STATE OF CALIFORNIA -- THE RESOURCES AGENCY ARNOLD SCHWARZENEGGER, *GOVERNOR*

CALIFORNIA COASTAL COMMISSION

NORTH COAST DISTRICT OFFICE
710 E STREET • SUITE 200
EUREKA, CA 95501-1865
VOICE (707) 445-7833
FACSIMILE (707) 445-7877

MAILING ADDRESS:
P. O. BOX 4908
EUREKA, CA 95502-4908

F17a

MEMORANDUM

Date: May 8, 2008

To: Commissioners and Interested Parties

From: Peter Douglas, Executive Director
Robert S. Merrill, District Manager – North Coast District

Subject: **Addendum to Commission Meeting for Friday, May 9, 2008**
North Coast District Item F17a, Appeal No. A-1-MEN-07-021 (Greg and Sandra Moore)

STAFF NOTE

This addendum presents certain new findings for approval of the project that were not included in the written staff recommendation mailed on April 25, 2008. The new findings reflect the basis for approval with conditions that is discussed in the Summary of the Staff Recommendation contained in the April 25, 2008 staff report.

A. Supplemental Expansion of Legal Non-Conforming Use of Property Findings

Add the following to Finding 5, "Expansion of Legal Non-Conforming Use of Property." The new finding language should be inserted on Page 19 of the staff recommendation after the listing of LCP policies relating to the finding topic.

Discussion*:*

The parcel is designated in the Land Use Plan (LUP) and zoned in the Coastal Zoning Code (CZC) as Rural Residential which allows single-family residential use as a principally permitted use. LUP Policy G3.2-3 and CZC Section 20.458.020 limit residential density on parcels in the Gualala area that are located west of Highway One, such as the subject parcel, to one unit per parcel. The property is currently developed with a residential duplex containing two residential units that was developed in the early

1960s, years prior to the Coastal Initiative of 1972. The second residence on the parcel is a legal non-conforming use as it is a use that was lawfully established and maintained prior to the adoption of the Coastal Zoning Ordinance in 1993 but does not conform to the current regulations for the zone.

CZC Section 20.480.010 states that a legal nonconforming use may be continued if: (1) the use is contained within a structure built or modified to accommodate the use and the use conforms with the applicable building code and/or zoning code in effect at the time of construction or modification; and (2) the use is compatible with adjacent land uses such that its hours of operation, noise levels, aesthetic impacts, and traffic to the site do not now significantly adversely impacts adjacent land uses. According to the County, the duplex use of the site was allowed by local zoning at the time it was constructed in the 1960s and building permits were granted, demonstrating that the development conformed to the applicable building codes at the time. The existing duplex contains a total of three bedrooms between the two units. Thus, the size of the residential building and the number of occupants it can accommodate are equivalent to those of a modest single family home similar to homes found in the neighborhood. As a result, the amount of noise and traffic generated by the duplex is similar to that generated by other homes in the neighborhood and the nonconforming two residence use of the subject property does not significantly adversely affect the adjacent residential land use. Therefore, the Commission finds that the existing legal nonconforming two residence use of the subject property may be continued consistent with the limitations of CZC Section 20.480.010.

The development will expand the intensity of the second residential use of the subject property by converting what is presently a duplex with two residences sharing the same building, into two detached residential units and expanding the total size of the residential use for both units from 3,099 square feet to 3,513 square feet. CZC Section 20.480.025 states that a non-conforming use can only be expanded if the expansion is consistent with certain criteria. These criteria include requirements that (1) it is not reasonably economically or physically feasible to make the use of the property compatible with the applicable general plan designation; (2) the use is, and after expansion will be, compatible with adjacent land uses and that any increased adverse impacts on access or public facilities and services will be mitigated; (3) the site is physically separate from surrounding properties such that continued nonconforming use is appropriate in that location; and (4) the expansion is found consistent with all other applicable policies of the Coastal Element of the Mendocino County General Plan.

With regard to the first criteria as to whether it is reasonably economically or physically feasible to make the use of the property compatible with the applicable general plan designation, the Commission notes that the property was developed with a residential duplex approximately 40 years ago. According to the County, the two residential unit use of the site was established as a legal use and only became non-conforming when the

LCP was certified in 1993, nearly 30 years after the use was established. Housing is in high demand along the Mendocino coast, and as second units are not allowed throughout the Mendocino County coastal zone except in very limited areas, properties that can legally support two residential units generally have much greater value than other residential lots. Given (1) the length of time that the two-residence use of the property has been a legal use of the property, (2) the 30 years of time that passed before the use became non-conforming, and (3) the value to the property that would be lost by elimination of the second residence use of the property, the Commission finds that it is not reasonably economically feasible to eliminate the second residence use of the property to make the use of the property compatible with the applicable general plan designation.

With regard to the second criteria, the existing two-residence use of the property has been part of the residential neighborhood for approximately 40 years. The expanded non-conforming use will remain compatible with the adjacent residential uses, as the expansion only involves an expansion of overall building floor area rather than increasing the number of bedrooms or the number of occupants the two units can accommodate. One of the two residential units currently has two bedrooms and the other one bedroom. The approved development will retain the same number of bedrooms, although the combined floor area of the two units will be larger in size. Thus, the development will not increase the level of activity, traffic, demand for parking, or demands for other services in a way that would make the use incompatible with adjacent land uses or increase adverse impacts on access or public facilities and services.

