in the California Natural Diversity Database (CNDDB). These communities have been classified and described by various references, including the *List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database* (CDFG 2003), Holland (1986), and Sawyer and Keeler-Wolf (1995). WRA also considered habitat for special status wildlife habitat and critical habitat established by the United States Fish and Wildlife Service (USFWS) to be ESHAs under the Mendocino County LCP.

4.0 METHODS

Focused evaluations of potential ESHAs as defined in Section 3.0 were performed by WRA in several visits between 2000 and October 2007. Additional site visits were conducted in May and July 2008 to repeat protocol-level rare plant surveys and to update locations of ESHAs. The methods for evaluating the presence of ESHAs during the site visits are described below. Prior to conducting field surveys, available reference materials were reviewed by WRA, including the Soil Survey of Mendocino County, Western Part (USDA 2005), the Gualala USGS 7.5' quadrangle, and available aerial photos of the site. The Study Area was traversed on foot, and locations of all ESHAs found were mapped using a sub-meter accuracy Global Positioning System (GPS). ESHA locations were also flagged by WRA for mapping by a surveyor, to be incorporated into updated site plans and topographic maps included in the application package.

4.1 Special Status Plant Surveys

Protocol-level special status plant surveys were repeated by WRA in 2008 to ensure current data were available for a new Coastal Development Permit application. Potential occurrence of special status species in the Study Area was evaluated prior to the 2008 surveys by conducting a literature and database search. Database searches for known occurrences of special status species focused on the Gualala 7.5' USGS quadrangle, as well as eight neighboring quadrangles along the Mendocino coast (Mallo Pass Creek, Point Arena, Eureka Hill, Zeni Ridge, Saunders Reef, Mcguire Ridge, Stewarts Point, and Plantation). Records from the CNDDDB (CDFG 2008) and the California Native Plant Society (CNPS) Electronic Inventory (CNPS 2008) were reviewed to determine which special status plant species have been documented to occur in the vicinity of the Study Area. A list of target plant species with potential to occur in the Study Area was generated, which guided subsequent field surveys. In addition to plant species qualifying as ESHAs, CNPS List 3 and 4 plants were included in the database search and field surveys. These species have little or no protection under CEQA and are not considered ESHAs, but are included in an effort to help clarify the status of these plants.

On May 22, May 28, and July 5, 2008, Jennifer Adler, Biologist, and Tim DeGraff, Senior Wetland Scientist performed protocol-level, seasonally-appropriate botanical surveys in the Study Area. All accessible portions of the Study Area were traversed using a wandering transect approach; all plant species were identified to the taxonomic level necessary to determine their status. Most steep portions of the bluffs were not surveyed due to safety concerns. Since the accessible portion of the Study Area is relatively small (0.6 acre), surveyors were able to approach 100% coverage. Each surveyor spent approximately three hours surveying the Study Area in May, and one surveyor spent approximately one and a half hours in July.

4.2 Wetlands

The previously identified wetland area (WRA 2000) was the focus of additional investigations in 2002, 2003, and 2004. Evaluation methodology followed the wetland definition as stated in the Coastal Act and the Mendocino County LCP. The potential wetland area was evaluated for the presence of wetland hydrology indicators, hydric soil indicators, and/or the dominance of hydrophytic vegetation. During the 2008 botanical surveys, WRA surveyed vegetation in the previously identified wetland area as well as the rest of the Study Area to identify any potential new wetland areas indicated by hydrophytic vegetation that may have developed since 2004.

4.3 Other ESHAs

The Study Area was also evaluated for the presence of other ESHAs defined in CCC regulations and the Mendocino County LCP, include rare natural communities designated in the CNDDDB (CDFG 2008), sensitive wildlife species habitat, and critical habitat designations from USFWS. The presence of rare natural communities was determined based on vegetation community classifications given in Holland (1986) and the *List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database* (CDFG 2003). An additional site visit was conducted by Tim DeGraff on October 25, 2007 to identify potential rare natural communities in the Study Area.

4.4 Offsite ESHAs

WRA completed an assessment of potential wetlands and other ESHAs on parcels adjacent to the Project Area. This assessment was conducted to determine whether any 100-foot buffers around ESHAs on adjacent parcels may overlap with the proposed construction impact zone of

the subject parcel. Surveyors reviewed recent aerial photos and soil maps of adjoining parcels within 100 feet of potential development areas. During the botanical surveys completed in May and July of 2008, field observations of adjacent parcels were made in all areas accessible or visible from the Study Area.

5.0 STUDY AREA DESCRIPTION

The Study Area consists of approximately 0.6 acre of a 0.72-acre parcel (APN 145-161-27), located west of Highway 1 in the southeastern corner of Mendocino County (Figure 1). It is an undeveloped parcel on Robinson Point at the edge of the coastal bluffs, located 150 feet west of Robinson Reef Drive. The Study Area ranges from approximately 100 to 130 feet in elevation; portions of the parcel that were inaccessible for surveys consisted of steep coastal bluffs extending down to sea level. The bluffs of Robinson Point are bordered by Big Gulch to the north and Robinson Gulch to the south, and the Gualala River discharges into the Pacific Ocean ½ mile to the southeast. Surrounding land uses are primarily single-family residences, with existing development to the east and undeveloped parcels to the north and south along the narrow eroding shoreline. Representative photographs of the Study Area and ESHAs are provided in Appendix A.

5.1 Vegetation

Study Area vegetation is composed primarily of a coastal scrub community dominated by native species. Coastal bluff scrub is found on the steep bluff slopes leading to the ocean, located more than 100 feet from the proposed development area, as well as in a small 0.03-acre patch in the southern portion of the Study Area. However, the flatter portions of the Study Area generally support a taller coastal scrub community, covering approximately 0.39 acre. These include intermixed scrub and grasses dominated by California blackberry (*Rubus ursinus*), coyote brush, Pacific reedgrass (*Calamagrostis nutkaensis*), ceanothus (*Ceanothus foliosus* and *C. gloriosus*), and tufted hairgrass (*Deschampsia cespitosa* var. *holciformis*). In the northern end of the parcel the coastal scrub is mixed with larger shrubs and trees typical of North Coast Coniferous Forest, including scattered Douglas fir (*Pseudotsuga menziesii* var. *menziesii*), wax myrtle (*Myrica californica*), and coffeeberry (*Rhamnus californica*).

Non-native vegetation mixed with common natives is dominant in the center of the Study Area, covering approximately 0.17 acre. These non-native and invasive species are also scattered in coastal scrub areas, including iceplant (*Carpobrotus edulis*), pampas grass (*Cortaderia jubata*), French broom (*Genista monspessulana*), slender wild oat (*Avena barbata*), velvet grass (*Holcus lanatus*), rattlesnake grass (*Briza maxima*), and wild radish (*Raphanus sativus*). A 0.02-acre dense patch of pampas grass is present at the southern end of the Study Area, and has expanded into former coastal bluff scrub habitat since 2004. Figure 2 illustrates the extent of the vegetation communities within the Study Area. Plant species observed during 2008 botanical surveys are listed in Appendix B.

5.2 Hydrology

Precipitation, surface runoff, and groundwater flow all contribute to the hydrology of the Study Area. There are no streams, tributaries, or water bodies present within the Study Area. Runoff comes from adjacent areas both on and off site to the north and east.

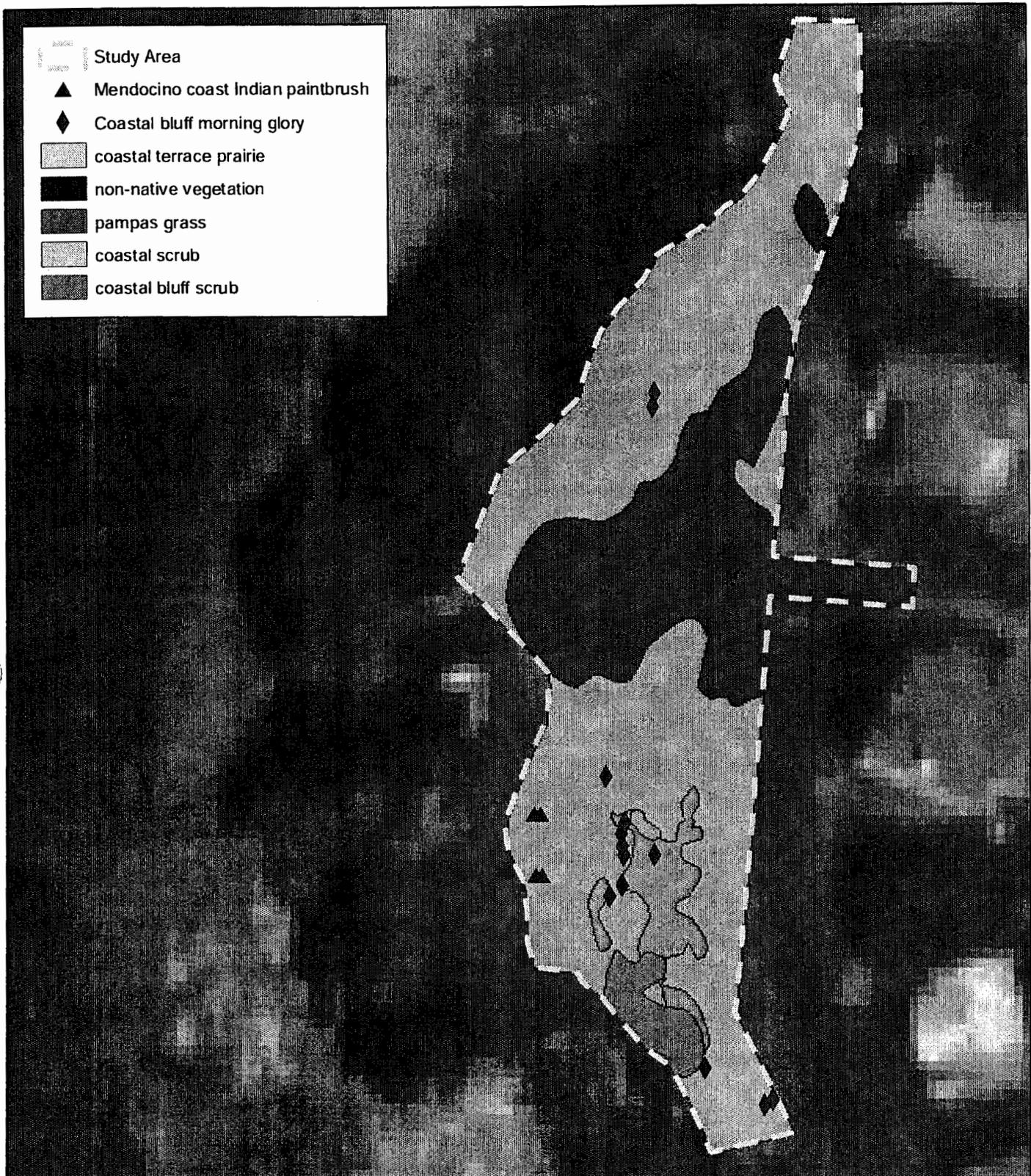
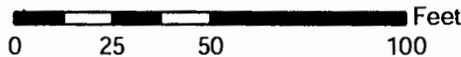


Figure 2. Natural Communities and Special Status Species



Wernette Property
Gualala, California



ENVIRONMENTAL CONSULTANTS

Date: July 2008
Base Photo: NAIP, 2005
Map By: Derek Chan
File: L:\Acad 2000 Files\10000\10083\gis\arcmap\July08\Fig2_RarePlants_07_18_08.mxd

5.3 Soils

The Soil Survey of Mendocino County, Western Part (USDA 2005), shows two soil map units mapped within the Study Area: Dystropepts, 30 to 75 percent slopes and Bruhel-Shinglemill complex, 2 to 15 percent slopes (Figure 3). Dystropepts are mapped in the western sloped portion of the Study Area, while the majority of project activity will occur in the flatter areas mapped as Bruhel-Shinglemill complex.

Dystropepts, 30 to 75 percent slopes, are on side slopes of marine terraces, derived from sandstone or shale. Soils in this map unit are generally shallow or moderately deep and well drained. Regions mapped under this unit include small areas of Abalobadiah and Vizcaino soils, areas of rock outcrops or mass wasting along ocean bluffs, and small areas of varying slopes. The surface layer of Dystropepts is typically 11 inches of dark grayish brown loam. From 11 to 19 inches is dark grayish brown very gravelly clay loam, with bedrock of hard and soft fractured shale below. Surface runoff is rapid or very rapid, and the hazard of water erosion is severe or very severe.

Bruhel-Shinglemill complex, 2 to 15 percent slopes is described as occurring on marine terraces in areas dominated by Bishop pine (*Pinus muricata*) and annual and perennial grasses. This map unit describes an intermingled zone of approximately 50 percent Bruhel loam and 25 percent Shinglemill loam. The last 25 percent is made up of various types of inclusions (Abalobadiah, Flumeville, and Gibney soils and Tropaquepts) or areas with 15 to 30 percent slopes.

Bruhel loam is a deep soil with a 4-inch thick dark grayish brown loam surface layer. From 4 to 21 inches the soil is grayish brown clay loam, and from 21 to 41 inches is brown gravelly loam and gravelly clay loam, with soft sandstone bedrock below. It is well drained and derived from sandstone. Shinglemill loam is similarly deep but is poorly drained and formed in marine sediments. The 3-inch surface layer is light gray and very pale brown loam, with very pale brown and reddish yellow loam from 3 to 8 inches. The subsoil is very pale brown loam from 8 to 15 inches, and light yellowish brown clay from 15 to 25 inches. The deepest layer is light yellowish brown, yellow, and brownish yellow clay and sandy clay with light gray, white, and red mottles reaching to 63 inches or deeper.

6.0 ENVIRONMENTALLY SENSITIVE HABITAT AREAS IN THE STUDY AREA

The Study Area contains scattered populations of two special status plant species and an area of Coastal Terrace Prairie, which are all potential ESHAs. No other ESHAs were determined to be present within the Study Area. The following sections contain a description of the ESHAs evaluated and documented within the Study Area.

6.1 Special Status Plant Species

Based upon WRA's 2008 database searches for special status plants that occur within the vicinity of Study Area, 10 special status plants have a moderate to high potential to occur within the Study Area (Appendix C). Figure 4 depicts CNDDDB occurrences of special status plants in the vicinity of the Study Area. Two special status plant species were observed within the Study Area during 2004 and 2008 surveys: coastal bluff morning glory (*Calystegia purpurata* ssp. *saxicola*) and Mendocino coast Indian paintbrush (*Castilleja mendocinensis*). A third species observed, Point Reyes ceanothus (*Ceanothus gloriosus* var. *gloriosus*) is a CNPS List 4 (plants

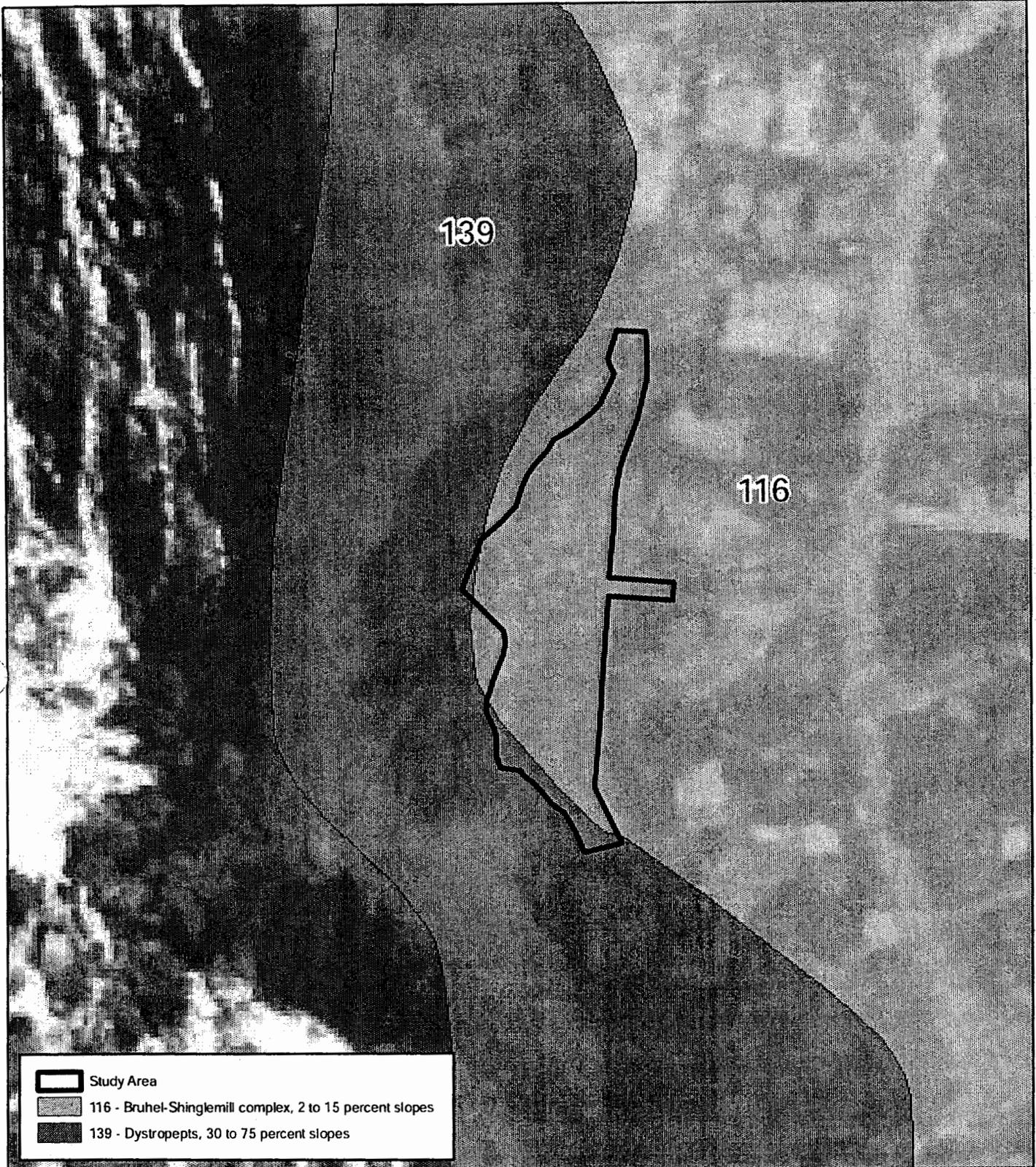


Figure 3. Soils Map

Wernette Property
Gualala, California

0 50 100 200 Feet



ENVIRONMENTAL CONSULTANTS

Date: July 2008
 Data Source: SSURGO
 Image Source: NAIP, 2005
 Map By: Derek Chan
 Filepath: L:\Acad 2000 Files\10000\10083\gis\arcmap\July08
 Fig3_Soils_07_18_08.mxd