With regard to the third criteria, the building additions that will accommodate the expanded floor area for the two-unit use of the site will not encroach significantly towards the residences on the surrounding properties and the non-conforming use will remain physically separate from the surrounding properties. The additions will encroach no closer to the residence on the parcel to the northwest than the existing structure, and the additions will be largely screened and separated from this neighbor by the existing structure. The new detached second unit will be approximately 31 feet closer to the residence on the parcel to the southeast than the existing structures on the subject property, but the new detached second unit will still be approximately 45 feet from the neighbor's house, maintaining a large separation. The new additions will also remain more than 250 feet away from the house located on the lot across Old Coast Highway from the subject property. As the development will not increase the level of activity at the site and will maintain large separations between the development on the subject property and neighboring residences, the Commission finds that the development satisfies the criteria that the site is physically separate from surrounding properties such that continued nonconforming use is appropriate in that location.

With regard to the fourth criteria, for the reasons discussed in the Commission's Planning and Locating New Development, Geologic Hazards, Environmentally Sensitive Habitat

Areas, Visual Resources, and Water Quality findings for the Commission's de novo review of Appeal No. A-1-MEN-07-021, the expansion of the non-conforming two residence use of the site is consistent with all other applicable policies of the Coastal Element of the Mendocino County General Plan.

Therefore, for the reasons stated above, the Commission finds that the expansion of the two residence use of the site is an expansion of an existing legal non-conforming use consistent with the limitations of CZC Section 20.480.025.

B. Supplemental Geologic Hazard Findings

Add the following to Finding 6, "Geologic Hazards." The new finding language should be inserted on Page 22 of the staff recommendation after the listing of LCP policies relating to the finding topic.

Discussion:

CZC Section 20.500.015(A) requires all applications for coastal development permits in areas of known or potential geologic hazards such as shoreline and bluff top lots be reviewed to ensure that new development will be safe from bluff erosion and cliff retreat. To this end, LUP Policy 3.4-7 and Coastal Zoning Code Sections 20.500.010(A)(3) and 20.500.020(E) direct the approving authority to assure that new development is sited and designed to provide adequate setbacks from geologically hazardous areas and that restrictions of land uses be applied as necessary to ensure that the construction of seawalls or other shoreline protective structures will not be needed "in any way" over a full 75-year economic lifespan for the development. A sole exception to this prohibition on the construction of shoreline protective devices is provided in CZC Section 20.500.020(E) for protecting existing development, public beaches, and coastal dependent uses.

As discussed above, the approved project includes the remodeling of an existing residential structure with two small additions, consisting of a 344-square-foot entry-way and laundry room addition and a 70-square-foot hot house addition. The approved project also includes the construction of a new detached 566-square-foot second residential unit and 818 square feet of additional ground floor decking. The existing residential structure is located approximately 33 feet from the bluff edge (an existing deck encroaches to within 17 feet of the bluff edge. The new additions to the existing residential structure are on the landward side of the existing residential structure and thus are separated from the bluff by the existing structure. These new additions are located no closer than 55 feet from the bluff edge. The new detached second residential structure was originally proposed to be located 25 feet from the head scarp of a bluff landslide

feature to the south and was later moved by the applicant to a location no closer than 40 feet away from this feature to further protect the new structure from bluff retreat hazards. The new deck additions are also located no closer than 40 feet from the bluff edge. The Commission must consider the conformance of the proposed new development with the LCP policies and standards regarding geologic hazards, including the new additions to the existing residential structure, the new detached second residential unit, and the new decking.

As discussed above, the subject property occupies most of a small local promontory between two small coves. The end of the point is flanked by 40 to 50-foot high bluffs around the sides of the promontory that face generally west, southwest, and southeast. The bluff top area of the parcel is part of a nearly level marine terrace that slopes very gradually south-southwest towards the ocean at a gradient of approximately ten horizontal to one vertical ratio.

A geotechnical investigation of the site was performed by Bace Geotechnical, which prepared a report dated June 24, 2005. The geotechnical report indicates that the materials exposed at the site consist of terrace deposits overlying sedimentary bedrock. The Pleistocene Epoch terrace deposits are composed of beach or shallow marine sediments. The steep bluff faces range from a slope of ½ horizontal to one vertical (1/2H:1V) to near vertical. The geotechnical investigation did not observe any sea caves at the toe of the bluffs.

A rock fall occurred on the bluff on the northwest part of the property between 2002 and 2005 that involved the fall of several large blocks of rock that are now resting on the small pocket beach below the bluff. An incipient landslide head scarp is located on the south southeast-facing bluff approximately 20 feet southeast of the property line. The top surface of the landslide area appears to have slumped several feet downward relative to the adjoining ground surface

In previous actions on coastal development permits and appeals, the Commission has interpreted Section 30253 of the Coastal Act, LUP Policy 3.4-7, and CZC Section 20.500.010(A) to require that coastal development be sited a sufficient distance landward of coastal bluffs that it will neither be endangered by erosion nor lead to the construction of protective coastal armoring during the assumed economic life of the development. LUP Policy 3.4-7 indicates the economic life of a structure to be 75 years. A setback adequate to protect development over the economic life of a development must account both for the expected bluff retreat during that time period and the existing slope stability. Long-term bluff retreat is measured by examining historic data including vertical aerial photographs and any surveys conducted that identified the bluff edge and estimating

changes in this rate that may be associated with continuing or accelerating sea level rise. Slope stability is a measure of the resistance of a slope to landsliding, and can be assessed by a quantitative slope stability analysis.