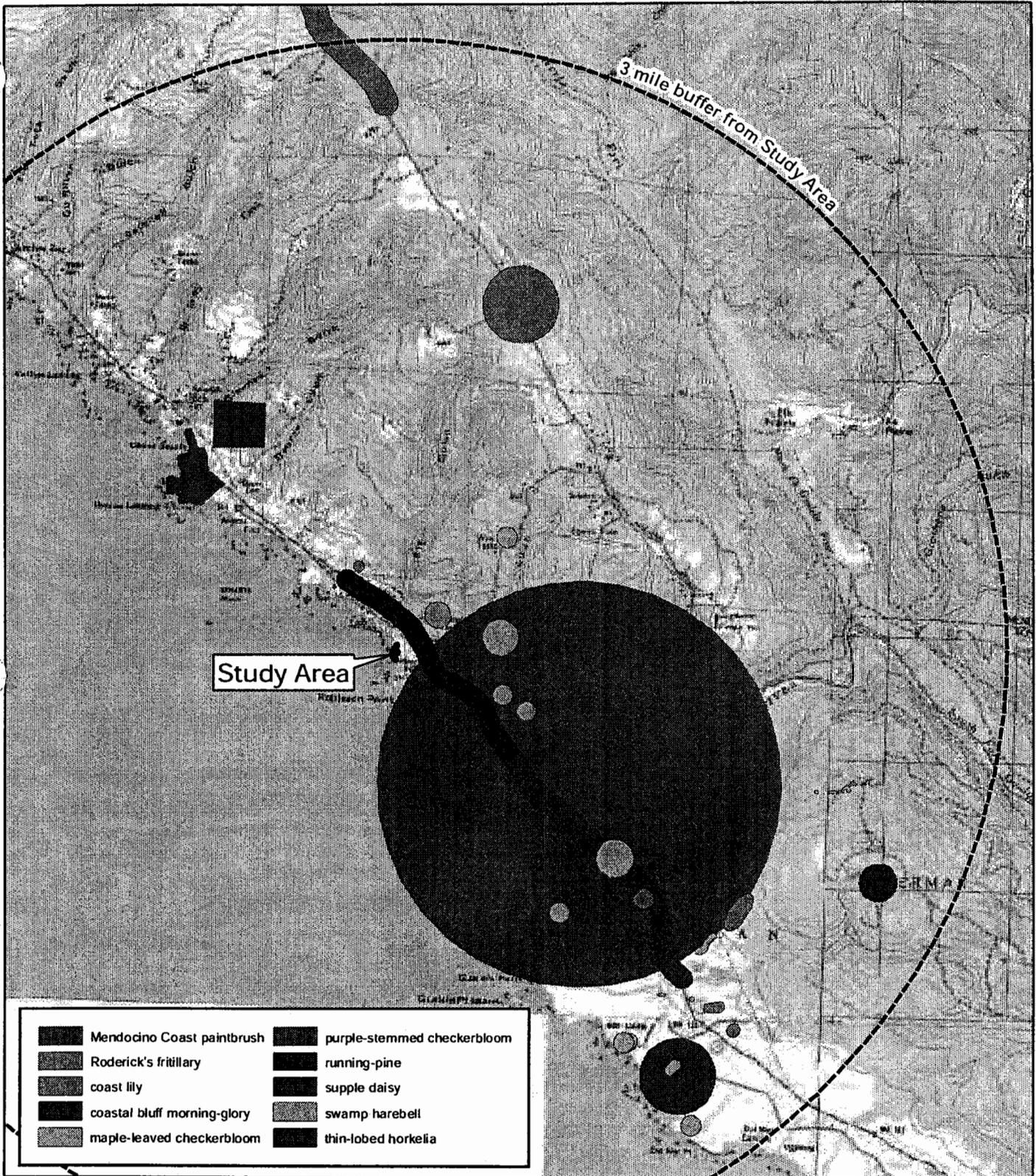
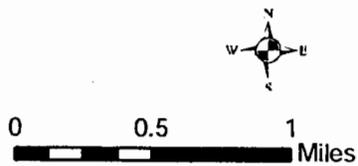


Figure 4. Special Status Plant Occurrences within 3 miles of the Study Area

Wernette Property
Gualala, California



Date: July 2008
Image Source: USGS Topo Quad
Map By: Derek Chan
Filepath: L:\Acad 2000 Files\1000\01\0083\gis\arcmap\July08\Fig4_CNDDB_plants_07_18_08.mxd

of limited distribution - a watch list) species and is therefore not considered an ESHA. Figure 2 shows the locations of special status plant ESHAs in the Study Area.

6.1.1 Coastal bluff morning glory (*Calystegia purpurata* ssp. *saxicola*)

This perennial herb is a CNPS List 1B species, found in coastal dune, coastal scrub, and North Coast coniferous forest habitats within Mendocino, Marin, and Sonoma counties. The blooming period for this plant occurs from May through September. Thirteen coastal bluff morning glory individuals were observed in the Study Area, with only two individuals located in the northern portion. Several of the observed plants exhibited identifying characteristics of both the rare subspecies and the related common subspecies, *C. purpurata* ssp. *purpurata*. The subspecies are differentiated primarily by leaf shape, which can be highly variable. Specimens with at least a few leaves matching taxonomic descriptions of the rare subspecies (rounded with overlapping lobes), including all potential hybrids, were mapped as ESHAs in this report to ensure that the most protective and suitable ESHA buffers and mitigation measures were applied to the Study Area.

Specimens were considered to be non-ESHAs if all leaves matched taxonomic descriptions of the common subspecies (acute tip and spreading lobes). Additional specimens that were clearly identified as the common subspecies were found along Robinson Reef Drive near the entrance to the Study Area. This close proximity indicates that hybridization between the subspecies is one potential explanation for specimens with a variety of leaf shapes.

6.1.2 Mendocino coast Indian paintbrush (*Castilleja mendocinensis*)

This perennial plant is a CNPS List 1B species that is hemiparasitic (acquires some nutrients through the roots of other plants). It is found in coastal bluff scrub, closed-cone coniferous forest, coastal dunes, coastal prairie, and coastal scrub habitats within Humboldt and Mendocino counties. The blooming period for this plant occurs from April through August. In 2004, four Mendocino coast Indian paintbrush individuals were mapped along the bluff face near the southern portion of the Study Area, a minimum of approximately 75 feet from the proposed construction area. These locations and all accessible portions of the parcel were examined for this species in 2008, but only the common species (*Castilleja wightii*) appeared to be present. As these plants are located on steep bluff slopes, they are difficult to access for precise identification. Therefore, all mapped locations from 2004 are assumed extant and are considered ESHAs with the applicable protective buffers incorporated into site plans for the proposed project.

6.1.3 Point Reyes ceanothus (*Ceanothus gloriosus* var. *gloriosus*)

Point Reyes ceanothus is a CNPS List 4 species. This evergreen shrub is found in closed-cone coniferous forest, coastal bluff scrub, coastal dunes, and coastal scrub habitats in Mendocino, Marin, and Sonoma counties. Mendocino County represents the northern limit of range for this species. Approximately 50 Point Reyes ceanothus individuals were scattered throughout the Study Area with the majority occurring in the southern portion.

6.2 Potential CCC Wetlands

Based upon the results of site visits in April 2002, September 2003, and May 2004, the area previously mapped as a potential wetland area (WRA 2000) is now considered non-wetland habitat. This conclusion was based on the lack of a hydrophytic plant community, hydric soils, and wetland hydrology indicators during three subsequent site visits. The site visits were conducted during three different years at different times of the year. Site visits for additional

rare plant surveys in 2008 confirmed a lack of wetland indicator species in the vicinity of the previously identified wetland. Low topographic areas that could collect water continue to be dominated by iceplant, coyote brush, and rattlesnake grass, all of which are upland indicators. No portion of the Study Area meets the CCC/LCP definition of a wetland; therefore, there are no wetland ESHAs present in the Study Area.

6.3 Other ESHAs

Figure 2 depicts all common and rare natural communities mapped in October 2007. A 61-square foot (0.001-acre) area of Coastal Terrace Prairie, which is a CDFG-listed rare natural community (CDFG 2003), was mapped based upon the community description in Holland (1986) and guidance from the CCC (Dixon 2005). This community was located in one relatively continuous patch with its closest boundary 55 feet from the proposed project footprint. This patch of Coastal Terrace Prairie was identified based upon the presence of approximately 30 percent cover of tufted hairgrass, with subdominant species including Pacific reedgrass, Point Reyes ceanothus, California blackberry, Douglas iris (*Iris douglasiana*), bracken fern (*Pteridium aquilinum* var. *pubescens*), and the exotic species rough cat's ear (*Hypochaeris radicata*) and rattlesnake grass.

No other ESHAs were observed in the Study Area. The mixed coastal scrub covering the rest of the Study Area was evaluated for potential areas of Northern Coastal Bluff Scrub, another CDFG-listed rare natural community. Typical Northern Coastal Bluff Scrub includes low-growing shrubs influenced by high winds and salt spray, with characteristic species such as coast buckwheat (*Eriogonum latifolium*), lizard tail (*Eriophyllum staechadifolium*), dudleya (*Dudleya farinosa*), and seaside daisy (*Erigeron glaucus*) (Holland 1986). However, except for steep western bluff areas that are greater than 100 feet from the proposed development, Study Area coastal scrub was generally dominated by coyote brush and Pacific reedgrass, and did not have the low shrubs or species characteristic of Northern Coastal Bluff Scrub. One 0.03-acre area was dominated by the low-growing Point Reyes ceanothus and was most similar to the rare community definition. However, it was not determined to be Northern Coastal Bluff Scrub because other dominants and subdominants were coastal scrub species such as Pacific reedgrass, coyote brush, bracken fern, salal (*Gaultheria shallon*), and cow parsnip (*Heracleum lanatum*). This non-ESHA area is designated as "coastal bluff scrub" in Figure 2.

6.4 Offsite ESHAs

No indicators of wetlands or other ESHAs were observed on parcels adjacent to the Project Area within 100 feet of potential development areas. Adjacent parcels are predominantly developed and planted with exotic vegetation.

7.0 PROJECT DESCRIPTION

The proposed project is a single-family residential home and associated structures (Figure 5). The residence and associated structures will be built on a 0.08-acre footprint, which is constrained by the required geotechnical setback from the top of the bluffs and building code setbacks from adjacent properties. A parking area, driveway, and retaining walls are proposed for placement between the residence and the eastern Study Area boundary. A propane tank and tanks for stormwater runoff and septic collection would be placed at the southern end of the proposed development area. Access to the parcel is provided by an easement which extends east to Robinson Reef Drive. Utility lines will be installed and drainage features restored in the easement. The easement is outside of the 50-foot buffers for all ESHAs, and passes between parcels with existing single-family residences. To reduce the impacts of additional impervious surfaces on the coastal scrub habitat downslope, the driveway and parking area will be constructed with permeable paving or another pervious material.

The proposed building footprint and associated parking and structures are located approximately 20 feet from the nearest ESHAs, two coastal bluff morning glory individuals in the northern portion of the Study Area. This distance was measured from the nearest ESHA to the location of the proposed foundation, and does not account for the overhang of the roof extending beyond the foundation. However, the site plan shown in Figure 5 depicts the total size of structures, including overhanging roofs and decks, septic tanks, etc. All other special status plants and a 61-square foot area of Coastal Terrace Prairie are at least 50 feet from the proposed development area. However, the residence must be located within 100 feet of the identified ESHAs, because 100-foot buffers exclude the entire parcel from development.

Construction of the project will necessitate impacts outside of the planned building footprint. The total "construction impact zone", including the adjacent easement, measures approximately 0.16 acre, as shown in Figure 5. Fencing and construction best management practices along this boundary will ensure that impacts are minimized to the preserved 50-foot ESHA buffers and the two coastal bluff morning glory individuals approximately 20 feet from the proposed development. The southern portion of the parcel outside of the construction impact zone will be permanently fenced off as a Conservation Area (0.26 acre within the Study Area; 0.34 acre including lower bluff slopes of the parcel) and managed according to the Resource Protection Plan described in Appendix D.

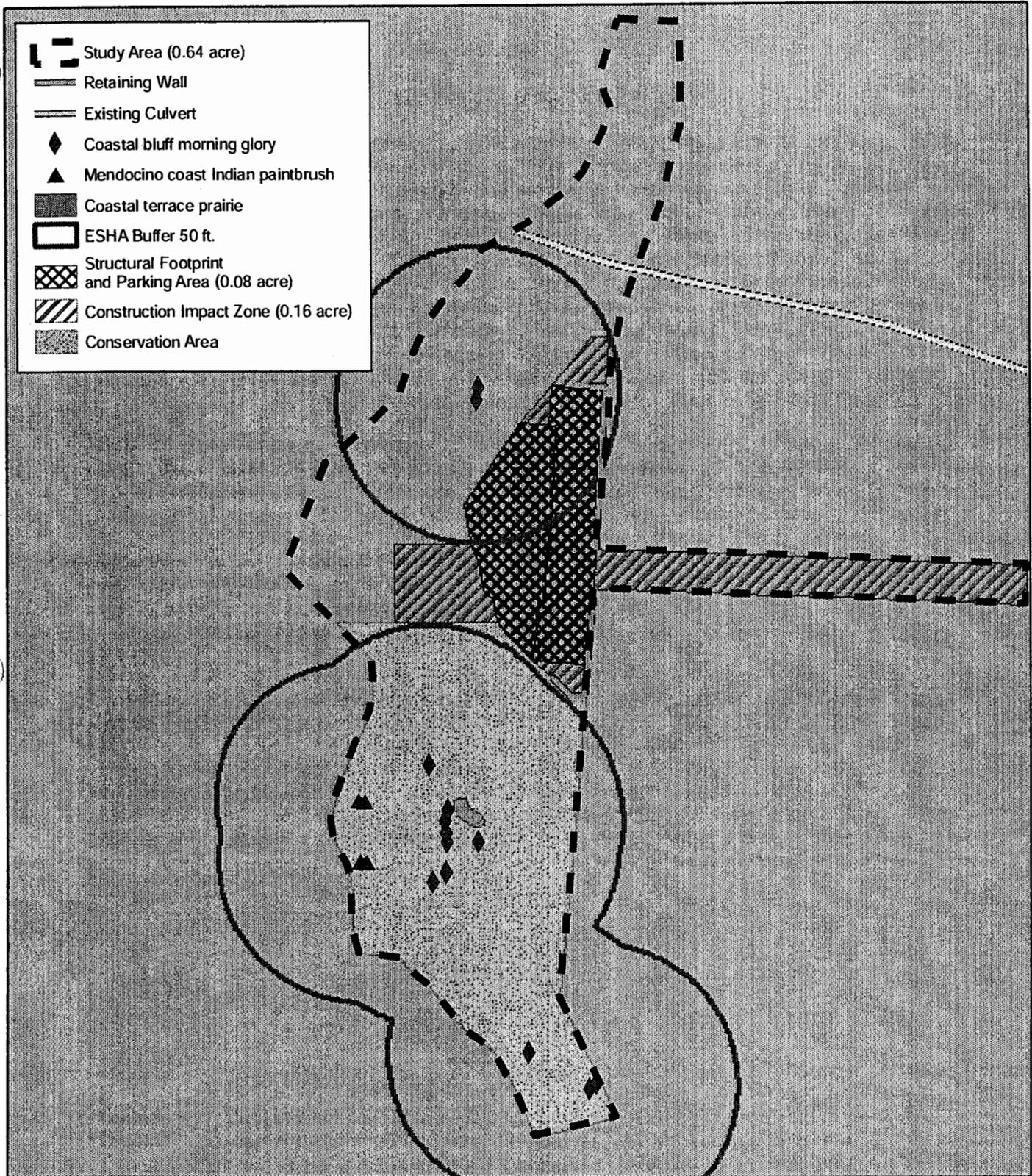
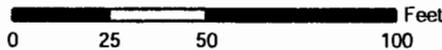


Figure 5. Proposed Project ESHA Map

Wernette Property
Gualala, California



ENVIRONMENTAL CONSULTANTS

Date: August 2008
 Base Photo: NAIP, 2005
 Map By: Michael Rochelle
 File: L:\Acad 2000Files\10000\10083\gis\
 arcmap\ESHA_Update_0508

8.0 BUFFER AREA ANALYSIS

Projects that propose construction with a buffer of less than 100 feet from an ESHA must provide information that indicates a lesser buffer distance will not have a significant adverse impact on the habitat. Structures will be allowed within the buffer area only if there is no other feasible site available on the parcel. The buffer area analysis utilizing Mendocino LCP Zoning Ordinance 20.496.020(A) [(1) through (4)(k)] is described below in Table 1.