The geotechnical report contains the following conclusions with respect to the rate of bluff retreat and site stability (page 6):

> Based upon the results of our reconnaissance, including comparisons of the bluff today with the 1964, 1981, and 2002 aerial photograph enlargements, the rate of retreat of the bluff edge on the property appears to average approximately two inches per year. The photographs show that the bluff-line at the property has not substantially changed in the last 41 years except for the recent rock fall. The lower bluff is comprised of generally hard rocks that are resistant to wave erosion, except for erosion within weaker fracture zones. The relatively minor bluff retreat that is occurring is doing so at varying, non-uniform rates due to periodic rock falls or infrequent, shallow sloughing on the upper bluffs. The recent (post-2002) rock fall that occurred on the west-facing bluff of the property was a result of an unstable over-hang due to the erosion of the bluff toe. Other portions of this west-facing bluff are also in an overhanging condition. A more catastrophic collapse of the upper bluff, similar to the post 2002 rock fall, may occur within the lifetime of the planned new residence, and several feet of the bluff edge may be lost in a single event.
>
> Based on the estimated average bluff retreat rate of 2 inches per year for 75 years (the economic lifespan of a house, per California Coastal Commission guidelines), the resulting bluff loss would be on the order of 12.5 feet. Applying a factor of safety of two, the recommended building setback from the bluff edge is 25 feet fro the proposed residence and associated structures. A setback of 25 feet from the head scarp of the incipient landslide southeast of the property is also recommended. The approximate building setback line from the bluff edge is shown on the Site Geologic Map, Plate 2…

The geotechnical report indicates that construction of the proposed residential development in accordance with certain recommendations included in the report would have no adverse effect upon bluff stability. The recommendations address site grading, foundation design, seismic design criteria, the installation of concrete slabs-on-grade, the construction of retaining walls, excavation for utility trenches, and site drainage. The recommendations are found in Section 6 of the geotechnical report, which is reproduced and included as part of Exhibit 13 of the Commission staff report (pages 17-21). Among the principal recommendations are recommendations to (1) grade finished foundation pad

surfaces to drain away from the foundations, (2) use either reinforced concrete spread footings founded at least six inches into supporting bedrock or cast-in-drilled-hole reinforced-concrete pier and grade bean foundations with at least 18-inch diameter piers, (3) provide permanent back drainage for retaining and subsurface walls to prevent the buildup of hydrostatic pressure, and (4) intercept and divert concentrated surface flows and subsurface seepage away from structural improvements, building foundations, and the edges of the ocean bluffs.

As noted above, all of the new structures to be added to the existing development at the site would be located a minimum of 40-feet away from the bluff edge and a minimum of 40 feet away from the head scarp of the landslide along the south southeast-facing bluff adjoining the subject property. This setback would assure stability for the assumed economic life of the development (75 years). As noted in the U.S. Geological Survey report entitled, "National Assessment of Shoreline Change, Part 4, Historical Coastal Cliff Retreat Along the California Coast, Open File Report 2007-1133"[1]:

> The cliff retreat data for this region [south of Point Arena in Mendocino County and north of Tomales Point in Marin County] are discontinuous and widely distributed, especially in the northern portion of the region (figure 17). The average retreat rate is -0.2 m/yr, the lowest in Northern California, and the average amount of retreat was only 15.3 m [over 70 years], which is also low compared to the rest of Northern California.

Therefore, the Commission finds that the minimum 40-foot setbacks between the bluff edges and the new structures proposed by the applicant and authorized by the permit are sufficient to protect the new structures from bluff retreat for a 75-year design life consistent with LUP Policy 3.4-7 and CZC Section 20.500.020(B).

To ensure that the proposed residential structures are developed consistent with the proposed 40-foot bluff setback, the Commission attaches Special Condition No. 1, which requires that the final construction plans for the development adhere to the design recommendations specified in the geotechnical report, except that the detached second unit and the new decking must be set back at least 40 feet from the bluff edge and the head scarp o the incipient landslide south southeast of the project as proposed by the applicant. The condition requires that development be constructed consistent with the final construction plans.

Notwithstanding the relative degree of insulation of the proposed project improvements in their proposed locations from geologic hazards, the applicants are proposing to construct

[1] Hapke and Reid, "National Assessment of Shoreline Change, Part 4, Historical Coastal Cliff Retreat Along the California Coast, Open File Report 2077-1133," U.S. Dept. of the Interior, U.S. Geological Survey

development that would be located on a high uplifted marine terrace bluff top that is actively eroding. Consequently, the development would be located in an area of high geologic hazard. However, new development can only be found consistent with LUP Policy 3.4-7, and CZC Section 20.500.010(A) if the risks to life and property from the geologic hazards are minimized and if a protective device will not be needed in the future. The applicants have submitted information from a registered engineering geologist which states that if new development is set back at least 25 feet from the bluff edge, the development will be safe from erosion and will not require any devices to protect the development during its useful economic life.

Although a comprehensive geotechnical evaluation is a necessary and useful tool that the Commission relies on to determine if proposed development is permissible at all on any given bluff top site, the Commission finds that a geotechnical evaluation alone is not a guarantee that a development will be safe from bluff retreat. It has been the experience of the Commission that in some instances, even when a thorough professional geotechnical analysis of a site has concluded that a proposed development will be safe from bluff retreat hazards, unexpected bluff retreat episodes that threaten development during the life of the structure sometimes still do occur. Examples of this situation include:

- The Kavich Home at 176 Roundhouse Creek Road in the Big Lagoon Area north of Trinidad (Humboldt County). In 1989, the Commission approved the construction of a new house on a vacant bluff top parcel (Permit 1-87-230). Based on the geotechnical report prepared for the project it was estimated that bluff retreat would jeopardize the approved structure in about 40 to 50 years. In 1999 the owners applied for a coastal development permit to move the approved house from the bluff top parcel to a landward parcel because the house was threatened by 40 to 60 feet of unexpected bluff retreat that occurred during a 1998 El Nino storm event. The Executive Director issued a waiver of coastal development permit (1-99-066-W) to authorize moving the house in September of 1999.

- The Denver/Canter home at 164/172 Neptune Avenue in Encinitas (San Diego County). In 1984, the Commission approved construction of a new house on a vacant bluff top lot (Permit 6-84-461) based on a positive geotechnical report. In 1993, the owners applied for a seawall to protect the home (Permit Application 6-93-135). The Commission denied the request. In 1996 (Permit Application 6-96-138), and again in 1997 (Permit Application 6-97-90) the owners again applied for a seawall to protect the home. The Commission denied the requests. In 1998, the owners again requested a seawall (Permit Application 6-98-39) and submitted a geotechnical report that documented the extent of the threat to the home. The Commission approved the request on November 5, 1998.

- The Arnold project at 3820 Vista Blanca in San Clemente (Orange County). Coastal development permit (Permit # 5-88-177) for a bluff top project required protection from

bluff top erosion, despite geotechnical information submitted with the permit application that suggested no such protection would be required if the project conformed to 25-foot bluff top setback. An emergency coastal development permit (Permit #5-93-254-G) was later issued to authorize bluff top protective works.

The Commission emphasizes that the examples above are not intended to be absolute indicators of bluff erosion on the subject parcel, as coastal geology can vary significantly from location to location. However, these examples do illustrate that site-specific geotechnical evaluations cannot always accurately account for the spatial and temporal variability associated with coastal processes and therefore, cannot always absolutely predict bluff erosion rates. Collectively, these examples have helped the Commission form its opinion on the vagaries of geotechnical evaluations with regard to predicting bluff erosion rates.

The BACE geotechnical report states that the geotechnical investigation and review of the proposed development was performed in accordance with the usual and current standards of the profession, as they relate to this and similar localities. The report further states, "*…No other warranty, expressed or implied, is provided as to the conclusions and professional advice presented in this report…*" This language in the report itself is indicative of the underlying uncertainties of this and any geotechnical evaluation and supports the notion that no guarantees can be made regarding the safety of the proposed development with respect to bluff retreat.

Geologic hazards are episodic, and bluffs that may seem stable now may not be so in the future. Therefore, the Commission finds that the subject lot is an inherently hazardous piece of property, that the bluffs are clearly eroding, and that the proposed new development will be subject to geologic hazard and could potentially someday require a bluff or shoreline protective device, inconsistent with LUP Policy 3.4-7, and CZC Section 20.500.010(A). The Commission finds that the proposed development could not be approved as being consistent with LUP Policy 3.4-7, and CZC Section 20.500.010(A) if projected bluff retreat would affect the proposed development and necessitate construction of a seawall to protect it.

Based upon the geologic report prepared by the applicants' geologist, the Commission finds that the risks of geologic hazard are minimized if development is set back at least 40 feet from the bluff edge. However, given that the risk cannot be eliminated and the geologic report cannot assure that shoreline protection will never be needed to protect the residence, the Commission finds that the proposed development is consistent with the Mendocino County LCP only if it is conditioned to provide that shoreline protection will not be constructed. Thus, the Commission further finds that due to the inherently hazardous nature of this lot, the fact that no geology report can conclude with certainty that a geologic hazard does not exist, the fact that the approved development and its maintenance may cause future problems that were not anticipated, and because new development shall not engender the need for shoreline protective devices, it is necessary

to attach Special Condition No. 8 to ensure that no future shoreline protective device will be constructed.

Special Condition No. 8 prohibits the construction of shoreline protective devices on the parcel to protect the detached second residential unit and new decking approved by Permit No. A-1-MEN-07-021 requires that the landowner provide a geotechnical investigation and remove the proposed improvements associated with the detached second residential unit and new decking approved by Permit No. A-1-MEN-07-021 if bluff retreat reaches the point where this development is threatened, and requires that the landowners accept sole responsibility for the removal of any structural debris resulting from landslides, slope failures, or erosion of the site. These requirements are necessary for compliance with CZC Section 20.500.010(A), which states that new development shall minimize risk to life and property in areas of high geologic, flood, and fire hazard, assure structural integrity and stability, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding areas, nor in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs. The Commission finds that the proposed development could not be approved as being consistent with CZC Section 20.500.010(A) if projected bluff retreat would affect the proposed development and necessitate construction of a seawall to protect it.

As noted above, some risks of an unforeseen natural disaster, such as an unexpected landslide, massive slope failure, erosion, etc. could result in destruction or partial destruction of the house or other development approved by the Commission. In addition, the development itself and its maintenance may cause future problems that were not anticipated. When such an event takes place, public funds are often sought for the clean-up of structural debris that winds up on the beach or on an adjacent property. As a precaution, in case such an unexpected event occurs on the subject property, Special Condition No. 8 also requires the landowner to accept sole responsibility for the removal of any structural debris resulting from landslides, slope failures, or erosion on the site, and agree to remove the residential improvements should the bluff retreat reach the point where a government agency has ordered that these facilities not be used.

Special Condition No. 9 requires the landowner to assume the risks of extraordinary erosion and geologic hazards of the property and waive any claim of liability on the part of the Commission. Given that the applicants have chosen to implement the project despite these risks, the applicants must assume the risks. In this way, the applicants are notified that the Commission is not liable for damage as a result of approving the permit for development. The condition also requires the applicants to indemnify the Commission in the event that third parties bring an action against the Commission as a result of the failure of the development to withstand hazards. In addition, Special Condition No. 2 requires the applicants to record a deed restriction to impose the special conditions of the permit as covenants, conditions and restrictions on the use and enjoyment of the property.