Table 1. Buffer Area Analysis Mendocino County Coastal Zoning Code Section 20.496.020	
A. Buffer Areas. A buffer area shall be established adjacent to all environmentally sensitive habitat areas. The purpose of this buffer area shall be to provide for a sufficient area to protect the environmentally sensitive habitat from degradation resulting from future developments and shall be compatible with the continuance of such areas.	
Sections 1 - 3: Development between 50 and 100 feet from ESHAs	
<p>1. Width. The width of the buffer area shall be a minimum of one hundred feet, unless an applicant can demonstrate, after consultation and agreement with the California Department of Fish and Game, and County Planning staff, that one hundred feet is not necessary to protect the resources of that particular habitat area from possible significant disruption caused by the proposed development. The buffer areas shall be measured from the outside edge of the Environmentally Sensitive Habitat Areas (ESHAs) and shall not be less than fifty feet in width. New land division shall not be allowed which will create new parcels entirely within a buffer area. Developments permitted within a buffer area shall generally be the same as those uses permitted in the adjacent ESHA.</p>	<p>A single family residence is proposed for placement such that a corridor of coastal scrub and bluff habitat will be preserved and all ESHAs located in the southern half of the Study Area will be protected in a contiguous Conservation Area.</p> <p>Due to the small parcel size, the proposed building footprint is within 100 feet of most ESHAs on the site. A 50-foot buffer is expected to be adequate to protect the special status plants and Coastal Terrace Prairie ESHAs, since they will be protected in a corridor of protected native habitat. They are already in a location that is largely fragmented from other bluff habitats along the coastline due to surrounding development. Impacts due to construction within the 100-foot buffer would be mitigated as proposed in Section 9.0.</p> <p>With the exception of two individual plants, structures will not encroach upon a 50-foot buffer area around the ESHAs. No structures or construction will encroach upon the 50-foot buffers for 84.6% of the coastal bluff morning glory (11 of 13), 100% of the Mendocino coast Indian paintbrush, and 100% of the coastal terrace prairie located in the Study Area. Due to the combined geotechnical, building setback, and ESHA constraints, the most suitable development area requires construction within the 50-foot buffer of two coastal bluff morning glory plants.</p>

<p>1 (a). Biological Significance of Adjacent Lands. The degree of significance depends upon the habitat requirements of the species in the habitat area. Where a significant functional relationship exists, the land adjacent to a wetland, stream, or riparian habitat area shall also be considered to be part of the ESHA, and the buffer zone shall be measured from the edge of these lands and be sufficiently wide to protect these functional relationships.</p>	<p>The required geotechnical setback along with 50-foot buffers around the ESHAs protects most of the native-dominated habitat in the Study Area, and will provide areas for future seedling establishment. Mitigation measures include protection, monitoring, and restoration which will ensure protection of the genetic resources on this remnant fragment of coastal scrub and prairie ESHAs. Lands to the east of the Study Area consist of residences and dense populations of invasive and exotic plants; they have very limited value as buffers for ESHAs or the surrounding native habitats. Therefore, protection and restoration of the contiguous native-dominated bluffs and Conservation Area should be adequate to preserve the functions of the existing habitats and ESHAs contained within.</p>
<p>1 (b). Sensitivity of Species to Disturbance. The width of the buffer zone shall be based, in part, on the distance necessary to ensure that the most sensitive species of plants and animals will not be disturbed significantly by the permitted development. Such a determination shall be based on the following:</p> <ul style="list-style-type: none"> (i) Nesting, feeding, breeding, resting, or other habitat requirements of both resident and migratory fish and wildlife species; (ii) An assessment of the short-term and long-term adaptability of various species to human disturbance; (iii) An assessment of the impact and activity levels of the proposed development on the resource. 	<ul style="list-style-type: none"> (i) It is expected that common species of avian wildlife and other small mammals will utilize the steep bluffs. No special status wildlife species are likely to occur in the Study Area. In addition, a specific assessment for Behren's silverspot butterfly and Lotis blue butterfly determined that the Study Area does not contain suitable habitat for either species. Resting rocks utilized by pelagic species such as cormorants are located below the bluffs, but this area is already surrounded by residential development. The proposed project is not expected to create a significant source of disturbance as long as mitigation measures to prevent disturbance of nesting and breeding birds are implemented (see Section 9.0). (ii) The ESHAs are not likely to be adaptable to extensive human disturbance, so the project will protect the entire southern portion of the Study Area using fencing and other protective mitigation measures. Adaptability to human disturbance is not expected to be a factor in their survival, since they will be protected by 50-foot buffers and other measures. Invasive species, especially iceplant, French broom, and pampas grass, appear to be a more significant threat to these ESHAs in the short-term. (iii) The proposed project will result in low level impacts to the existing conditions in the buffer areas and no direct impacts to ESHAs given implementation of the mitigation measures within this report. A reduced 50-foot buffer should be adequate to protect the ESHAs. The mitigation measures aim to prevent direct disturbance from foot or vehicle traffic. The construction avoidance measures and Resource Protection Plan will also serve to prevent direct or

	<p>indirect disturbance of ESHAs and buffer areas, particularly by controlling encroachment of invasive species in the short-term. However, the longer-term viability of the site is limited due to coastal bluff erosion and existing development east of the Study Area; the proposed project would not significantly increase the existing threats to the ESHAs of historic fragmentation and continued erosion.</p>
<p>1 (c). Susceptibility of Parcel to Erosion. The width of the buffer zone shall be based, in part, on an assessment of the slope, soils, impervious surface coverage, runoff characteristics, and vegetative cover of the parcel and to what degree the development will change the potential for erosion. A sufficient buffer to allow for the interception of any additional material eroded as a result of the proposed development should be provided.</p>	<p>Development will occur on a relatively flat portion of the Study Area, where runoff and eroding sediments generally move west toward the bluffs, and that condition will not be affected by the proposed project and its drainage plan. Impervious surface coverage will be approximately 1,150 square feet, which would have a minor impact on runoff characteristics of the site. However, a runoff pumping station is planned to collect runoff from the residence and driveway, to avoid impacts from an increase in impervious surfaces. In addition, the driveway and parking area will be constructed with permeable paving or other pervious materials. The proposed project is not expected to affect the ESHAs through changes in runoff or erosion.</p>
<p>1 (d). Use of Natural Topographic Features to Locate Development. Hills and bluffs adjacent to ESHAs shall be used, where feasible, to buffer habitat areas. Where otherwise permitted, development should be located on the sides of hills away from ESHAs. Similarly, bluff faces should not be developed, but shall be included in the buffer zone.</p>	<p>To the greatest extent possible, consistent with geotechnical and other legal requirements, the applicant designed the proposed project to use natural topographic features. The Conservation Area and bluff faces will not be developed or altered. Construction impacts will occur on the flatter portions of the Study Area that are primarily dominated by non-native plant species.</p>
<p>1 (e). Use of Existing Cultural Features to Locate Buffer Zones. Cultural features (e.g. roads and dikes) shall be used, where feasible, to buffer habitat areas. Where feasible, development shall be located on the side of roads, dikes, irrigation canals, flood control channels, etc. away from the ESHA.</p>	<p>The existing easement will continue to provide the only access to the proposed project. No cultural features are present that could be used as a buffer.</p>

<p>1 (f). Lot Configuration and Location of Existing Development. Where an existing subdivision or other development is largely built-out and the buildings are a uniform distance from a habitat area, at least that same distance shall be required as a buffer zone for any new development permitted. However, if that distance is less than one hundred feet, additional mitigation measures (e.g. planting of native vegetation) shall be provided to ensure additional protection. Where development is proposed in an area that is largely undeveloped, the widest and most protective buffer zone feasible shall be required.</p>	<p>The Study Area is located on a relatively flat ledge to the west of an existing row of residences. Existing development in the vicinity is generally located 30 to 100 feet from the top of bluffs. The proposed project is positioned so that support structures are at least 40 feet from the top of bluff. Unlike the proposed project, adjacent lots do not contain large areas of preserved coastal scrub and are more densely developed, resulting in the Study Area supporting a very small remnant fragment of coastal terrace habitat. In addition, neighboring developed parcels already encroach upon the 100-foot buffer areas of several Study Area ESHAs.</p>
<p>1 (g). Type and Scale of Development Proposed. The type and scale of the proposed development will, to a large degree, determine the size of the buffer zone necessary to protect the ESHA. Such evaluations will be made on a case-by-case basis depending upon the resources involved, the degree to which adjacent lands have been developed, and the type of development in the area.</p>	<p>The proposed project is a single-family residence and associated structures on approximately 0.08 acre on a 0.72-acre parcel. Temporary construction impacts and the adjacent easement increase the total construction footprint to 0.16 acre. This is consistent with the scale and type of use on surrounding parcels. A majority of the flat portion of the Study Area will be protected from both long-term and temporary construction impacts by the 50-foot buffer areas, and mitigation measures including restoration activities described in the Resource Protection Plan. This area of coastal scrub is already largely isolated from similar nearby bluff habitats and the type and scale of proposed development will not significantly impact the habitat values of this isolated patch.</p>
<p>2. Configuration. The buffer area shall be measured from the nearest outside edge of the ESHA (e.g. for a wetland from the landward edge of the wetland; for a stream from the landward edge of the riparian vegetation or the top of bank.</p>	<p>The proposed buffer areas are measured from GPS-located positions of all individual plant ESHAs and the outer boundary of the Coastal Terrace Prairie. Wetland and plant surveys were conducted following definitions and methodology contained in the Coastal Act and the Mendocino County LCP.</p>
<p>3. Land Division. New subdivisions or boundary line adjustments shall not be allowed which will create or provide for new parcels entirely within a buffer area.</p>	<p>The property owner does not propose to subdivide the property.</p>

Section 4: Development within 50 feet of ESHAs

4. Permitted Development.

Development permitted within the buffer area shall comply at a minimum with the following standards:

(a). Development shall be compatible with the continuance of the adjacent habitat area by maintaining the functional capacity, their ability to be self-sustaining and maintain natural species diversity.

The proposed project would encroach upon the 50-foot buffer of two coastal bluff morning glory plants. These plants are located in relatively shady locations on the edge of a densely-vegetated shrubby mound. Although the project may create additional shade in this area, the coastal bluff morning glory will be protected by an approximately 20-foot buffer and will continue to receive southwestern-exposure sunlight. The supporting shrubby habitat for this climbing/trailing plant will not be disturbed. The diversity and functional capacity of habitat supporting these plants will not be substantially altered by the project, if the protective measures described in Section 9.0 are implemented.

4 (b). Structures will be allowed within the buffer area only if there is no other feasible site available on the parcel.

Several site limitations, including the necessary building setbacks, geotechnical setbacks, and a concentration of ESHAs in the southern portion of the Study Area resulted in proposing development in this location. The site chosen for development utilizes an area dominated primarily by common native and exotic species, and avoids the southern half of the Study Area to maintain a contiguous Conservation Area around the rest of the ESHAs and their surrounding 50-foot buffer areas. This Conservation Area will remain connected to additional bluff scrub habitat on the northern slopes of the parcel, including the two coastal bluff morning glory locations. The applicant states that a feasible project could not be constructed on the small remaining available footprint if a 50-foot buffer around the northern ESHAs was maintained. The remaining footprint could only fit a home with less than 540+ sq. ft. of livable space and only one of two required on-site parking spaces could be provided. The applicant also states that there would be no room for safety vehicle turn-around and the resulting structure would be inconsistent with Zoning Code Sec. 20.504.020, Special Communities and Neighborhoods.

<p>4 (c). Development shall be sited and designed to prevent impacts which would degrade adjacent habitat areas. The determination of the best site shall include consideration of drainage, access, soil type, vegetation, hydrological characteristics, elevation, topography, and distance from the natural stream channels.</p>	<p>The site chosen utilizes a relatively disturbed, flat area with the most direct access to the adjacent driveway easement. Development in this location minimizes potential impacts to ESHAs and its supporting coastal bluff habitat, particularly by preserving the southern portion and maintaining a connection between all ESHA habitats. Invasive species already present will be removed, and implementation of the Resource Protection Plan should help to prevent further introduction of invasives due to construction disturbance. Therefore, potential impacts on ESHAs and adjacent habitat will be minimized and mitigated by the siting of the project and ongoing restoration activities.</p> <p>Rick Macedo of CDFG and Teresa Spade from Mendocino County Planning visited the site in December 2007. Mr. Macedo concluded that, in general, the northern portion of the subject parcel represented relatively poor habitat conditions for native plant species such as the coastal bluff morning glory and that, in particular, with the concentration of non-native invasive species, the coastal bluff morning glory plants found there may not be self-sustaining under existing conditions. Mr. Macedo also concluded that the most desirable and likely sustainable populations were located in the south half of the subject parcel. The poor habitat conditions in the northern portion of the parcel could contribute to the eventual loss of the coastal bluff morning glory located there. Non-project related impacts such as the ongoing expansion of non-native invasive plants at the subject parcel could adversely affect the functional capacity of this area as well as the ability of the coastal bluff morning glory plants to remain self-sustaining and natural species diversity maintained.</p>
<p>4 (d). [Same as 4 (a)] Development shall be compatible with the continuance of such habitat areas by maintaining their functional capacity and their ability to be self-sustaining and to maintain natural species diversity.</p>	<p>As stated in Section 4(a), the proposed project would maintain a 20-foot buffer around two coastal bluff morning glory plants. The diversity and functional capacity of habitat supporting these plants will not be substantially altered by the project, if the protective measures described in Section 9.0 are implemented.</p>

<p>4 (e). Structures will be allowed within the buffer area only if there is no other feasible site available on the parcel. Mitigation measures, such as planting riparian vegetation, shall be required to replace the protective values of the buffer area on the parcel, at a minimum ratio of 1:1, which are lost as a result of development under this solution.</p>	<p>There is no other feasible site available for development on the parcel, and the applicant states that the only feasible design for the project requires encroachment on the 50-foot buffers of two coastal bluff morning glory individuals. The entire area outside of the 50-foot ESHA buffers, building setbacks, and geotechnical setbacks would result in a development area approximately 450 square feet in size. The construction of a single family residence within the Study Area requires additional infrastructure including parking, retaining walls, propane tanks, septic systems, and runoff storage tanks. Therefore, the applicant states that it is infeasible to construct a single family home and associated infrastructure within this limited area.</p> <p>Mitigation measures for this encroachment include establishing a Conservation Area on the southern portion of the Study Area, in order to protect and restore the native coastal bluff habitats contained within. The primary action that will mitigate for the loss of buffer area will be invasive species removal. Iceplant, French broom, and pampas grass are currently spreading throughout the Study Area, and without control efforts these plants are highly likely to displace many of the ESHAs and degrade the surrounding native habitats. Invasive species control will not only protect the ESHAs but will also serve to create additional space for planting or natural recruitment of native and rare plants.</p>
<p>4 (f). Development shall minimize the following: impervious surfaces, removal of vegetation, amount of bare soil, noise, dust, artificial light, nutrient runoff, air pollution, and human intrusion into the wetland, and minimize alteration of natural landforms.</p>	<p>The proposed project will use permeable paving for the driveway and parking area, and will employ a drainage system that avoids significant alterations to subsurface flows. The two ESHAs with reduced buffers are located slightly upslope from the development footprint, on a small mound that would not be altered by indirect impacts such as increased impervious cover or runoff downslope. Vegetation removal and other impacts will be limited to the construction impact zone shown in Figure 5, and mitigation measures were designed to prevent impacts to ESHAs and buffer areas during construction. Construction best management practices will minimize movement of dust, runoff, and pollutants, and ensure no impacts to breeding and nesting special status birds occur. Following construction, the residence will not alter conditions significantly, as the site is already surrounded by residential development. Permanent fencing will protect the ESHAs from foot and vehicle traffic.</p>

<p>4 (g). Where riparian vegetation is lost due to development, such vegetation shall be replaced at a minimum ratio of 1:1 to restore the protective values of the buffer area.</p>	<p>The Study Area does not contain any riparian vegetation.</p>
<p>4 (h). Aboveground structures shall allow peak surface water flows from a 100-year flood to pass with no significant impediment.</p>	<p>The Study Area does not contain drainage features that transport seasonal or flood water flows.</p>
<p>4 (i). Hydraulic capacity, subsurface flow patterns, biological diversity, and/or biological or hydrological processes, either terrestrial or aquatic, shall be protected.</p>	<p>Development within the 50-foot buffer of the two coastal bluff morning glory is not expected to affect any hydrological or biological processes supporting these species.</p>
<p>4 (j). Priority for drainage conveyance from a development site shall be through the natural stream environment zones, if any exist in the development area. In the drainage system design report or development plan, the capacity of natural stream environment zones to convey runoff from the completed development shall be evaluated and integrated with the drainage system whenever possible. No structure shall interrupt the flow of groundwater within a buffer strip. Foundations shall be situated with the long axis of interrupted impermeable vertical surfaces oriented parallel to the groundwater flow direction.</p>	<p>No natural streams or drainage ditches are present in the Study Area. A storm drainage pipe currently passes from neighboring properties through the parcel, with its outfall on the northern bluffs. Proposed structures will not impact subsurface flow patterns or groundwater flow, and will not affect drainage in the reduced ESHA buffers.</p>
<p>4 (k). If findings are made that the effects of developing an ESHA buffer area may result in significant adverse impacts to the ESHA, mitigation measures will be required as a condition of project approval. Noise barriers, buffer areas in permanent open space, land dedication for erosion control, and wetland restoration, including off-site drainage improvements, may be required as mitigation measures for developments adjacent to environmentally sensitive habitats.</p>	<p>Impacts to the two coastal bluff morning glory ESHAs are possible as a result of construction of the proposed project. Potential impacts relate to minor impacts to the long-term sustainability of the habitat due to changes in shading or nearby disturbance that leads to encroachment by invasive species. Several mitigation measures are proposed in Section 9.0 that will minimize these potential adverse impacts. Without development, the ESHAs are already threatened by invasive species, bluff erosion, and lack of intact habitat in the vicinity to provide areas for colonization and preservation of diverse genetic resources. Therefore, the proposed project will have minimal impacts compared to current conditions, and restoration and protective measures included as mitigation in this report should adequately preserve the remnant coastal bluff habitats onsite and rare plant ESHAs contained within.</p>

9.0 IMPACT ANALYSIS AND MITIGATION MEASURES

The project proposed includes 50-foot ESHA buffers from all construction impacts for all but two special status plant ESHAs. The buffer on the southeast side of two individual special status plants would be reduced to approximately 20 feet (Figure 5). The proposed buffers are expected to be adequate to protect the special status plant and Coastal Terrace Prairie ESHAs, if the mitigation measures described below are implemented. Due to the small parcel size, 100-foot buffers are not feasible nor would they be significantly beneficial since those buffer areas consist largely of adjacent development and dense cover of invasive and exotic plants.

Required building setbacks from adjacent properties, geotechnical constraints, and a cluster of ESHAs in the southern portion of the Study Area resulted in the proposed footprint in a relatively disturbed, flat area partially within the 50-foot buffer for two special status plant ESHAs. Fencing and restoration of disturbed habitats should be adequate to prevent direct or long-term disturbance impacts to these plants. No direct impacts to ESHAs are anticipated. There is potential for some indirect impacts to the ESHAs due to construction activities within the 100-foot buffer, loss of some coastal scrub habitat, and disturbance which may increase erosion or presence of invasive species.

Potential impacts to ESHAs in the Study Area and mitigation measures recommended to reduce these impacts to a less than significant level are discussed below. The goal of mitigation is to improve the condition of existing native habitats and maintain self-sustaining populations of coastal scrub, coastal bluff scrub, and Coastal Terrace Prairie species, including the three rare plant species (two of which are ESHAs) present within the Study Area.

Potential Impact 1: Direct and indirect impacts to special status species may occur over the long term due to loss of surrounding habitat or human disturbance. Potential impacts following construction include landscaping, vehicle parking, regular foot traffic, excessive shade, and small scale removal of vegetation or placement of fill near ESHAs.

Mitigation Measure 1a: Areas outside of the construction impact zone (Figure 5) shall be maintained in a condition similar to that which occurred within the Study Area prior to disturbance. No landscaping, paving, or other disturbance shall be allowed in this area. No activities may occur that would negatively impact native vegetation, topography, or hydrology in the ESHAs or the 50-foot ESHA buffer areas, either during or following construction. Some examples of these activities are vehicle parking or storage of other heavy materials, regular foot traffic, and clearing of vegetation (except for exotic species removal and other native habitat management activities).

Mitigation Measure 1b: Prior to issuance of the Coastal Development Permit, the landowner shall execute and record a non-revokable deed restriction which shall provide that the Conservation Area as depicted in Figure 5 shall be protected from development and disturbance (with the exception of restoration and other preservation activities) in perpetuity.