This special condition is required, in part, to ensure that the development is consistent with the Coastal Act and to provide notice of potential hazards of the property and help eliminate false expectations on the part of potential buyers of the property, lending institutions, and insurance agencies that the property is safe for an indefinite period of time and for further development indefinitely into the future, or that a protective device could be constructed to protect the approved development and will ensure that future owners of the property will be informed of the Commission's immunity from liability, and the indemnity afforded the Commission.

The Commission further notes that Section 30610(a) of the Coastal Act and Chapter 20.532 of the County's Coastal Zoning Code exempt certain additions to existing single family residential structures from coastal development permit requirements. Pursuant to this exemption, once a house has been constructed, certain additions and accessory buildings that the applicant might propose in the future are normally exempt from the need for a permit or permit amendment.

However, in this case because the existing and proposed residences are located within 50 feet of the edge of a coastal bluff, future improvements to the approved project will not be exempt from permit requirements pursuant to Section 30610(a) of the Coastal Act and Section 13250 of the Commission's regulations. Section 30610(a) requires the Commission to specify by regulation those classes of development which involve a risk of adverse environmental effects and require that a permit be obtained for such improvements. Pursuant to Section 30610(a) of the Coastal Act, the Commission adopted Section 13250 of Title 14 of the California Code of regulations. Section 13250 specifically authorizes the Commission to require a permit for additions to existing single-family residences that could involve a risk of adverse environmental effect.

In addition, Section 13250(b)(1) indicates that improvements to a single-family structure in an area within 50 feet of the edge of a coastal bluff involve a risk of adverse environmental effect and therefore are not exempt. As discussed previously, the existing and approved residences on the subject property are within 50 feet of a coastal bluff. Therefore, pursuant to Section 13250(b)(1) of the Commission's regulations, Special Condition No. 7 expressly requires all future improvements to the approved development to obtain a coastal development permit so the County and the Commission would have the ability to review all future development on the site to ensure that future improvements will not be sited or designed in a manner that would result in an adverse environmental impact. As discussed above, Special Condition No. 2 also requires that the applicant record and execute a deed restriction approved by the Executive Director against the property that imposes the special conditions of this permit as covenants, conditions and restrictions on the use and enjoyment of the property. Special Condition No. 2 will also help assure that future owners are aware of these CDP requirements applicable to all future development.

The Commission thus finds that the proposed development, as conditioned, is consistent with the policies of the LCP regarding geologic hazards, including LUP Policy 3.4-7, and CZC Section 20.500.010(A), since the development as conditioned (1) will not contribute significantly to the creation of any geologic hazards, (2) will not have adverse impacts on the stability of the coastal bluff or on erosion, and (3) will not require the construction of shoreline protective works. Only as conditioned is the proposed development consistent with the LCP.

C. Supplemental Environmentally Sensitive Habitat Areas Findings

Add the following to Finding 7, "Environmentally Sensitive Habitat Areas." The new finding language should be inserted on Page 29 of the staff recommendation after the listing of LCP policies relating to the finding topic.

Discussion:

As discussed above in Finding 2, Site Description, the subject parcel is vegetated primarily by mowed perennial grasses and forbs, with an over story of Bishop pine (*Pinus muricata*) and Monterey Cypress (Cupressus macrocarpa). An open forest consisting mostly of native bishop pine and non-native Monterey cypress covers about two-thirds of the parcel from the roadway to the duplex sited near the bluff edge. Near the bluff edge, the vegetation changes to a northern coastal scrub community and a small remnant patch of coastal terrace prairie, a rare plant community.

A botanical survey was performed in September of 2006 (See Exhibit No. 10). The survey indicates that rare coastal bluff morning glory (*Calystegia purpurata ssp. Saxicola)* is present in five specific areas of the property, including within certain portions of the bishop pine forest area of the parcel between the road and the duplex and also within the coastal scrub community along the bluff. The total population is estimated to number between 258 and 300 individuals. The coastal bluff morning glory habitat is mapped on the site plan attached as Exhibit No. 3. As discussed in the Environmentally Sensitive Habitat Area (ESHA) finding below, the coastal bluff morning glory habitat is considered to be ESHA. The botanical survey did not identify the remnant patch of coastal terrace prairie to be ESHA, mainly because the patch is very small. The coastal terrace prairie is not located in an area that would be affected by the development.

The botanical survey also identified blue violet (Viola adnunca) within the project area. Blue violet can serve as a host plant for endangered Behren's silverspot butterfly. However, a further survey of the suitability of the parcel to provide butterfly habitat was later performed in 2006 (See Exhibit No. 11), and based on the results of that study and the mitigation measures of the project, the U.S. Fish & Wildlife Service has determined

that the project is unlikely to result in incidental take of Behren's silverspot butterfly (See Exhibit No. 12).

As cited above, Coastal Zoning Code Section 20.496.010 states that environmentally sensitive habitat areas (ESHA) include habitats of rare and endangered plants and animals. Therefore, as ESHA, the rare and endangered plant habitat on the subject property is subject to the ESHA buffer requirements of LUP Policy 3.1-7 and Coastal Zoning Code Section 20.496.020. According to these policies, a buffer area of a minimum of 100 feet shall be established adjacent to all ESHAs, unless an applicant can demonstrate, after consultations and agreement with the California Department of Fish and Game (DFG) that 100 feet is not necessary to protect the resources of that particular habitat area from possible significant disruption caused by the proposed development. The policies state that in that event, the buffer shall not be less than 50 feet in width. Coastal Zoning Code Section 20.496.020 states that the standards for determining the appropriate width of the buffer area are the seven standards of subsections (a) through (g) of subsection (A)(1) of that section, including (a) the biological significance of adjacent lands, (b) sensitivity of species to disturbance, (c) susceptibility of parcel to erosion, (d) use of natural topographic features to locate development, (e) use of existing cultural features to locate buffer zones, (f) lot configuration and location of existing development, and (g) the type and scale of the development proposed.

The existing residential structure to be remodeled and added on to was constructed in the 1960's prior to voter passage of the Proposition 20 Coastal Initiative in 1972 and the Legislature's adoption of the Coastal Act in 1976. The building as it was built and exists currently is itself located as close as five feet from the edge of the rare plant ESHA along the bluff, and portions of the buildings decks are directly adjacent to the rare plant ESHA. This existing setback from the rare plant ESHA along the bluff area would not change as a result of the proposed project. All of the proposed additions to the existing residence and the new detached second unit structure would be located a minimum of 50 feet from all of the ESHA with the exception of the entryway and laundry room addition and portions of the expanded decking that is approved landward of the existing duplex structure. These approved additions are located as close as 28 feet from the rare plant habitat along the bluff. However, all of these additions that are located closer then 50 feet to the ESHA along the bluff are separated from this ESHA by the existing building, which is located between the additions and bluff. The existing residential building was built approximately 40 years ago and is a substantial structure, approximately 3,099 square feet in size. The full width of the existing building will screen and separate the approved additions from the ESHA in question along the bluff.

As noted above, LUP Policy 3.1-7 and Coastal Zoning Code Section 20.496.020 indicate that a buffer area of 100 feet shall be established adjacent to all ESHAs, although the buffer width can be reduced to a minimum of 50 feet under certain circumstances. In this

case, the substantial existing pre-Coastal Act structure adjoins or is located within a few feet of a portion of the ESHA and intervenes between the additions and this portion of the ESHA, precluding the establishment of a buffer in these portions of the site. In all other areas of the site, where the substantial existing pre-Coastal Act structure does not intervene between the new development and ESHA, a minimum 50-foot buffer would be established by the approved project between the new development and the ESHA locations.

The applicant's biologist prepared an analysis that substantiates that where substantial existing development does not intervene between the new development and ESHA and a buffer can be established (between the new development and the four areas of coastal morning glory ESHA located landward of the residential development, see Exhibit No. 3), a 50-foot buffer is adequate to protect the ESHA from the impacts of the proposed above ground development based on the seven standards contained within Coastal Zoning Code Section 20.496.020(A)(1)(a) through (g) of the MCCZC as discussed below.

Regarding criteria (a), the biological significance of adjacent lands, the applicant's biologist indicates that the bishop pine forest around the four areas of coastal morning glory ESHA is not a preferred habitat for the rare species. Thus, the coastal morning glory is not likely to spread into these areas and is not otherwise functionally dependent on these adjoining areas for its own survival.

Regarding criteria (b), the sensitivity of the species to disturbance, the applicant's biologist indicates that a wide buffer is not needed to protect the coastal bluff morning glory plants from disturbance. The biologist notes that some of the rare plants on the property are growing adjacent to existing structures and the species is hardy and resilient. Unlike for sensitive animal species, noise, bright lights, and motion at a distance do not significantly affect the rare plant species. The biologist indicates the principal factors that could disturb the coastal morning glory include direct trampling or disturbance within the habitat, erosion and sedimentation from runoff, invasion by exotic plants, and competition from shrubs and trees whether native or exotic that grow taller than the coastal morning glory and eventually shade and crowd out the rare plant. Thus, the biologist indicates that measures that are more important and more effective for protecting the rare plant habitat than wide spatial buffers are measures such as the use of exclusionary fencing during construction, best management practices for erosion control, preserving the habitat from future development, restricting landscaping, requiring the removal of non-native invasive species, and seasonal high-weed mowing to reduce the competition in this area. The biologist thus recommends that a 50-foot buffer would be adequate provided these mitigation measures are incorporated into the project.

Regarding criteria (c), the susceptibility of the parcel to erosion, the applicant's biologist notes that the project site is nearly level, and that on the Windyhollow soils of the project

site, surface runoff is very slow. The proposed development is not expected to significantly change the potential for erosion, particularly if best management erosion control practices are used during construction. Therefore, the biologist suggests a 50-foot wide buffer would be adequate to address erosion concerns.

Regarding criteria (d) and (e), the use of natural or cultural features to locate the buffer area, the biologist indicates that the nearly level site offers no hills or other pronounced topographic features, or other cultural features (e.g., roads, dikes, etc.) at the site that would affect the consideration of an appropriate buffer area.

Regarding criteria (f), lot configuration and the location of existing development, the applicant's biologist indicates that the proposed remodel and additions are within an established subdivision, and the project has proposed mitigation measures.

Regarding criteria (g), the type and scale of development proposed, the applicant's biologist indicates the proposed project to remodel and expand an existing duplex represents a fairly small-scale construction project within an existing residential subdivision, implying that the scale of the development is not so large as to require a full 100-foot buffer.

Of the several factors raised by the applicants' biologist as reasons why a reduced 50-foot buffer would be adequate, the Commission finds that the most significant are those regarding (1) the low biological significance of the lands adjacent to the ESHA, (2) the low significance of a greater than 50-foot buffer to avoid species disturbance provided other mitigation measures are provided, and (3) the low susceptibility of the parcel to erosion.

The biological report demonstrates that the ESHA supports rare plant species that, unlike certain wildlife species, do not depend on the functional relationships of adjacent lands that a larger buffer area is usually intended to protect such as breeding, nesting, feeding, or resting activities. Therefore, in this case, there is less need for a wide buffer to help sustain the species that inhabit the ESHA. In addition, the fact that the development site is relatively flat indicates that erosion and sedimentation from construction, and from the completed development, are less likely to affect the ESHA than erosion and sedimentation would if the building site had a steeper slope with greater potential for erosion, particularly with implementation of the additional erosion and sedimentation controls required by Special Condition No. 4 described below. Additionally, the biological report establishes that there are measures that are more important and more effective for protecting the rare plant habitat from disturbance than wide spatial buffers including the use of exclusionary fencing during construction, best management practices for erosion control, preserving the habitat from future development, restricting landscaping, requiring the removal of non-native invasive species, and seasonal high-

weed mowing to reduce the competition in this area. The biological report demonstrates that with these mitigation measures, a 50-foot buffer would be adequate to protect the coastal morning glory habitat.