Mitigation Measure 1c: Protect the Conservation Area through installation of permanent exclusionary fencing beyond which only foot traffic for restoration, monitoring, and maintenance will be allowed. Detailed descriptions of restoration and maintenance activities to be performed in the Study Area can be found in the Resource Protection Plan (Appendix D).

Mitigation Measure 1d: Fencing and restoration of the Conservation Area shall be monitored annually by a qualified biologist for five years from completion of the initial invasive plant removal work or completion of construction, whichever occurs later. Details on invasive plant removal work and mitigation monitoring to be performed are provided in the Resource Protection Plan. The first mitigation monitoring visit and report may be combined with the construction completion report (see Mitigation Measure 2c). The biologist shall submit all reports to the County and to CDFG.

Mitigation Measure 1e: Both during and following development of the site, no exotic plants shall be planted in the Conservation Area. Landscaping outside of the Conservation Area shall be limited to local native plants or plants listed in the Gualala Town Plan Landscaping Species List.¹ Native plants are recommended for all exterior landscaping, as the entire construction impact zone falls within the 100-foot special status plant and Coastal Terrace Prairie buffer areas. When possible, planting should be of local stock to preserve local genetic diversity. Plant species listed as invasive ("High", "Moderate", and "Limited" impacts) on the California Invasive Plant Council's California Invasive Plant Inventory (Cal-IPC 2006) shall not be installed anywhere in the Study Area as it would pose a risk to onsite ESHAs and the coastal scrub plant community. The Resource Protection Plan provides further guidance on removal of invasive species, and any new or existing occurrences that threaten the preservation of the native plant community in the Conservation Area (generally those species listed as "High" or "Moderate") should be a target for removal in perpetuity, when feasible.

Potential Impact 2: Construction of the residence may adversely impact the onsite ESHAs and associated coastal scrub habitat. Potential construction impacts include release of sediment, debris, or other harmful materials, accidental placement of fill on the ESHAs or changes to the surrounding topography, and trampling and soil compaction by construction crews or equipment.

Populations of coastal bluff morning glory and Mendocino coast Indian paintbrush are concentrated primarily in the southern portion of the Study Area. Only two coastal bluff morning glory are located in the northern portion (Figure 2).

Mitigation Measure 2a: During construction, combination silt fence and construction fence shall be installed around the construction impact zone to indicate the limits of ground and vegetation disturbance (Figure 5). In most areas, this fencing will be located just inside the permanent Conservation Area fencing, so the permanent fencing need only be installed by the time construction is complete and temporary fencing is removed. The fencing shall be not be placed within the designated buffers of the special status plant and Coastal Terrace Prairie ESHAs. The barrier should be constructed in a manner that precludes access to areas beyond the construction impact zone by humans and equipment. No grading, placement of fill material, or other ground disturbance shall occur beyond the fence. The temporary fence shall only be removed once all construction activities are completed.

¹ Appendix B of the Gualala Town Plan section of the Coastal Element of the Mendocino County General Plan.

Mitigation Measure 2b: Prior to construction, the project contractors shall be informed of the sensitive resources within the Study Area. All special status ESHAs will be flagged by a qualified biologist. Furthermore, the significance of the flagging and the construction impact zone shall be clearly explained to all parties working within the Study Area.

Mitigation Measure 2c: The locations of flagging and construction fencing shall be determined by a qualified biologist. The biologist shall monitor the site weekly until the project is completed to ensure fencing is intact and that no impacts are occurring beyond the construction impact zone. Upon completion of construction, the biologist shall inspect the site for protection of the ESHAs and compliance with these mitigation measures. The biologist will then submit a construction completion report detailing the condition of the site to the County and CDFG. Initial restoration activities (specifically the initial removal of iceplant, pampas grass, and French broom) as provided in the Resource Protection Plan should also be performed by the time of completion of construction, if feasible. If that is the case, the first mitigation monitoring report may be combined with the construction completion report.

Mitigation Measure 2d: All activities that require substantial ground disturbance shall take place during the summer months (generally April 15 through October 31) to minimize potential erosion. The only activities that can take place outside of this window are planting and those activities that do not require ground disturbance or construction vehicle access to unpaved areas.

Mitigation Measure 2e: Areas of disturbed soil shall be mulched, seeded, or planted and covered with vegetation as soon as possible. If erosion control seeding is performed, a qualified biologist shall be consulted to ensure use of a native seed palette. Existing native vegetation shall be maintained in the construction impact zone to the maximum extent feasible. Trees shall be protected from damage by proper grading techniques.

Mitigation Measure 2f: Solid materials, including wood, masonry/rock, glass, paper, or other materials may be stored only within the construction impact zone as delineated in Figure 5. Solid waste materials should be properly disposed of offsite. Fluid materials, including concrete, wash water, fuels, lubricants, or other fluid materials used during construction should not be disposed of onsite and should be stored or confined as necessary to prevent spillage into natural habitats including the ESHA buffer areas. If a spill of such materials occurs, the area should be cleaned immediately and contaminated materials disposed of properly. The affected area should be restored to its natural vegetated condition.

Potential Impact 3: Construction in the Study Area has the potential to impact breeding birds during the nesting season as well as special status bats. Impacts to migratory breeding birds are prohibited by the Migratory Bird Treaty Act.

Mitigation Measure 3: Construction activities requiring substantial ground disturbance should be limited to the period from September 1 to October 31 to avoid impacts to special status birds or special status bats during the breeding season. If this cannot occur, surveys for special status breeding birds and special status bats will be conducted by a qualified biologist prior to ground disturbance.

If active special status breeding bird nests or bat maternity sites or breeding colonies are observed within 300 feet of the construction impact zone, no substantial ground disturbance activities shall occur within a 100-foot exclusion zone for special status passerine birds, and within a 300-foot exclusion zone for special status raptors or other special status non-passerine bird species. The applicant will maintain the appropriate exclusion zones until all young are either no longer dependent upon the nest, substantial ground disturbance activities cease, or the breeding bird season ends, whichever is sooner. The applicant will retain a biologist to monitor the nest site weekly while the exclusion zone is in place to ensure that the buffer is sufficient to protect the nest site from construction-related disturbance. If special status bat species are found to be roosting in trees that are to be removed by construction, removal of those trees will be delayed until between September 1 and the end of February.

10.0 CONCLUSION

Surveys of the Study Area determined that two types of ESHAs are present in this relatively isolated coastal scrub community. The Study Area contains several specimens of two special status plant species: coastal bluff morning glory (*Calystegia purpurata* ssp. *saxicola*) and Mendocino coast Indian paintbrush (*Castilleja mendocinensis*). In addition, Point Reyes ceanothus (*Ceanothus gloriosus* var. *gloriosus*), a CNPS List 4 plant species that is not considered an ESHA, was found scattered throughout the Study Area. A 61-square foot patch of Coastal Terrace Prairie, a rare natural community is present in the southern portion of the Study Area and is also an ESHA.

The buffer analysis determined that the preservation and protection of habitats outside the construction impact zone, native plant restoration, and construction best management practices can mitigate the indirect impacts to ESHAs due to a reduced buffer. A buffer less than 50 feet from the nearest special status plants is adequate with mitigation measures to reduce impacts to the two coastal bluff morning glory individuals. The other onsite ESHAs will be protected by a 50-foot buffer and enhanced by the implementation of mitigation measures describe in this report. Fencing, restoration, construction monitoring, and additional mitigation measures will be implemented to greatly reduce impacts and enhance the onsite habitat and special status plant populations. Therefore, no significant long-term impacts to the ESHAs in the Study Area are expected to occur as a result of development if the mitigation measures described in Section 9.0 are implemented.

Existing resources within and adjacent to the Study Area are typical of disturbed coastal prairie, coastal scrub, coastal bluff scrub, and coniferous forest dominated by native trees and non-native herbaceous plant species. Parcels in the vicinity contain similar habitat types or are more densely developed, and contain single family residential homes similar to that proposed within the Study Area. Development will be placed in the most feasible and most disturbed portion of the Study Area, where exotic species are dominant. The native-plant-dominated portions will be protected and will help to support self-sustaining populations of the special status plants in the Study Area. Construction of a house on a 0.08-acre footprint on the 0.72-acre subject parcel with implementation of the mitigation measures described in Section 9.0 is therefore not expected to result in any significant impacts to Environmentally Sensitive Habitat Areas.

11.0 REFERENCES

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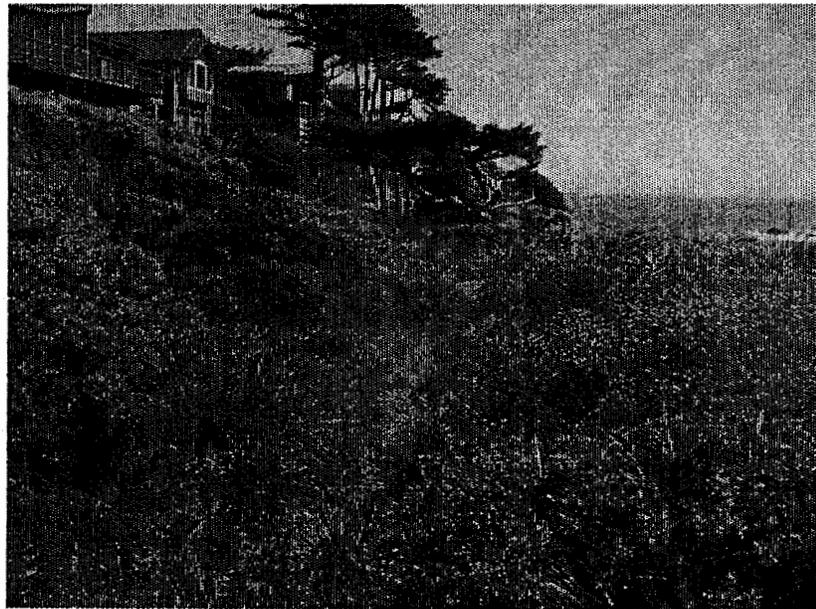
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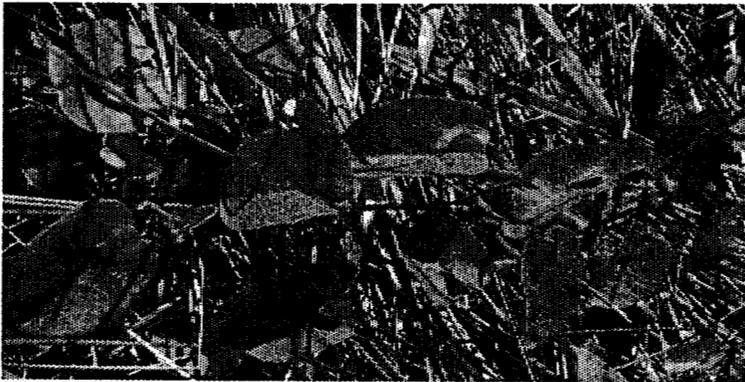
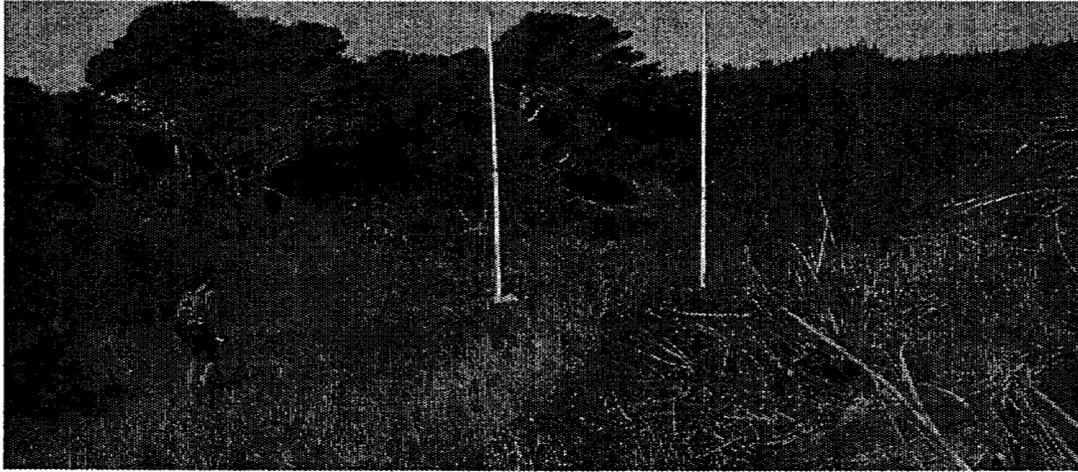
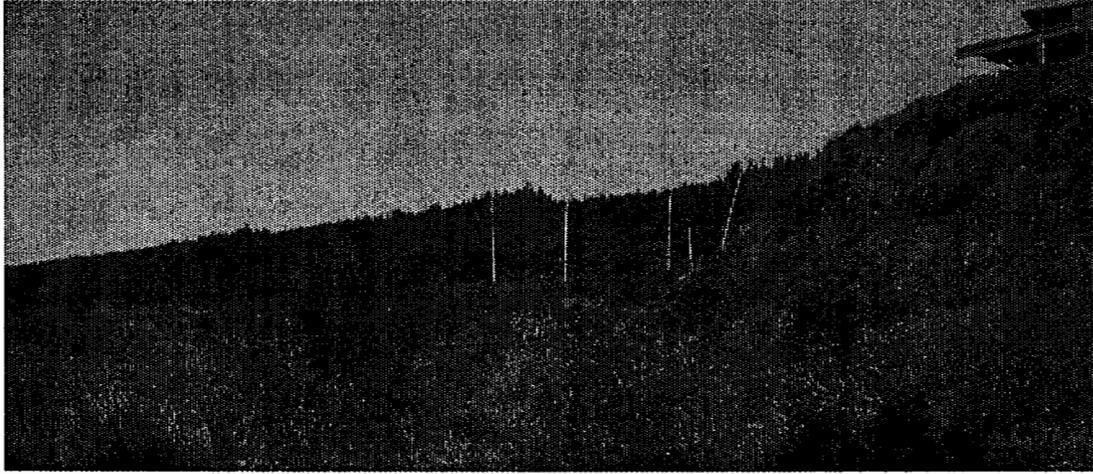


Appendix A - Representative Photographs

Above: Typical coastal scrub in the Study Area, dominated by Pacific reedgrass, with continued expansion of invasive iceplant. (03/13/07)

Below: Conservation Area in southern half of parcel. (05/22/08)





Above and middle: Looking north at the approximate proposed residence footprint (white poles are for a previous larger proposal, new footprint is smaller and farther south). (03/13/07) Two coastal bluff morning glory are located at the edge of the shrubby wind-pruned trees.
Below left and right: Coastal bluff morning glory (CNPS List 1B) exhibiting diagnostic leaf shape. (05/22/08)



Appendix B. Plant species observed by WRA, Inc at the Wernette property (Study Area) during surveys conducted on May 22, May 28, and July 5, 2008.

SCIENTIFIC NAME	COMMON NAME	FAMILY	non-native	status (rarity or invasiveness)
<i>Achillea millefolium</i>	yarrow	Asteraceae		
<i>Agrostis aff. capillaris</i>	colonial bentgrass	Poaceae	x	
<i>Aira caryophylla</i>	silvery hairgrass	Poaceae	x	
<i>Aira praecox</i>	yellow hairgrass	Poaceae	x	
<i>Anagallis arvensis</i>	scarlet pimpernel	Primulaceae	x	
<i>Anaphalis margaritacea</i>	pearly everlasting	Asteraceae		
<i>Angelica hendersonii</i>	coast angelica	Apiaceae		
<i>Anthoxanthum odoratum</i>	sweet vernal grass	Poaceae	x	moderate invasive
<i>Arctotheca calendula</i>	cape weed	Asteraceae	x	moderate invasive
<i>Avena barbata</i>	slender wild oats	Poaceae	x	moderate invasive
<i>Baccharis pilularis</i>	coyote brush	Asteraceae		
<i>Briza maxima</i>	rattlesnake grass	Poaceae	x	limited invasive
<i>Bromus carinatus</i>	California brome	Poaceae		
<i>Bromus diandrus</i>	ripgut brome	Poaceae	x	moderate invasive
<i>Calamagrostis nutkaensis</i>	Pacific reedgrass	Poaceae		
<i>Calystegia purpurata ssp. purpurata</i>	western morning glory	Convolvulaceae		
<i>Calystegia purpurata ssp. saxicola</i>	coastal bluff morning glory	Convolvulaceae		CNPS List 1B
<i>Carduus pycnocephalus</i>	Italian thistle	Asteraceae	x	moderate invasive
<i>Carex pachystachya</i>	thick headed sedge	Cyperaceae		
<i>Carpobrotus edulis</i>	ice plant	Aizoaceae	x	high invasive
<i>Castilleja wightii</i>	Wight's paintbrush	Scrophulariaceae		
<i>Ceanothus foliosus var. foliosus</i>	wavyleaf ceanothus	Rhamnaceae		
<i>Ceanothus gloriosus var. gloriosus</i>	Point Reyes ceanothus	Rhamnaceae		CNPS List 4
<i>Cirsium vulgare</i>	bull thistle	Asteraceae	x	moderate invasive
<i>Cistus sp.</i>	rockrose	Cistaceae	x	
<i>Cortaderia jubata</i>	pampas grass	Poaceae	x	high invasive
<i>Cotoneaster sp.</i>	cotoneaster	Rosaceae	x	moderate invasive
<i>Cupressus macrocarpa</i>	Monterey cypress	Cupressaceae	x	limited invasive
<i>Cynodon dactylon</i>	bermuda grass	Poaceae	x	moderate invasive
<i>Dactylis glomerata</i>	orchard grass	Poaceae	x	limited invasive
<i>Danthonia californica var. americana</i>	California oatgrass	Poaceae		