Therefore, the Commission finds that primarily based on the buffer width criteria of subsections (a), (b), and (c) of Coastal Zoning Code Section 20.496.020 regarding the biological significance of adjacent lands, sensitivity of species to disturbance, and the susceptibility of the parcel to erosion, the proposed 50-foot buffer width in conjunction with implementation of Special Condition Nos. 4 and 6 requiring certain erosion and sedimentation controls and implementation of the protective measures recommended by the applicant's biologist is adequate to protect the environmentally sensitive habitat at the project site from possible significant disruption caused by the proposed development.

To ensure that erosion control measures and other protective measures recommended by the applicant's biologist are implemented, the Commission attaches Special Condition Nos. 4 and 6. Special Condition No. 4 requires the implementation of Best Management Practices (BMPs) to control erosion and sedimentation during and following construction. These required BMPs include (a) disposing of any excess excavated material resulting from construction activities at a disposal site outside the coastal zone or within the coastal zone pursuant to a valid coastal development permit; (b) installing straw bales, coir rolls, or silt fencing structures to prevent runoff from construction areas from draining down the bluff toward the ocean, (c) maintaining on-site vegetation to the maximum extent possible during construction activities; (d) replanting any disturbed areas as soon as feasible following completion of construction, but in any event no later than May 1st of the next spring season consistent with the planting limitations of Special Condition No. 6(d); (e) covering and containing all on-site stockpiles of construction debris at all times to prevent polluted water runoff; and (f) protecting the canopy and root zones of existing living trees on site through temporary fencing or screening during construction. Additionally, the special condition requires the installation of temporary exclusion/construction fencing to be installed between the ESHA and the proposed development during construction.

Special Condition No. 6 requires implementation of the other ESHA protection measures recommended by the applicant's biologist including removing invasive plants from the property in the manner recommended by the biological report, and conducting seasonal high-weed mowing in the area between the existing and authorized development and Old Coast Highway to keep weeds and brush from invading the coastal bluff morning glory habitat.

Furthermore, the ESHA could be adversely affected by the development if non-native, invasive plant species were introduced from landscaping at the site. Introduced invasive exotic plant species could spread into the ESHA and displace native riparian and wetland vegetation, thereby disrupting the value and function of the adjacent ESHA. The

applicant has not proposed a specific landscaping plan as part of the proposed project. However, to ensure that the ESHA is not adversely impacted by any future landscaping of the site, Special Condition No. 6 also requires that only native and/or non-invasive plant species of native stock be planted at the site.

To help in the establishment of vegetation, rodenticides are sometimes used to prevent rats, moles, voles, and other similar small animals from eating the newly planted saplings. Certain rodenticides, particularly those utilizing blood anticoagulant compounds such as brodifacoum, bromadiolone and diphacinone, have been found to poses significant primary and secondary risks to non-target wildlife present in urban and urban/ wildland areas. As the target species are preyed upon by raptors or other environmentally sensitive predators and scavengers, these compounds can bio-accumulate in the animals that have consumed the rodents to concentrations toxic to the ingesting non-target species. Therefore, to minimize this potential significant adverse cumulative impact to environmentally sensitive wildlife species, Special Condition No. 6 prohibits the use of specified rodenticides on the property governed by CDP No. A-1-MEN-07-021.

The Commission further notes that Section 30610(a) of the Coastal Act and Chapter 20.532 of the County's Coastal Zoning Code exempt certain additions to existing single family residential structures from coastal development permit requirements. Pursuant to this exemption, once a house has been constructed, certain additions and accessory buildings that the applicant might propose in the future are normally exempt from the need for a permit or permit amendment.

However, in this case because the existing and proposed residences are located within 50 feet of the edge of a coastal bluff, future improvements to the approved project will not be exempt from permit requirements pursuant to Section 30610(a) of the Coastal Act and Section 13250 of the Commission's regulations. Section 30610(a) requires the Commission to specify by regulation those classes of development which involve a risk of adverse environmental effects and require that a permit be obtained for such improvements. Pursuant to Section 30610(a) of the Coastal Act, the Commission adopted Section 13250 of Title 14 of the California Code of regulations. Section 13250 specifically authorizes the Commission to require a permit for additions to existing single-family residences that could involve a risk of adverse environmental effect.

In addition, Section 13250(b)(1) indicates that improvements to a single-family structure in an area within 50 feet of the edge of a coastal bluff involve a risk of adverse environmental effect and therefore are not exempt. As discussed previously, the existing and approved residences on the subject property are within 50 feet of a coastal bluff. Therefore, pursuant to Section 13250(b)(1) of the Commission's regulations, Special Condition No. 7 expressly requires all future improvements to the approved development to obtain a coastal development permit so the County and the Commission would have the ability to review all future development on the site to ensure that future improvements

will not be sited or designed in a manner that would result in adverse impacts to environmentally sensitive habitat. Special Condition No. 2 also requires that the applicant record and execute a deed restriction approved by the Executive Director against the property that imposes the special conditions of this permit as covenants, conditions and restrictions on the use and enjoyment of the property. Special Condition No. 2 will also help assure that future owners are aware of these CDP requirements applicable to all future development.