SCIENTIFIC NAME	COMMON NAME	FAMILY	non-native	status (rarity or invasiveness)
<i>Danthonia pilosa</i>	hairy oatgrass	Poaceae	x	
<i>Delphinium hesperium</i> ssp. <i>hesperium</i>	western larkspur	Ranunculaceae		
<i>Deschampsia cespitosa</i> ssp. <i>holciformis</i>	coastal tufted hairgrass	Poaceae		
<i>Dudleya farinosa</i>	bluff lettuce	Crassulaceae		
<i>Equisetum telmateia</i> ssp. <i>braunii</i>	giant horsetail	Equisetaceae		
<i>Elymus glaucus</i> ssp. <i>glaucus</i>	blue wild rye	Poaceae		
<i>Erechtites glomerata</i>	New Zealand fireweed	Asteraceae	x	moderate invasive
<i>Erigeron glaucus</i>	seaside daisy	Asteraceae		
<i>Eriophyllum staechadifolium</i>	lizard tail	Asteraceae		
<i>Eschscholzia californica</i>	California poppy	Papaveraceae		
<i>Euphorbia lathyris</i>	compass plant	Euphorbiaceae	x	
<i>Fragaria chiloensis</i>	beach strawberry	Rosaceae		
<i>Galium aparine</i>	common bedstraw	Rubiaceae		
<i>Galium californicum</i> ssp. <i>californicum</i>	California bedstraw	Rubiaceae		
<i>Gaultheria shallon</i>	salal	Ericaceae		
<i>Genista monspessulana</i>	French broom	Fabaceae	x	high invasive
<i>Geranium dissectum</i>	cut leaved geranium	Geraniaceae	x	moderate invasive
<i>Gnaphalium purpureum</i>	purple cudweed	Asteraceae		
<i>Heracleum lanatum</i>	cow parsnip	Apiaceae		
<i>Heterotheca sessiliflora</i> ssp. <i>bolanderi</i>	golden aster	Asteraceae		
<i>Holcus lanatus</i>	velvet grass	Poaceae	x	moderate invasive
<i>Hypochaeris radicata</i>	rough cat's ear	Asteraceae	x	moderate invasive
<i>Iris douglasiana</i>	Douglas' iris	Iridaceae		
<i>Juncus balticus</i>	Baltic rush	Juncaceae		
<i>Juncus bolanderi</i>	Bolander's rush	Juncaceae		
<i>Juncus bufonius</i>	toad rush	Juncaceae		
<i>Juncus effusus</i> var. <i>brunneus</i>	bog rush	Juncaceae		
<i>Juncus patens</i>	spreading rush	Juncaceae		
<i>Kniphofia uvaria</i>	redhot poker	Liliaceae	x	
<i>Lathyrus vestitus</i> var. <i>vestitus</i>	wild sweetpea	Fabaceae		
<i>Leucanthemum vulgare</i>	oxeye daisy	Asteraceae	x	moderate invasive
<i>Ligusticum apiifolium</i>	celery leaved lovage	Apiaceae		
<i>Linum bienne</i>	flax	Linaceae	x	

SCIENTIFIC NAME	COMMON NAME	FAMILY	non-native	status (rarity or invasiveness)
<i>Lotus angustissimus</i>	slender lotus	Fabaceae	x	
<i>Lotus corniculatus</i>	bird's foot trefoil	Fabaceae	x	
<i>Lotus micranthus</i>	small flowered lotus	Fabaceae		
<i>Lupinus albus</i> var. <i>albus</i>	silver lupine	Fabaceae		
<i>Luzula comosa</i>	common wood rush	Juncaceae		
<i>Myrica californica</i>	Pacific wax myrtle	Myricaceae		
<i>Pinus aff. radiata</i>	Monterey pine?	Pinaceae	x	limited invasive
<i>Plantago lanceolata</i>	English plantain	Plantaginaceae	x	limited invasive
<i>Plantago subnuda</i>	naked plantain	Plantaginaceae		
<i>Poa annua</i>	annual bluegrass	Poaceae	x	
<i>Polygala californica</i>	California milkwort	Polygalaceae		
<i>Polystichum munitum</i>	western sword fern	Dryopteridaceae		
<i>Prunella vulgaris</i> var. <i>lanceolata</i>	mountain selfheal	Lamiaceae		
<i>Pseudotsuga menziesii</i> var. <i>menziesii</i>	Douglas-fir	Pinaceae		
<i>Pteridium aquilinum</i> var. <i>pubescens</i>	bracken fern	Dennstaedtiaceae		
<i>Raphanus sativus</i>	wild radish	Brassicaceae	x	limited invasive
<i>Rhamnus californica</i> ssp. <i>californica</i>	California coffeeberry	Rhamnaceae		
<i>Rosa nutkana</i> var. <i>nutkana</i>	Nootka rose	Rosaceae		
<i>Rubus discolor</i>	Himalayan blackberry	Rosaceae	x	high invasive
<i>Rubus ursinus</i>	California blackberry	Rosaceae		
<i>Rumex crispus</i>	curly dock	Polygonaceae	x	limited invasive
<i>Sanicula crassicaulis</i>	Pacific sanicle	Apiaceae		
<i>Sisyrinchium bellum</i>	blue-eyed grass	Iridaceae		
<i>Stachys ajugoides</i> var. <i>rigida</i>	hedge nettle	Lamiaceae		
<i>Stellaria media</i>	common chickweed	Caryophyllaceae	x	
<i>Trifolium wormskioldii</i>	coast clover	Fabaceae		
<i>Tropaeolum majus</i>	nasturtium	Tropaeolaceae	x	
<i>Umbellularia californica</i>	California bay	Lauraceae		
<i>Vaccinium ovatum</i>	California huckleberry	Ericaceae		
<i>Vicia villosa</i> ssp. <i>villosa</i>	hairy vetch	Fabaceae	x	
<i>Viola adunca</i>	western dog violet	Violaceae		
<i>Vulpia</i> sp.	fescue	Poaceae	x?	

Appendix C. Potential for occurrence of special status plant species at the Wernette property (Study Area). List compiled from the California Natural Diversity Database (CNDDB) and California Native Plant Society (CNPS) Electronic Inventory searches (June 2008) of the Gualala, Mallo Pass Creek, Point Arena, Eureka Hill, Zeni Ridge, Saunders Reef, McGuire Ridge, Stewarts Point, and Plantation USGS 7.5' quadrangles.

SPECIES	STATUS*	HABITAT REQUIREMENTS	HABITAT SUITABILITY OF STUDY AREA	SPECIES EVALUATION** AND SURVEY RESULTS
<i>Abronia umbellata</i> ssp. <i>breviflora</i> pink sand-verbena	List 1B	Coastal dunes; foredunes and interdunes with sparse cover. 0-12 m. Blooms June-Oct.	Unsuitable. Study Area lacks shifting sand dune habitats.	No potential. No suitable habitat in the Study Area. Not observed during 2008 surveys.
<i>Agrostis blasdalei</i> Blasdale's bent grass	List 1B	Coastal bluff scrub, coastal dunes, coastal prairie. Sandy or gravelly soil close to rocks; often in nutrient-poor soil with sparse vegetation. 5-150 m. Blooms May-July.	Suitable. Coastal bluffs, scrub and grassy openings onsite could support this species.	High potential. The Study Area contains suitable habitat and an occurrence was recorded within 5 miles. However, species was not observed during 2008 surveys.
<i>Astragalus</i> <i>agnicidus</i> Humboldt County milk-vetch	SE, List 1B	Broadleaved upland forest, North Coast coniferous forest/openings, disturbed areas, sometimes roadsides, south aspects. 180-800 m. Blooms April-Sept.	Unsuitable. Species occurs at higher elevations; suitable forested habitat not present.	No potential. No suitable habitat in the Study Area. Not observed during 2008 surveys.
<i>Calystegia</i> <i>purpurata</i> ssp. <i>saxicola</i> coastal bluff morning-glory	List 1B	Coastal dunes, coastal scrub, North Coast coniferous forest. 10-105 m. Blooms May-Sept.	Suitable. Coastal scrub in the Study Area is similar to documented habitat for this species.	Present. Identified by WRA in 2004; locations updated by WRA during the May 2008 survey. Several potential hybrids with ssp. <i>purpurata</i> were mapped as well.
<i>Campanula</i> <i>californica</i> swamp harebell	List 1B	Bogs and fens, closed-cone coniferous forest, coastal prairie, meadows and seeps, marshes and swamps (freshwater), North Coast coniferous forest/mesic. 1-405 m. Blooms June-Oct.	Unsuitable. Mesic area onsite is only wet for short duration and is dominated by invasive iceplant. No suitable wetland habitat present.	No potential. No suitable habitat in the Study Area. Not observed during 2008 surveys.
<i>Carex californica</i> California sedge	List 2	Bogs and fens, closed-cone coniferous forest, coastal prairie, meadows and seeps, drier areas of swamps, marsh margins. 90-335 m. Blooms May-Aug.	Unsuitable. No suitable wetland habitat present, and Study Area is at lower elevation than known occurrences of this species.	No potential. No suitable habitat in the Study Area. Not observed during 2008 surveys.

SPECIES	STATUS*	HABITAT REQUIREMENTS	HABITAT SUITABILITY OF STUDY AREA	SPECIES EVALUATION** AND SURVEY RESULTS
<i>Carex lyngbyei</i> Lyngbye's sedge	List 2	Marshes and swamps (brackish or freshwater). 0-10 m. Blooms May-Aug.	Unsuitable. No perennial or seasonal marsh present to support this obligate wetland species.	No potential. No suitable habitat in the Study Area. Not observed during 2008 surveys.
<i>Carex saliniformis</i> deceiving sedge	List 1B	Coastal prairie, coastal scrub, meadows and seeps, marshes and swamps (coastal salt); mesic sites. 3-230 m. Blooms June, sometimes July.	Unsuitable. Flatter mesic portions of the Study Area are densely vegetated, invaded by iceplant, and drier than the wetland habitat where this species is found.	No potential. No suitable habitat in the Study Area. Not observed during 2008 surveys.
<i>Castilleja ambigua</i> ssp. <i>humboldtensis</i> Humboldt Bay owl's-clover	List 1B	Marshes and swamps (coastal salt). In coastal salt marsh with <i>Spartina</i> , <i>Distichlis</i> , <i>Salicornia</i> , <i>Jaumea</i> . 0-3 m. Blooms April-Aug.	Unsuitable. No salt marsh habitat present in vicinity to support this obligate wetland species.	No potential. No suitable habitat in the Study Area. Not observed during 2008 surveys.
<i>Castilleja mendocinensis</i> Mendocino Coast paintbrush	List 1B	Coastal bluff scrub, closed-cone coniferous forest, coastal dunes, coastal prairie, coastal scrub. Often on sea bluffs or cliffs. 0-160 m. Blooms April-Aug.	Suitable. Bluff tops and slopes in the Study Area with coastal scrub and coastal prairie provide suitable habitat for this species.	High potential. Only <i>C. wightii</i> was observed in 2008, but the bluff habitats are largely inaccessible. Previous observations of <i>C. mendocinensis</i> may have been misidentified, but these locations will be protected as ESHAs nonetheless.
<i>Cupressus goveniana</i> ssp. <i>pigmaea</i> pygmy cypress	List 1B	Closed-cone coniferous forest, on podzol-like Blacklock soil in pygmy cypress forest community. 30-600 m.	Unsuitable. No dense clay soils present that would support this species; no pygmy forest community observed in immediate vicinity of the Study Area.	No potential. No suitable habitat in the Study Area. Not observed during 2008 surveys.
<i>Erigeron biolettii</i> streamside daisy	List 3	Broadleafed upland forest, cismontane woodland, North Coast coniferous forest/rocky, mesic. 30-1100 m. Blooms June-Oct.	Unsuitable. Suitable forested habitat not present.	No potential. No suitable habitat in the Study Area. Not observed during 2008 surveys.

SPECIES	STATUS*	HABITAT REQUIREMENTS	HABITAT SUITABILITY OF STUDY AREA	SPECIES EVALUATION** AND SURVEY RESULTS
<i>Erigeron supplex</i> supple daisy	List 1B	Coastal bluff scrub, coastal prairie; usually in grassy sites. 5-50 m. Blooms May-July.	Suitable. Coastal bluffs, scrub and grassy openings onsite could support this species.	High potential. Suitable habitat present and several occurrences are recorded in the vicinity. However, this species was not observed during 2008 surveys.
<i>Fritillaria roderickii</i> Roderick's fritillary	SE, List 1B	Coastal bluff scrub, coastal prairie, valley and foothill grassland; grassy slopes, mesas. 15-610 m. Blooms March-May.	Suitable. Coastal bluffs, scrub and grassy openings onsite could support this species.	Moderate potential. Suitable habitat present but species is very rare and was not observed during 2008 surveys.
<i>Gilia capitata</i> ssp. <i>pacifica</i> Pacific gilia	List 1B	Coastal bluff scrub, chaparral (openings), coastal prairie, valley and foothill grassland. 5-869 m. Blooms April-Aug.	Suitable. Coastal bluffs, scrub and grassy openings onsite could support this species.	Moderate potential. Suitable habitat present although no known occurrences are recorded in the vicinity. Not observed during 2008 surveys.
<i>Gilia capitata</i> ssp. <i>tomentosa</i> woolly-headed gilia	List 1B	Coastal bluff scrub (rocky outcrops). 15-155 m. Blooms May-July.	Suitable. Rocky coastal bluff slopes in the Study Area may support this species.	Moderate potential. Suitable habitat present although no known occurrences are recorded in the vicinity. Not observed during 2008 surveys.
<i>Gilia millefoliata</i> dark-eyed gilia	List 1B	Coastal dunes. 2-20 m.	Unsuitable. Study Area lacks shifting sand dune habitats.	No potential. No suitable habitat in the Study Area. Not observed during 2008 surveys.
<i>Glyceria grandis</i> American manna grass	List 2	Bogs and fens, wet meadows, ditches, streambanks and lake margins, and ponds in valleys and lower elevations in the mountains. 15-1980 m. Blooms Jun-Aug.	Unsuitable. No suitable wetland habitat present to support this obligate wetland species.	No potential. No suitable habitat in the Study Area. Not observed during 2008 surveys.
<i>Hemizonia congesta</i> ssp. <i>leucocephala</i> hayfield tarplant	List 3	Coastal scrub, valley and foothill grassland; sometimes roadsides. 25-455 m. Blooms April-Oct.	Suitable. Coastal scrub and grassy openings onsite could support this species.	Unlikely. Habitat may be suitable but this species typically occurs farther inland and Study Area is near the northern edge of its range. Not observed during 2008 surveys.

SPECIES	STATUS*	HABITAT REQUIREMENTS	HABITAT SUITABILITY OF STUDY AREA	SPECIES EVALUATION** AND SURVEY RESULTS
<i>Hesperrevax sparsiflora</i> var. <i>brevifolia</i> short-leaved evax	List 2	Sandy bluffs and flats in coastal bluff scrub and coastal dunes. 0-215 m. Blooms March-June.	Suitable (marginal). Study Area supports coastal bluff scrub but soils consist of loams and loamy clays.	Moderate potential. Bluffs may support this species, but soil type may be a limiting factor. Not observed during 2008 surveys.
<i>Horkelia marinensis</i> Point Reyes horkelia	List 1B	Sandy flats and dunes in coastal dune, coastal prairie, or coastal scrub. 5-350 m. Blooms May-Sept.	Suitable (marginal). Study Area supports coastal bluff scrub but soils consist of loams and loamy clays.	Moderate potential. Bluffs may support this species, but soil type may be a limiting factor. CNDDDB occurrence documented along Highway 1 near the Study Area. Not observed during 2008 surveys.
<i>Horkelia tenuiloba</i> thin-lobed horkelia	List 1B	Broadleaved upland forest, chaparral, valley and foothill grassland; mesic openings, sandy. 50-500 m. Blooms May-July.	Unsuitable. No suitable plant communities or sandy soils present, and Study Area is at lower elevation than known occurrences of this species.	No potential. No suitable habitat in the Study Area. Not observed during 2008 surveys.
<i>Lasthenia californica</i> ssp. <i>bakeri</i> Baker's goldfields	List 1B	Closed-cone coniferous forest (openings), coastal scrub, meadows and seeps, marshes and swamps. 60-520 m. Blooms April-Oct.	Suitable (marginal). Some suitable coastal scrub habitat present, but species historically occurred on grassy hillslopes; grassy openings are minimal and disturbed in the Study Area.	Unlikely. Several occurrences in coastal prairie in Mendocino County, although most are at least 50 years old. No <i>Lasthenia</i> have been observed in the Study Area during 2008 or previous surveys.
<i>Lasthenia californica</i> ssp. <i>macrantha</i> perennial goldfields	List 1B	Coastal bluff scrub, coastal dunes, coastal scrub. 5-520 m. Blooms Jan.-Nov.	Suitable. Coastal scrub and bluff scrub could support this species.	Unlikely. Occurrences recorded in the vicinity in similar bluff habitat, but no <i>Lasthenia</i> have been observed in the Study Area during 2008 or previous surveys.
<i>Lasthenia conjugens</i> Contra Costa goldfields	FE, List 1B	Cismontane woodland, playas (alkaline), valley and foothill grassland; vernal pools, swales, low depressions, in open grassy areas. 0-470 m. Blooms March-June.	Unsuitable. Mesic area onsite lacks vernal pool characteristics or vegetation and is dominated by invasive iceplant. No woodland or valley/foothill grassland habitats present in the Study Area.	No potential. No suitable habitat in the Study Area. No <i>Lasthenia</i> spp. have been observed in the Study Area during 2008 or previous surveys.

SPECIES	STATUS*	HABITAT REQUIREMENTS	HABITAT SUITABILITY OF STUDY AREA	SPECIES EVALUATION** AND SURVEY RESULTS
<i>Lathyrus palustris</i> marsh pea	List 2	Bogs and fens, coastal prairie, coastal scrub, lower montane coniferous forest, marshes and swamps, North Coast coniferous forest/ mesic. 1-100 m. Blooms March-Aug.	Unsuitable. Mesic area onsite is only wet for short duration and is dominated by invasive iceplant. No suitable wetland habitat present for this obligate wetland species.	Unlikely. Mesic area in coastal scrub/prairie is marginal habitat as it is relatively dry and dominated by invasive species. Not observed during 2008 surveys.
<i>Leptosiphon rosaceus</i> rose leptosiphon	List 1B	Coastal bluff scrub. 0-100 m. Blooms April-July.	Suitable. Coastal bluff scrub habitat present in the Study Area.	Unlikely. Bluff slopes may provide suitable habitat, although this species is not known to occur north of Sonoma County. Not observed during 2008 surveys.
<i>Lilium maritimum</i> coast lily	List 1B	Broadleaved upland forest, closed-cone coniferous forest, coastal prairie, coastal scrub, marshes and swamps (freshwater), North Coast coniferous forest/ often roadside ditches. 5-475 m. Blooms May-Aug.	Suitable. Coastal scrub and grassy openings could support this species, although the mesic areas with most suitable conditions for the species are dominated by invasives (predominantly iceplant).	Moderate potential. Moderately suitable habitat present and several occurrences located in the vicinity. However, this species was not observed during 2008 surveys.
<i>Lycopodium clavatum</i> running-pine	List 2	Lower montane coniferous forest, marshes and swamps, North Coast coniferous forest/ often mesic sites in forest openings, edges, understory, and roadsides. 45-1640 m. Blooms June-Aug.	Unsuitable. Species occurs at higher elevations; suitable forested habitat not present.	No potential. No suitable habitat in the Study Area. Not observed during 2008 surveys.
<i>Microseris paludosa</i> marsh microseris	List 1B	Closed-cone coniferous forest, cismontane woodland, coastal scrub, valley and foothill grassland. 5-300 m. Blooms April-June, sometimes July.	Suitable. Coastal scrub and grassy openings could support this species.	Unlikely. Potential suitable habitat present but only one occurrence recorded in the county. Not observed during 2008 surveys.
<i>Sidaicea calycosa</i> ssp. <i>rhizomata</i> Point Reyes checkerbloom	List 1B	Freshwater marshes near the coast. 3-75 m. Blooms April-Sept.	Unsuitable. No perennial or seasonal marsh habitat present that would support this obligate wetland species.	No potential. No suitable habitat in the Study Area. Not observed during 2008 surveys.

SPECIES	STATUS*	HABITAT REQUIREMENTS	HABITAT SUITABILITY OF STUDY AREA	SPECIES EVALUATION** AND SURVEY RESULTS
<i>Sidalcea malviflora</i> <i>ssp. purpurea</i> purple-stemmed checkerbloom	List 1B	Broadleaved upland forest, coastal prairie. 15-85 m. Blooms May-June.	Suitable (marginal). No forest habitat present; coastal prairie habitat consists of only a few small grassy openings in the Study Area.	Unlikely. Coastal prairie habitat is minimal in the Study Area and vicinity. Not observed during 2008 surveys.
<i>Trifolium buckwestiorum</i> Santa Cruz clover	List 1B	Broadleaved upland forest, cismontane woodland, coastal prairie; gravelly, margins. 105-610 m. Blooms April-Oct.	Unsuitable. Species occurs at higher elevations; forested habitat not present and coastal prairie habitat consists of only a few small grassy openings in the Study Area.	No potential. No suitable habitat in the Study Area. Not observed during 2008 surveys.
<i>Usnea longissima</i> long-beard lichen	none	Grows in the "redwood zone" on a variety of trees incl big leaf maple, oaks, ash, Doug-fir, and bay. 0-2000' in California.	Unsuitable. Species typically found in open forest habitats not present in the Study Area.	Unlikely. Few trees present in coastal scrub habitat. Not observed during 2008 surveys.

* Key to status codes:

- FE Federal Endangered
- SE State Endangered
- List 1B CNPS List 1B: Plants rare, threatened or endangered in California and elsewhere
- List 2 CNPS List 2: Plants rare, threatened, or endangered in California, but more common elsewhere
- List 3 CNPS List 3: Plants about which CNPS needs more information (a review list)

** Species evaluation ratings:

No Potential. Habitat on and adjacent to the site is clearly unsuitable for the species requirements (cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).
Unlikely. Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site.
Moderate Potential. Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.
High Potential. All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.
Present. Species is observed on the site or has been recorded (i.e. CNDDDB, other reports) on the site recently.

APPENDIX D

RESOURCE PROTECTION PLAN

for the Proposed Wernette Project
in Gualala, California



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Figure A - Conservation Area Map

ATTACHMENTS

Attachment A - Plant species observed at 38454 Robinson Reef Drive

1.0 INTRODUCTION

Development of a single-family residence at 38454 Robinson Reef Drive requires mitigation for potential impacts to rare plants and communities found on the parcel. In coastal properties, the Mendocino County Local Coastal Program (LCP) and the California Coastal Act (CCA) require the establishment of buffer zones to protect rare plants and other unique environmental features designated as Environmentally Sensitive Habitat Areas (ESHAs). Due to site limitations including a small parcel size and required setbacks from adjacent properties and the coastal bluff slopes, home construction will encroach on the 100-foot buffers around rare plants found in this parcel. This Resource Protection Plan (Plan) was developed to guide the preservation and restoration of the coastal plant community in all portions of the parcel not impacted by development. The Plan is intended to mitigate for development less than 100 feet from the ESHAs by controlling the invasive species that are currently encroaching upon the native communities and ESHAs.

The 0.72-acre parcel (APN 145-161-27) is located west of Highway 1 in the southeastern corner of Mendocino County. It is an undeveloped site on Robinson Point at the edge of coastal bluffs, located west of Robinson Reef Drive. The parcel ranges from approximately sea level to 130 feet in elevation. The single-family home and associated structures and construction impacts will be located in a contiguous area in the center of the parcel, adjacent to the eastern boundary and existing easement (Figure A). The southern portion of the parcel will be designated as the 0.34-acre deed-restricted Conservation Area, as stipulated in the Biological Report of Compliance for Mendocino Coastal Development Permit (WRA 2008).

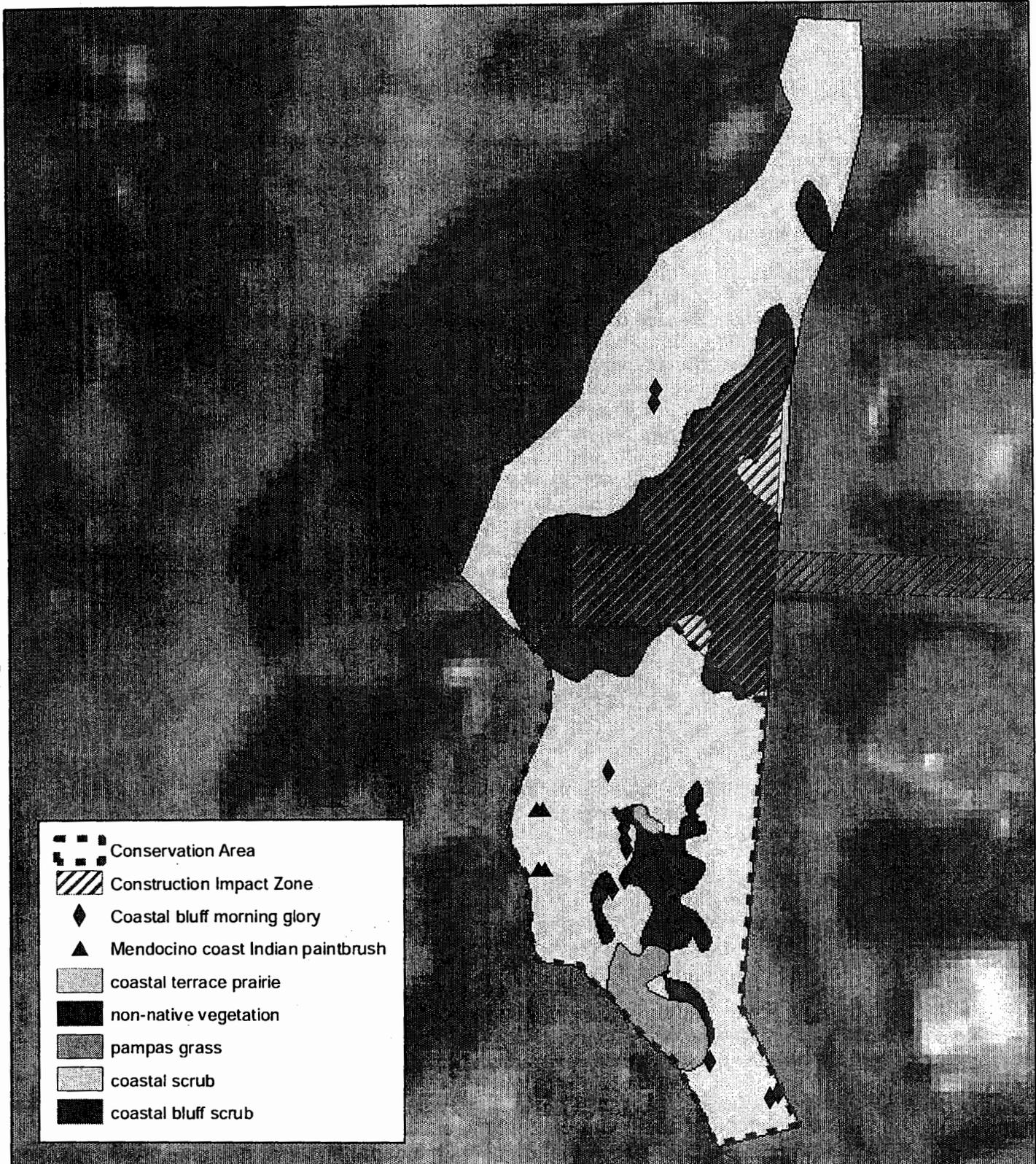
The purpose of this Resource Protection Plan is to provide the background information, resources, and guidance on preserving the rare plant ESHAs and native coastal scrub, coastal bluff scrub, and coastal terrace prairie plant communities in the Conservation Area. This plan also describes measures to conserve the two coastal bluff morning glory ESHAs in the northern portion of the parcel. Fencing, restrictions on use, removal or management of threats such as invasive plants, and some planting of native species will help to mitigate for impacts from development of the parcel. The goal is to maintain a healthy native plant community that will be relatively self-sustaining and more resilient to indirect impacts from neighboring land uses.

2.0 DEFINITIONS

In several locations throughout this Plan, native and non-native plant species are mentioned. The following definitions of these terms have been included to assist the property owner or manager in determining the status of plant species on the property.

2.1 Native Plants

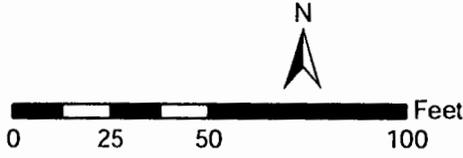
For the purposes of this Plan, "native plants" refers to species that are locally-native to the site. Specifically, they are believed by the scientific community to have been present in coastal areas of Mendocino or Sonoma counties prior to the settlement of Europeans. *The Jepson Manual* (Hickman 1993) or online CalFlora Database (www.calflora.org) can be references for determining if a plant is native or non-native. The monitoring biologist, local botanists, or the local chapter of the California Native Plant Society can help to determine if a plant found onsite or in nurseries can be considered locally-native.



-  Conservation Area
-  Construction Impact Zone
-  Coastal bluff morning glory
-  Mendocino coast Indian paintbrush
-  coastal terrace prairie
-  non-native vegetation
-  pampas grass
-  coastal scrub
-  coastal bluff scrub

Figure A. Conservation Area Map

Wernette Property
Gualala, California



ENVIRONMENTAL CONSULTANTS

Date: November 2007
 Base Photo: NAIP, 2005
 Map By: Derek Chan
 File: L:\Acad 2000Files\10000\10083\gis\arcmap\FigA_MitigationArea_20080812.mxd

2.2 Non-Native (Exotic) Plants

As described above, any plant species not considered native to local coastal habitats will be defined as "non-native" (or "exotic"). Non-native plants may not pose any threat to the native coastal scrub community, and can sometimes be appropriately used in formal landscaping or vegetable gardening, with restrictions explained in Section 6.4. Certain non-native plants may also be defined as invasive, as described below.

2.3 Invasive Plants

Invasive plants are species that are undesirable, like weeds, but also displace native plants or otherwise have negative impacts on native plant communities. Invasive plants are most often, but not always, non-native species that are able to encroach upon and dominate or disrupt the native habitat being restored or preserved. Native species can be considered invasive if they grow aggressively on a site only because of human disturbance, such as nutrient pollution, and they adversely affect the diversity or general functions of a native community.

The monitoring biologist and the property manager can refer to the California Invasive Plant Inventory (Cal-IPC 2006; available online) or *Invasive Plants of California's Wildlands* (Bossard et al. 2000) to assist them in determining if a plant is an invasive species. Cal-IPC ranks species as "High", "Moderate", or "Limited" impact, and any species from these lists found on or in the vicinity of the Conservation Area should be evaluated for potential threat to management goals. Even species ranked as "Limited" impact for California as a whole can have severe impacts in a particular county or property due to local history and site conditions.

3.0 EXISTING CONDITIONS

3.1 Hydrology and Soils

Precipitation, surface runoff, and groundwater flow all contribute to the hydrology of the site. There are no streams, tributaries, or water bodies present. Runoff comes from adjacent areas both on and off site to the north and east.

The Soil Survey of Mendocino County, Western Part (USDA 2005), shows two types of soils mapped within the property: Dystropepts with 30 to 75 percent slopes and Bruhel-Shinglemill complex with 2 to 15 percent slopes. Dystropepts are mapped in the western sloped portion of the property, while the majority of construction and restoration activity will occur in the flatter areas mapped as Bruhel-Shinglemill complex.

Dystropepts, 30 to 75 percent slopes, are on side slopes of marine terraces, derived from sandstone or shale. Dystropepts are generally shallow or moderately deep and well-drained. Surface runoff is rapid or very rapid, and the hazard of erosion is severe or very severe.

Bruhel-Shinglemill complex, 2 to 15 percent slopes is described as occurring on marine terraces in areas dominated by Bishop pine (*Pinus muricata*) and annual and perennial grasses. Bruhel loam is a deep soil that is well-drained and derived from sandstone. Shinglemill loam is similarly deep but is poorly drained and formed in marine sediments.

3.2 Plants

The subject parcel supports a relatively undisturbed coastal scrub community, much of it on steep slopes extending to the ocean. The parcel is dominated by low shrubs and herbaceous perennials and also has scattered Monterey cypress (*Cupressus macrocarpa*) and Douglas fir trees (*Pseudotsuga menziesii* var. *menziesii*). The Conservation Area also supports coastal terrace prairie dominated by native perennial bunchgrasses. These communities are adapted to exposed bluff conditions, which include rocky and poorly-developed soil, and constant winds and salt spray. Growth can occur almost year-round in this moist environment, but the most significant growth and flowering period occurs in late spring and early summer. The coastal terrace prairie is protected from adverse impacts as an ESHA under the CCA and LCP.

The parcel also supports two special status plant species, most of which occur in the Conservation Area. These species are described in more detail below, and are protected from adverse impacts as ESHAs by the CCA and LCP. Special status species have been formally listed, are proposed as endangered or threatened, or are candidates for such listing under the federal Endangered Species Act (ESA) or California Endangered Species Act (CESA). Plants on the California Native Plant Society (CNPS) Lists 1 or 2 are also considered special status plant species. CNPS also maintains List 3 to catalogue species for which more information is needed, and List 4 for species with limited distribution that may be locally rare or significant. List 3 and 4 species are not protected as ESHAs, but should nevertheless be targets for conservation in the management of the Conservation Area.

Attachment A provides a list of species observed on the parcel. Many other coastal bluff scrub and prairie species may be suitable for planting on the property if local nursery stock is available.

3.2.1 Coastal Bluff Morning Glory (*Calystegia purpurata* ssp. *saxicola*)

Coastal bluff morning glory, a CNPS List 1B plant, is a small trailing or climbing perennial with white or purple-tinged, bell-shaped flowers. Its stem and leaves die back each year after producing seed. This subspecies occurs in rocky coastal scrub, coastal dune, and North Coast coniferous forest habitats within Mendocino, Marin, and Sonoma counties. The flowers are typically in bloom between May and September. Western morning glory (*Calystegia purpurata* ssp. *purpurata*) is a more common subspecies also found on the site and in the vicinity. Hybrids may also be present, as there are several plants with identifying characteristics of both subspecies. Potential hybrids are shown on supporting figures as the rare subspecies, and these shall be protected as ESHAs unless further information is obtained confirming their identification as hybrids or common specimens.

Thirteen coastal bluff morning glory individuals have been mapped in the parcel, primarily in the Conservation Area, a minimum of 50 feet from the proposed development area. Two are located in the northern portion, outside of the Conservation Area and approximately 20 feet from the proposed residence foundation, due to site constraints. These two individual plants were found climbing dense, taller coastal scrub vegetation which will be fenced off from the residential area.

3.2.2 Mendocino Coast Indian Paintbrush (*Castilleja mendocinensis*)

This CNPS List 1B perennial is hemiparasitic (acquires some nutrients from the roots of other plants), with orange-red to red bracts (leaf-like structures that are more noticeable than the

flowers), yellow flowers, and wide, fleshy non-glandular leaves. The brightest coloration and flowers are generally seen from April to August. Mendocino coast Indian paintbrush occurs in coastal bluff scrub, closed-cone coniferous forest, coastal dunes, coastal prairie, and coastal scrub habitats in Mendocino County, and has been recorded as occurring in Gualala.

Four Mendocino coast Indian paintbrush individuals were observed in 2004 along the bluff face in the southwestern portion of the Conservation Area, a minimum of 75 feet from the proposed development area. These locations and all accessible portions of the parcel were examined for this species in 2008, but only the common species (*Castilleja wightii*) appeared to be present. As these plants are located on steep bluff slopes, they are difficult to access for precise identification. Therefore, all mapped locations from 2004 are assumed extant and are considered ESHAs with the applicable protective buffers incorporated into site plans for the proposed project. The Conservation Area may provide suitable habitat for planting of the rare species if available from local nurseries or other sources.

3.2.3 Point Reyes Ceanothus (*Ceanothus gloriosus* var. *gloriosus*)

Point Reyes ceanothus is a CNPS List 4 evergreen shrub that grows low to the ground in mats, with deep blue to violet flowers and dark-green holly-like leaves. It occurs in closed-cone coniferous forest, coastal bluff scrub, coastal dunes, and coastal scrub habitats in Mendocino, Marin, and Sonoma counties.

Approximately fifty Point Reyes ceanothus individuals are scattered throughout the flat portions of the parcel with the majority occurring as mats in the Conservation Area. Several individuals may be impacted by construction, and shall be transplanted to an appropriate location in the Conservation Area, such as bare areas resulting from exotic species removal.

3.3 Land Use

The Conservation Area and new single-family residence are located adjacent to existing homes to the east. The parcel formerly held a railroad bed, but was entirely re-vegetated by the time of residential construction. Historic land use at Robinson Point included a lumber mill, and now the area is primarily residential. To the north and south of the parcel, narrow fragments of coastal bluff habitat persist on some less densely-developed parcels.

3.4 Existing Threats

Restoration of the Conservation Area is aimed at reducing existing and potential future threats to special status plant species and ensuring self-sustaining populations. This requires preserving the general character, species composition, soils and hydrology of the native coastal scrub and prairie communities. Threats to these characteristics include excessive disturbance such as trampling or increased runoff from irrigation, erosion of sediments or pollutants from developed areas, and invasive species. Certain invasive species can interfere with management goals by changing the physical qualities of the site, such as by growing taller and shading out native plants, or by dropping large amounts of litter or otherwise affecting soil nutrients and the litter layer. Invasive species may also impact a community by spreading and reproducing more successfully than natives, eventually dominating and replacing native habitat.

Highly invasive plants are already present in the Conservation Area and have the potential to crowd out native and special status species due to their prolific seeding, aggressive spread, or shading of smaller plants. The introduction of new invasive species to the Conservation Area is

also possible, particularly due to construction impacts such as ground disturbance and the presence of numerous vehicles that may carry seeds in their tire treads or other equipment. Currently, the invasive plants that most threaten the preservation of the native coastal scrub and prairie species are: iceplant (*Carpobrotus edulis*), French broom (*Genista monspessulana*), and pampas grass (*Cortaderia jubata*). Potential impacts of these species and suggested control efforts are described below in Section 4.3.

4.0 METHODS

4.1 Fencing and Signage

Permanent exclusionary post and cable or similar fencing will mark the boundary of the Conservation Area and other habitats outside of the construction impact zone. Beyond the fence, only foot traffic will be allowed and should be limited to visits for restoration, monitoring, and maintenance by the property owner, monitoring biologist, or designated maintenance personnel.

Prior to construction, the project contractors and property owner will be informed of the sensitive resources on the site. All special status plants will be flagged by a qualified biologist. Furthermore, the significance of the flagging and the Conservation Area will be clearly explained to all parties working on the site both during residential construction and future maintenance of the property and Conservation Area.

4.2 Personnel

The current or future property owner will be responsible for implementing this Plan with the guidance of the local planning board, environmental consultants, or conservation groups such as a local CNPS chapter. Implementation of restoration activities described below should be performed by a qualified biologist or landscape contractor with knowledge of local native plants and invasive species removal techniques in sensitive habitats. Annual monitoring and reporting must be performed by a qualified biologist with experience in native plant restoration and special status species preservation and regulations.

4.3 Vegetation Management

4.3.1 Invasive Plant Removal Techniques

The Weed Workers' Handbook (The Watershed Project and Cal-IPC 2004) and the Global Invasive Species Initiative website (The Nature Conservancy 2007) and Weed Control Methods Handbook (Tu et al. 2001) can serve as guides for effective management techniques for invasive plant species (see References in Section 7.0). Three methods are outlined below, and can be used individually or in combination to remove or contain most invasive plant populations encountered in the Conservation Area.

4.3.1.1 Hand/Mechanical Removal

Hand removal or use of small handheld equipment (such as a Weed Wrench or a chainsaw) is the preferred method of removing invasive plant species from the Conservation Area. Many species must be removed entirely and disposed of carefully, including stems and all root fragments, in order to prevent regeneration or spread. Also,

pruning and disposal of seed heads and flowers of invasive species in plastic trash bags or a hot compost pile can help to prevent spread if removal of the entire plant is not possible or is planned for a later date. If hand removal methods are tried and found to be ineffective after several years of repeated treatment, or the problem is too widespread for hand removal to be practical, then chemical controls may be implemented as described below.

4.3.1.2 Herbicides

Glyphosate- or triclopyr-based herbicides, such as Round-up and Garlon, may be utilized if invasive plants cannot be managed through other environmentally sensitive methods. The herbicide must be applied according to the label, using a localized spot-treatment method and with care to avoid drift onto native plants. Herbicide may not be used when rain is predicted within 24 hours after application, or in locations within 5 feet of any ESHA. This approval does not obviate the need for the property owner to obtain any other applicable approvals for the use of these chemicals.

4.3.1.3 Mowing

The use of weed-eaters (or "weed-whackers") or similar trimmers with string or metal blades is appropriate for mowing contiguous patches or large individuals of certain invasive species. Perennial and annual grasses can often be managed effectively by mowing each time the inflorescence (flower/seed head) appears. Complete removal of perennial species also requires digging of the roots and/or rhizomes, but mowing can be used to suppress growth and prevent seeding until future removal is performed. Any mowing should be performed with care to avoid native grasses and other interspersed native species. Mowing is unlikely to be necessary or appropriate in the Conservation Area, unless construction impacts lead to a significant invasion of non-native grasses.

4.3.2 Priority Invasives and Weedy Non-Native Species

The non-native species listed below have been observed on the site, and should be targets for removal throughout the parcel, due to their current large populations or their ability to invade and replace native plant communities.

Current non-native species threats:

Bermuda grass (*Cynodon dactylon*)
cape weed (*Arctotheca calendula*)
French broom (*Genista monspessulana*)
Himalayan blackberry (*Rubus discolor*)
iceplant (*Carpobrotus edulis*)
nasturtium (*Tropaeolum majus*)
orchard grass (*Dactylis glomerata*)
pampas grass (*Cortaderia jubata*)
redhot poker (*Kniphofia uvaria*)
wild radish (*Raphanus sativus*)

Invasive grasses and annuals that can be partially controlled by mowing, as long as significant damage to native plants can be avoided, include: velvet grass (*Holcus lanatus*), sweet vernal grass (*Anthoxanthum odoratum*), wild oats (*Avena* sp.), ripgut brome (*Bromus diandrus*), and Italian thistle (*Carduus pycnocephalus*).

Three particular plants are present in significant numbers and are currently the primary threats to the coastal scrub and prairie communities and special status plants, as detailed below.

4.3.2.1 Iceplant (*Carpobrotus edulis*)

Iceplant is a low-growing perennial succulent that forms mats in coastal and sandy habitats. This species was planted widely in the past to stabilize steep slopes and dunes, but now spreads on its own and overgrows shrubs and grassland plants, preventing the establishment and growth of native species. Iceplant currently covers the driveway area and is found in scattered patches throughout the Conservation Area. The densest patches are on the steep slopes on the eastern boundary of the property, but the greatest threat to native coastal bluff communities is in flatter areas where iceplant is invading and currently makes up about 20-50% of the vegetation.

Iceplant can be removed at any time of year, but work should not be performed on the steep slopes of the eastern boundary during the rainy months (approximately November through April). Removal of the roots is necessary to control iceplant, but root systems are typically not extensive or deep compared to the above-ground volume of material. Iceplant can be pulled by hand and with a pick to remove most roots. Because of the large volume of iceplant present, debris should be removed and piled on disturbed ground outside of the Conservation Area or taken to a local green waste collection facility. Follow-up inspections are necessary for two to three years following removal, because root fragments left in the ground will continue to sprout.

4.3.2.2 French broom (*Genista monspessulana*)

A small population of French broom is found in the center of the Conservation Area, directly south of the proposed residence. This perennial shrub can produce thousands of seeds and alters soil chemistry by adding nitrogen, often providing new habitat for other non-native species. The shrubs shade out native species and can create a single-species stand with almost no vegetation beneath the canopy. The prolific seed production means that prompt removal is important and follow-up for five to ten years may be necessary to remove new seedlings. French broom should be removed before the dark brown seed pods form in the summer, or branches containing seed pods should be carefully placed in bags since pods will easily pop open to release the seeds.

French broom usually forms a tap root that can reach several feet deep, and which must be removed or killed down to about 6" deep to prevent resprouting. Cut stumps will resprout vigorously, but can be controlled by painting the stump with herbicide or peeling all of the bark down about 1" below the soil surface. Both of these methods must be done soon after cutting. Small plants (with stems less than 1/2" in diameter) can be pulled out by hand, but this should be done when the soil is moist to prevent breakage. A "weed wrench" is available in many sizes to provide leverage for completely removing larger plants and roots. However, cutting and peeling bark is the recommended approach for larger plants on the parcel, because of the small number of plants to be controlled and the desire to avoid soil disturbance and herbicide use whenever possible.

4.3.2.3 Pampas grass (*Cortaderia jubata*)

Pampas grass is a large perennial grass that aggressively covers disturbed areas, especially open rocky slopes. Two main clusters of pampas grass are found at the top

of the bluff to the northwest and southwest of the proposed residence, including several very large and ten to fifteen smaller specimens. Many more are scattered along the steep bluff slope in areas that are only accessible with rappelling equipment. Professional landscape contractors with rappelling experience may be hired to perform this work, and iceplant removal on the steep western slopes could also be performed using these techniques. Due to the potential cost and associated risk, work on the steep western slopes is only recommended rather than required. The role of these plants as a seed source for the Conservation Area should be evaluated during annual biological monitoring surveys.

Pampas grass produces large amounts of seed that are carried easily by wind, so it is desirable to remove flowering stems whenever possible and to carefully dispose of the plumes when seed may be present. The large volume of live and dead leaves should be cut and removed from the site to gain access to the root mass. The large central root mass of pampas grass must be dug from the ground and these roots will regrow if left in contact with soil. Therefore, a pampas grass clump must be turned upside with roots in open air if left onsite, or more preferably the entire plant should be composted or disposed of as green waste. A patch of pampas grass should only require one year of follow-up to remove sprouting roots, but the entire site should be monitored annually for new seedlings due to the seed bank and numerous seed sources on surrounding lands.

4.3.3 Planting

Planting is generally not necessary when small areas of soil are exposed during invasive plant removal. If management activities result in contiguous areas of disturbed soil larger than approximately ten square feet, these should be planted with locally-native coastal bluff scrub or coastal prairie species such as those listed in Table 1 below and in Attachment A.

Non-native plants shall not be planted in the Conservation Area. Invasive plants or any aggressive plant that can easily spread into the Conservation Area shall not be installed anywhere on the property as it would pose a risk to special status plants and the native plant communities.

The optimal time to plant native species is during the winter after rains have begun and when more rain is predicted in the coming weeks and months. This allows the plants to establish sufficient root systems and eliminates the need for supplemental irrigation. Watering is still recommended immediately after planting and during any dry spells during the first few months after planting.

4.3.4 Managing for Rare Plants

Prior to any construction or management activities on the property, special status plant species and other selected native vegetation will be flagged to ensure that the selected native plant species are not inadvertently destroyed. Additionally, prior to initiation of restoration activities, contractors will be informed about the significance of the flagged vegetation.

Planting of locally-native rare plants such as those already found on or near the parcel (see Section 3.2) is encouraged, if a source of seeds or container plants is available. The Conservation Area contains suitable habitat for two additional valuable species for butterflies, western dog violet (*Viola adunca*) and harlequin lotus (*Lotus formosissimus*), which should be planted or seeded if nursery stock is available.

Table 1. Suggested species for planting or seeding disturbed areas. (This list should not be considered exhaustive or restrictive; plantings may include other locally-native coastal bluff scrub or prairie species, depending on availability).

Scientific name	Common name
<i>Achillea millefolium</i>	yarrow
<i>Armeria maritima ssp. californica</i>	sea pink
<i>Artemisia suksdorfii</i>	coastal mugwort
<i>Bromus carinatus</i>	California brome
<i>Danthonia californica</i>	California oatgrass
<i>Delphinium hesperium ssp. hesperium</i>	western larkspur
<i>Deschampsia cespitosa ssp. holciformis</i>	coastal tufted hairgrass
<i>Erigeron glaucus</i>	seaside daisy
<i>Eriophyllum staechadifolium</i>	lizard tail
<i>Fragaria chiloensis</i>	beach strawberry
<i>Heterotheca sessiliflora ssp. bolanderi</i>	golden aster
<i>Iris douglasiana</i>	Douglas' iris
<i>Poa unilateralis</i>	ocean bluff bluegrass
<i>Polystichum munitum</i>	western sword fern
<i>Sisyrinchium bellum</i>	blue-eyed grass

5.0 SUCCESS MONITORING

For five years following the completion of construction, a qualified biologist shall perform annual mitigation monitoring and submit a report to the County and the California Department of Fish and Game (CDFG). The purpose of the site evaluation would be to verify that the specifications included within this report and success criteria summarized below have been completed. Additionally, if any additional problems are encountered that threaten the preservation of the onsite ESHAs or supporting habitats in the Conservation Area, appropriate contingency measures shall be recommended and carried out by the applicant. The monitoring biologist will also assess the presence of any newly introduced non-native plant species and recommend removal as needed.

5.1 Success Criteria

Preservation of the coastal scrub and prairie communities and special status species requires prevention of extensive human disturbance and of spread of highly invasive species present in the Conservation Area. Therefore, the following criteria will be evaluated to ensure that the basic preliminary steps necessary for preservation are being performed:

- Fencing between the Conservation Area and the developed areas of the property is installed and intact. The Conservation Area shows no sign of damage from foot traffic or any other uses besides the necessary management and monitoring activities outlined in this Plan.
- The special status plant populations in the Conservation Area remain stable, with populations of each species maintained at a minimum of 80% of the number observed at the start of construction.
- All accessible populations of iceplant, French broom, and pampas grass are to be removed before completion of residential construction. Follow-up monitoring and control of resprouts and new seedlings of these species shall be performed semiannually during the five-year post-project monitoring, or more if monitoring indicates the need for further follow-up. Other Cal-IPC-listed species (including High, Moderate, and Limited impact species such as Himalayan blackberry, orchard grass, and wild radish) shall be removed by the end of the fourth year if determined feasible by the monitoring biologist.
- New invasive species or expanded populations due to invasive species removal or other disturbance are included in control efforts, and the creation of bare ground that would further encourage invasion is minimized by mulching or alternative removal techniques.

5.2 Monitoring Schedule

Monitoring by a qualified biologist will occur annually beginning immediately after completion of residential construction or following completion of initial removal of all accessible iceplant, French broom, and pampas grass, whichever occurs later. Monitoring will continue for a total of five years, and each year the site will be evaluated for progress in achieving the success criteria.

5.3 Reporting

Monitoring reports to be submitted to the County and CDFG should include a general description of work performed over the previous year and an evaluation of the Conservation Area according to the success criteria. The numbers and condition of special status and other rare plants should be described, as well as any observed threats to these plants or to native habitats. New invasions of exotic species and plans for their removal or control should be detailed, as necessary. The fifth year monitoring report should also evaluate whether the Conservation Area has become sufficiently self-sustaining or whether additional invasive species control work or other conservation activities or monitoring should be performed.

6.0 RESTRICTIONS

The following restrictions on activities in the subject parcel are intended to prevent further disturbance to the native plant communities and associated special status plant ESHAs. Any deviation from these restrictions requires approval from the County and CDFG.

6.1 Construction and Material Storage

Construction and storage of materials within the Conservation Area is limited to exclusionary fencing and signage described in Section 4.1, and piles of plant debris. These debris piles may only be left in the Conservation Area on sites that are already covered in non-native plants or bare ground, and only if necessary to suppress regrowth of invasive plants, to prevent erosion, or to prevent the spread of exotic seeds or plant parts that can regenerate. Otherwise, these piles should be removed from the Conservation Area and composted when feasible. A layer of mulch, such as certified weed-free rice straw may also be applied to larger areas of exposed soil if there is potential for significant erosion or regrowth of non-native species.

Solid materials, including wood, masonry/rock, glass, paper, or other materials should not be stored anywhere outside of the construction impact zone. Solid waste materials should be properly disposed of offsite.

6.2 Foot Traffic

No permanent trails may be constructed within the Conservation Area, due to the risk of increased erosion and introduction of non-native plant seeds from regular foot traffic. No vehicles may enter the Conservation Area, and foot traffic must be limited to the visits necessary for monitoring, restoration, and maintenance by the property owner or personnel such as landscape contractors and the monitoring biologist.

6.3 Grading or Alteration of Hydrology

With the exception of restoration activities described in this Plan, no grading or other ground disturbance should occur in the Conservation Area due to the potential to increase erosion or to alter the movement of surface or subsurface water. Care should be taken to avoid disturbing the existing grade and surrounding soils as much as possible when removing invasive plants or planting native species.

6.4 Planting Non-native Species

Non-native plants shall not be planted in the Conservation Area. Species listed as invasive ("High", "Moderate", and "Limited") on the California Invasive Plant Council's California Invasive Plant Inventory (Cal-IPC 2006) shall not be planted anywhere on the property as they would pose a risk to special status plants and the associated coastal plant communities. Landscaping outside of the Conservation Area shall be limited to plants listed in the Gualala Town Plan Landscaping Species List.¹ Locally-native plants are recommended, but not required, for all exterior landscaping, since the entire construction area falls within the 100-foot buffer areas for several special status plants.

6.5 Tree Removal

If any of the native trees on the property become diseased or are a danger to public safety or private property, removal will be allowed. This statement does not imply permission to undertake the removal of any tree without obtaining any appropriate tree removal permits, if

¹ Appendix B of the Gualala Town Plan section of the Coastal Element of the Mendocino County General Plan.

applicable. In addition, removal will be consistent with CDFG regulations and may require a bird nesting survey consistent with applicable laws. If a tree had died, and is not a threat to special status plants or other trees, a danger to public safety, or to private property, removal is not required. Standing or downed dead trees are often important habitat elements for wildlife and should be left in place when feasible.

Monterey cypress (*Cupressus macrocarpa*), a tree native to the Monterey area and often invasive in northern coastal locations, is present on the site and individual trees may be removed if individual trees become diseased or a threat to public safety or to onsite special status plants. However, all nesting surveys and safety precautions listed above must also be taken before removal of this species. Small piles of debris may be left onsite for wildlife habitat and no stump treatment is necessary as this species will not resprout when cut.

7.0 CONTINGENCY MEASURES

If unavoidable indirect impacts are anticipated to the two coastal bluff morning glory individuals in the northern region such as shading or excessive competition with non-native invasive plants, the applicant shall contact the Coastal Permit Administrator immediately. With the concurrence of the Coastal Permit Administrator, the subject plants will be moved from their current location at the north end of the subject parcel to the Conservation Area. There are inherent biological and precedent setting risks associated with moving rare plants as described by Dr. Baye in his August 29, 2005 memorandum report. Issues such as soil disturbance and compaction and the associated increased competition with invasive non-native plant species as well as ensuring long-term management and monitoring takes place will be addressed by including the following project features:

- Use current state-of-the art plant relocation techniques.
- Incorporate species expert oversight.
- Engage local environmental group stakeholders, such as a representative from the local CNPS chapter, to assist with oversight.
- Re-establish other unique native species to contribute to restoring regional biodiversity.
- Implement invasive species control measures: first, by guarding against inadvertently transplanting invasive species into superior habitat thus degrading it and second, by implementing a long-term invasive species management program.

8.0 RESOURCES

8.1 Native Plants and Special Status Species

California Department of Fish and Game (CDFG). 2006. California Natural Diversity Database (CNDDDB). Special status plant lists and locations available online: <http://www.dfg.ca.gov/bdb/html/cnddb.html>

California Native Plant Society (CNPS). 2006. Inventory of Rare and Endangered Plants (online edition, v7-06c). California Native Plant Society, Sacramento, California. Available online: <http://cnps.web.aplus.net/cgi-bin/inv/inventory.cgi>

Hickman, J. C. 1993. The Jepson Manual: Higher Plants of California. University of California Press, Berkeley, CA.

For more information on special status plants and native plant nurseries:

California Native Plant Society (CNPS), 2707 K Street, Suite 1, Sacramento, CA 95816
Phone: (916) 447-2677 Email: cnps@cnps.org Website: www.cnps.org

Local native plant society chapter (for coastal Mendocino and Sonoma counties):

Dorothy King Young Chapter of the California Native Plant Society (CNPS)
P.O. Box 577, Gualala, CA 95445. Website: <http://www.dkycnps.org/index.html>

8.2 Invasive Plant Identification and Management

Bossard, C. C., J. M. Randall, and M. C. Hoshovsky, eds. 2000. Invasive Plants of California's Wildlands. University of California Press, Berkeley, CA.

California Invasive Plant Council (Cal-IPC). 2006. California Invasive Plant Inventory: Cal-IPC Publication 2006-2. California Invasive Plant Council, Berkeley, CA. Available online: <http://www.cal-ipc.org/ip/inventory/index.php>

The Nature Conservancy. 2007. The Global Invasive Species Initiative (website). Available online: <http://tncweeds.ucdavis.edu/>

Tu, M., C. Hurd and J. M. Randall. 2001. Weed Control Methods Handbook. The Nature Conservancy. Version: April 2001. Available online: <http://tncweeds.ucdavis.edu/handbook.html>

Watershed Project and California Invasive Plant Council (Cal-IPC). 2004. The Weed Workers' Handbook. Berkeley, CA. Available in print or online: <http://www.cal-ipc.org/ip/management/wwh/index.php>

8.3 Other Resources

U.S. Department of Agriculture, Natural Resources Conservation Service (USDA). 2005. Web Soil Survey: Mendocino County, Western Part, California soil maps. Version 1, January 12, 2005. Available online: <http://websoilsurvey.nrcs.usda.gov/>

WRA. 2008. Biological Report of Compliance for Mendocino County Coastal Development Permit, Wernette Property, 38454 Robinson Reef Drive, Gualala, Mendocino County, California. July.

Attachment A. Plant species observed by WRA, Inc at the Wernette property during surveys conducted on May 22, May 28, and July 5, 2008.

SCIENTIFIC NAME	COMMON NAME	FAMILY	non-native	status (rarity or invasiveness)
<i>Achillea millefolium</i>	yarrow	Asteraceae		
<i>Agrostis aff. capillaris</i>	colonial bentgrass	Poaceae	x	
<i>Aira caryophylla</i>	silvery hairgrass	Poaceae	x	
<i>Aira praecox</i>	yellow hairgrass	Poaceae	x	
<i>Anagallis arvensis</i>	scarlet pimpernel	Primulaceae	x	
<i>Anaphalis margaritacea</i>	pearly everlasting	Asteraceae		
<i>Angelica hendersonii</i>	coast angelica	Apiaceae		
<i>Anthoxanthum odoratum</i>	sweet vernal grass	Poaceae	x	moderate invasive
<i>Arctotheca calendula</i>	cape weed	Asteraceae	x	moderate invasive
<i>Avena barbata</i>	slender wild oats	Poaceae	x	moderate invasive
<i>Baccharis pilularis</i>	coyote brush	Asteraceae		
<i>Briza maxima</i>	rattlesnake grass	Poaceae	x	limited invasive
<i>Bromus carinatus</i>	California brome	Poaceae		
<i>Bromus diandrus</i>	ripgut brome	Poaceae	x	moderate invasive
<i>Calamagrostis nutkaensis</i>	Pacific reedgrass	Poaceae		
<i>Calystegia purpurata ssp. purpurata</i>	western morning glory	Convolvulaceae		
<i>Calystegia purpurata ssp. saxicola</i>	coastal bluff morning glory	Convolvulaceae		CNPS List 1B
<i>Carduus pycnocephalus</i>	Italian thistle	Asteraceae	x	moderate invasive
<i>Carex pachystachya</i>	thick headed sedge	Cyperaceae		
<i>Carpobrotus edulis</i>	ice plant	Aizoaceae	x	high invasive
<i>Castilleja mendocinensis (possibly present)</i>	Mendocino coast Indian paintbrush	Scrophulariaceae		CNPS List 1B
<i>Castilleja wightii</i>	Wight's paintbrush	Scrophulariaceae		
<i>Ceanothus foliosus var. foliosus</i>	wavyleaf ceanothus	Rhamnaceae		
<i>Ceanothus gloriosus var. gloriosus</i>	Point Reyes ceanothus	Rhamnaceae		CNPS List 4
<i>Cirsium vulgare</i>	bull thistle	Asteraceae	x	moderate invasive
<i>Cistus sp.</i>	rockrose	Cistaceae	x	
<i>Cortaderia jubata</i>	pampas grass	Poaceae	x	high invasive
<i>Cotoneaster sp.</i>	cotoneaster	Rosaceae	x	moderate invasive
<i>Cupressus macrocarpa</i>	Monterey cypress	Cupressaceae	x	limited invasive
<i>Cynodon dactylon</i>	bermuda grass	Poaceae	x	moderate invasive
<i>Dactylis glomerata</i>	orchard grass	Poaceae	x	limited invasive
<i>Danthonia californica var. americana</i>	California oatgrass	Poaceae		

SCIENTIFIC NAME	COMMON NAME	FAMILY	non-native	status (rarity or invasiveness)
<i>Danthonia pilosa</i>	hairy oatgrass	Poaceae	x	
<i>Delphinium hesperium</i> ssp. <i>hesperium</i>	western larkspur	Ranunculaceae		
<i>Deschampsia cespitosa</i> ssp. <i>holciformis</i>	coastal tufted hairgrass	Poaceae		
<i>Dudleya farinosa</i>	bluff lettuce	Crassulaceae		
<i>Equisetum telmateia</i> ssp. <i>braunii</i>	giant horsetail	Equisetaceae		
<i>Elymus glaucus</i> ssp. <i>glaucus</i>	blue wild rye	Poaceae		
<i>Erechtites glomerata</i>	New Zealand fireweed	Asteraceae	x	moderate invasive
<i>Erigeron glaucus</i>	seaside daisy	Asteraceae		
<i>Eriophyllum staechadifolium</i>	lizard tail	Asteraceae		
<i>Eschscholzia californica</i>	California poppy	Papaveraceae		
<i>Euphorbia lathyris</i>	compass plant	Euphorbiaceae	x	
<i>Fragaria chiloensis</i>	beach strawberry	Rosaceae		
<i>Galium aparine</i>	common bedstraw	Rubiaceae		
<i>Galium californicum</i> ssp. <i>californicum</i>	California bedstraw	Rubiaceae		
<i>Gaultheria shallon</i>	salal	Ericaceae		
<i>Genista monspessulana</i>	French broom	Fabaceae	x	high invasive
<i>Geranium dissectum</i>	cut leaved geranium	Geraniaceae	x	moderate invasive
<i>Gnaphalium purpureum</i>	purple cudweed	Asteraceae		
<i>Heracleum lanatum</i>	cow parsnip	Apiaceae		
<i>Heterotheca sessiliflora</i> ssp. <i>bolanderi</i>	golden aster	Asteraceae		
<i>Holcus lanatus</i>	velvet grass	Poaceae	x	moderate invasive
<i>Hypochaeris radicata</i>	rough cat's ear	Asteraceae	x	moderate invasive
<i>Iris douglasiana</i>	Douglas' iris	Iridaceae		
<i>Juncus balticus</i>	Baltic rush	Juncaceae		
<i>Juncus bolanderi</i>	Bolander's rush	Juncaceae		
<i>Juncus bufonius</i>	toad rush	Juncaceae		
<i>Juncus effusus</i> var. <i>brunneus</i>	bog rush	Juncaceae		
<i>Juncus patens</i>	spreading rush	Juncaceae		
<i>Kniphofia uvaria</i>	redhot poker	Liliaceae	x	
<i>Lathyrus vestitus</i> var. <i>vestitus</i>	wild sweetpea	Fabaceae		
<i>Leucanthemum vulgare</i>	oxeye daisy	Asteraceae	x	moderate invasive
<i>Ligusticum apiifolium</i>	celery leaved lovage	Apiaceae		
<i>Linum bienne</i>	flax	Linaceae	x	
<i>Lotus angustissimus</i>	slender lotus	Fabaceae	x	

EXHIBIT NO. 15
APPEAL NO. A-1-MEN-09-023
WERNETTE
FEBRUARY 2009 LETTER RE: CBMG ESHA (1 of 4)



February 23, 2009

Teresa Spade
Mendocino County Planning and Building
790 South Franklin Street
Fort Bragg, CA 95437-5456

Dear Teresa,

The following is a discussion of the coastal bluff morning glory (*Calystegia purpurata* spp. *saxicola*) and plant communities observed at 38454 Robinson Reef Drive (APN 145-161-27). The intent of this discussion is to provide the County of Mendocino and California Department of Fish and Game information to assist them in determining which of the site's plant communities and habitats will be designated Environmentally Sensitive Habitat Areas (ESHAs). Thirteen specimens of this CNPS List 1B subspecies were identified in the parcel by WRA. This number includes potential hybrid plants that exhibited characteristics of both the listed and common subspecies, western morning glory (*C. purpurata* ssp. *purpurata*). Several additional specimens were observed in the southern half of the parcel and near Robinson Reef Drive that fit the taxonomic description of western morning glory. WRA has also identified Coastal Terrace Prairie and Mendocino coast Indian paintbrush (*Castilleja mendocinensis*) in the southern half of the parcel.

This letter describes the similarities and differences of the southern portion of the parcel where eleven coastal bluff morning glory are located, the center of the parcel dominated by non-native species, and the northern portion of the parcel, where two isolated coastal bluff morning glory plants are located. Development of a single-family residence is proposed for the center portion, which is dominated by non-native species. Vegetation throughout the parcel can generally be described as a coastal scrub community. The southern portion supports a more intact native community with low coastal scrub species and native grasses, as described in more detail below. In contrast, the center and northern portions are heavily invaded by non-native species and also support a cluster of trees. A vegetation community map depicting the approximate locations of these communities in relation to the coastal bluff morning glory is attached to this letter.

The coastal scrub on slopes and the southern portion of the parcel is dominated by native species typical of shrubby bluff habitats. Dominant species include California blackberry (*Rubus ursinus*), coyote brush (*Baccharis pilularis*), Pacific reedgrass (*Calamagrostis nutkaensis*), ceanothus (*Ceanothus foliosus* and *C. gloriosus* var. *gloriosus* [CNPS List 4]), silver lupine (*Lupinus albifrons*), tufted hairgrass (*Deschampsia cespitosa* var. *holciformis*), salal (*Gaultheria shallon*), and cow parsnip (*Heracleum lanatum*). In this area, specimens identified as the rare coastal bluff morning glory were found climbing the 1-3'-tall shrubs (see Photo 1 below), near the edges of grassy clearings.

Non-native vegetation mixed with common natives is dominant in the center of the parcel, where no morning glory species were observed. This area is dominated by non-native and invasive species including iceplant (*Carpobrotus edulis*), pampas grass (*Cortaderia jubata*), French broom (*Genista monspessulana*), slender wild oat (*Avena barbata*), velvet grass (*Holcus lanatus*), rattlesnake grass (*Briza maxima*), and red hot poker (*Kniphofia uvaria*). This habitat is not likely to be suitable for new recruitment of coastal bluff morning glory due to competition from invasive species.



Photo 1. Low-growing coastal scrub in the southern portion of the parcel. Red flags signify coastal bluff morning glory plant locations.



Photo 2. Coastal bluff morning glory climbing up grasses and the steep rocky slope beneath trees (located between the two red flags in Photo 3).

Calystegia species are known to be sensitive to competition, especially from non-native grasses. Several greenhouse experiments conducted have found Calystegia's growth and abundance to decline in the presence of other species (Guntli 1999). We have spoken with a local botanist who has observed Calystegia species thriving in areas known to be consistently mowed (pers. comm. Matt Richmond, 2008). Vegetation disturbance, such as mowing, in areas near Calystegia species can help to remove or reduce competition from other species and create additional open spaces to allow for seedling establishment. Absent invasive



Photo 3. Red flags indicate the locations of 2 coastal bluff morning glory individuals in the northern portion of the parcel, surrounded by larger shrubs and trees and non-native grassland.

plant control in the center portion of the parcel, this area is unlikely to provide habitat for the coastal bluff morning glory and would not meet the definition of an ESHA.

In the northern portion of the parcel the coastal scrub is mixed with larger shrubs and trees, including Douglas-fir (*Pseudotsuga menziesii* var. *menziesii*), wax myrtle (*Myrica californica*), coffeeberry (*Rhamnus californica*), and California bay (*Umbellularia californica*). The two coastal bluff morning glory are growing below the wind-pruned trees, climbing up the rocky nearly vertical slope and within Pacific reedgrass, in an area relatively protected from wind (Photos 2 and 3). This habitat is very different from the non-native grass-dominated clearing

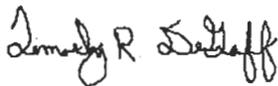
located directly southeast, where residential development is proposed. The relatively shady and protected conditions where these two plants are located are unlike the exposed coastal bluff habitat with low native shrubs and native grasses in which the subspecies is typically documented to occur, such as on bluffs at Point Reyes National Seashore.

In summary, the two isolated coastal bluff morning glory locations are in atypical habitat that may be unsuitable for sustaining these plants, and is not likely to support natural recruitment of new individuals. The immediate vicinity of the plants is dominated by shady habitat, large shrubs and trees, and adjacent habitats are also dominated by invasive species such as pampas grass, iceplant, and annual grasses. As the trees and shrubs continue to grow and invasions expand, this may prove to be unsuitable habitat for the plants, whether development occurs in the vicinity of these morning glory plants or not. It is our opinion that these two isolated coastal bluff morning glory plants do not meet the definition of an ESHA, as the supporting habitat is not rare or sensitive, and is not likely to sustain the existing plants or population in the long-term.

In addition, the development plan does not propose to impact the grasses or steep slope on which the two isolated plants are climbing or the surrounding trees, and fencing and construction crew education are proposed as mitigation measures to prevent any direct disturbance. Therefore, the proposed development will allow for the persistence of these plants. A more direct threat to these plants is that they will be naturally shaded out or overgrown by the surrounding trees and shrubs or invasive species.

Please do not hesitate to contact me if you have any questions or if you require additional information.

Sincerely,



Tim DeGraff
Senior Vice President

Encl.

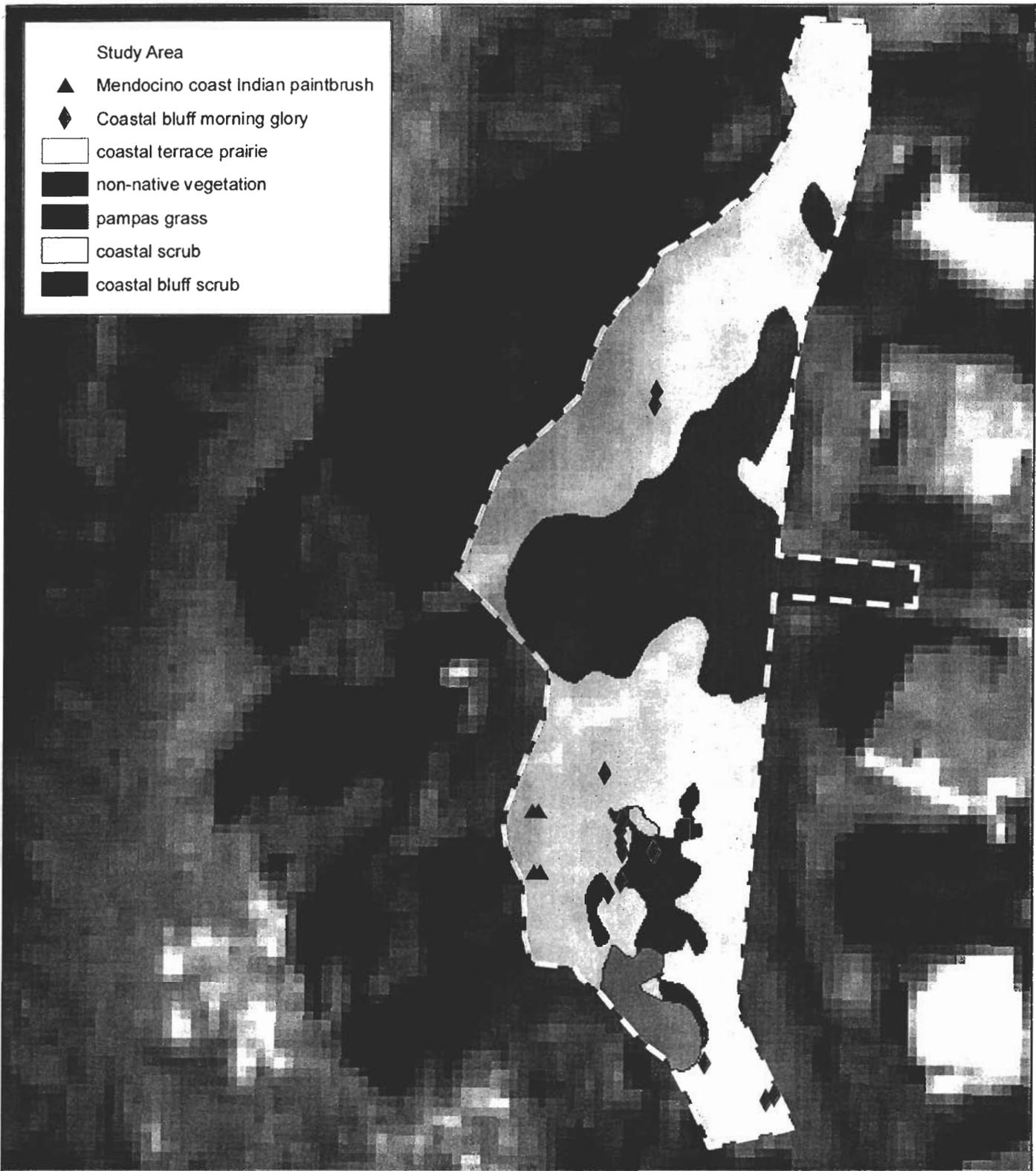
References

Corrigan, E. E. 2003. New England Conservation Program. *Calystegia spithamea* (L.) Pursh ssp. *spithamea*. Low Bindweed. Conservation and Research Plan for New England prepared for New England Wild Flower Society.

Guntli, D., S. Burgos, I. Kump, M. Heeb, H. Pflirter, and G. Defago. 1999. Biological Control of Hedge Bindweed (*Calystegia sepium*) with *Stagonospora convolvuli* Strain LA39 in Combination with Competition from Red Clover (*Trifolium pretense*). *Biological Control* 15: 252-258

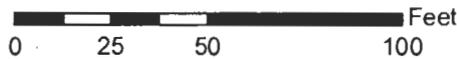
Personal Communication with Matt Richmond, Botanist, December 30, 2008

Ushimaru, A., and K. Kikuzawa. 1999. Variation of Breeding System, Floral Rewards, and Reproductive Success in Clonal *Calystegia* Species (Convolvulaceae). *American Journal of Botany* 86(3): 436-446



Natural Communities and Special Status Species

Wernette Property
Gualala, California



ENVIRONMENTAL CONSULTANTS

Date: July 2008
 Base Photo: NAIP, 2005
 Map By: Derek Chan
 File: L:\Acad 2000 Files\10000\10083\gis\arcmap\July08\
 Fig2_RarePlants_07_18_08.mxd