With the mitigation measures discussed above, which are designed to minimize any potential impacts to the adjacent environmentally sensitive habitat area, the project as conditioned will not significantly degrade adjacent ESHA and will be compatible with the continuance of the coastal morning glory habitat areas.

Therefore, the Commission finds that the proposed development, as conditioned, is consistent with the provisions of LUP Policies 3.1-7 and Coastal Zoning Ordinance Section 20.496.020 concerning establishment of buffers between development and existing ESHA because (1) an ESHA buffer would be established between all new development and the ESHA on the site where the substantial existing pre-Coastal Act development does not intervene between the new development and ESHA and preclude the establishment of such a buffer, (2) where buffers can be established, the proposed project would establish an ESHA buffer width based on the standards set forth in Coastal Zoning Ordinance Section 20.496.020(A)(1)(a) through (g) for reducing the minimum buffer below 100 feet, and (3) all impacts of the development on the adjacent ESHA would be mitigated to levels of less than significant.

D. Supplemental Visual Findings

Add the following to Finding 8, "Visual Resources." The new finding language should be inserted on Page 31 of the staff recommendation after the listing of LCP policies relating to the finding topic.

Discussion:

The subject property is not located within a designated highly scenic area but is within a special neighborhood as designated in the Mendocino County LCP. As cited above, the LCP sets forth numerous policies regarding the protection of visual resources. LUP Policy 3.5-1 states that the scenic and visual qualities of Mendocino County coastal areas must be considered and protected by requiring that permitted development be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of

surrounding areas, and where feasible, to restore and enhance visual quality in visually degraded areas.

In addition, LUP Policy 3.5-2 and CZC Section 20.504.020 require special protection for several communities, including within the Gualala area, all commercial and industrially zoned parcels on the east side of Highway 1 and all parcels west of Highway 1, such as the subject property. CZC Section 20.504.020 requires that development of these parcels are subject to the development criteria set forth in CZC Section 20.504.020(C), which require that (1) the scale of new development (building height and bulk) shall be within the scope and character of existing development in the surrounding neighborhood, (2) coastal views by protected, (3) the location and scale of a proposed structure shall not have an adverse effect on nearby historic structures, and (4) Building materials and exterior colors shall be compatible with those of existing structures.

Furthermore, LUP Policy 3.5-15 and CZC Sections 20.504.035 set forth standards for exterior lighting. These policies require that lighting be shielded and positioned so that they do not shine or glare beyond the limits of the development parcel where possible.

Consistency With LUP Policy 3.5-1

The proposed development conforms to the applicable requirements of LUP Policy 3.5-1. The proposed new development will not adversely affect coastal views. No coastal views are currently afforded through the parcel from the public road as trees block all views due to the forested nature of the parcel and the surrounding area. Therefore, the development will be sited and designed to protect views to and along the ocean and scenic coastal areas.

The new development does not require significant landform alteration. The generally flat site does not require significant grading to develop the new second unit and building additions. In addition, the expanded residential development will continue to use the existing driveway that serves the site, thereby further minimizing the need for grading. Therefore, the development will minimize the alteration of natural land forms.

The new development will be visually compatible with the character of the surrounding area for several reasons. First, as discussed below in the section on consistency with CZC Section 20.504.020(C), the scale of the new development will be within the scope and character of the existing development in the surrounding neighborhood. Second, the color scheme will match the color scheme of the existing structure on the site which is similar to the color scheme of other residences within the neighborhood. Third, the 4,069-square-foot size of the remodeled and expanded residential development will be larger than some of the other residences in neighborhood, but the difference in size will not appear significant given the numerous trees that soften and screen views of structures from the road and between the parcels. Fourth, the requirements of Special Condition

No. 5 will ensure that exterior lighting associated with the development will be shielded and not shine past the boundaries of the parcel. The condition requires that all exterior lights be the minimum necessary for safe ingress, egress, and use of the structures, and shall be low-wattage, non-reflective, shielded, and have a directional cast downward such that no light will be directed to shine beyond the boundaries of the subject parcel. Thus, the development will be visually compatible with character of the surrounding area.

Therefore, for the reasons stated above, the Commission finds that the proposed project is consistent with LUP Policy 3.5-1.

Consistency With CZC Section 20.504.020(C)

The proposed development meets the criteria of CZC Section 20.504.020(C). The height of the proposed detached second unit structure and the proposed additions to the existing two story residential structure will be no taller than the maximum 24-foot height of the existing structure. Other two-story structures of similar height exist in the neighborhood, including the property immediately adjacent to the north. The proposed development will increase the size of the existing residential development on the site from 3,099 square feet to 4,069 square feet. The resulting remodeled and expanded residential development will be larger than some of the other residences in neighborhood, but the difference in size will not appear significant given the numerous trees in the area that soften and screen views of structures from the road and between the parcels. Therefore, the scale of the new development will be within the scope and character of the existing development in the surrounding neighborhood.

The proposed new development will not adversely affect coastal views. As noted above, no coastal views are currently afforded through the parcel from the public road as all views are blocked by the numerous trees in the area.

The proposed new development will not have an adverse effect on nearby historic structures. No historic structures are known to exist in the immediate vicinity of the proposed development, and even if historic structures did exist on adjacent parcels which they do not. the numerous trees on the lot will largely screen the modest sized proposed additions from view to a degree that there will be no significant adverse visual impact on such structures from the proposed development.

The proposed exterior materials and colors would generally match the existing materials and colors. The roof is composite and built-up tar and gravel. The siding is board and batt and colored gray. The trim is resawn cedar painted gray. The fascia is also resawn cedar painted gray. The proposed new windows would have aluminum frames. The roof gutters and flashing would be copper. Other houses in the neighborhood use similar color schemes. As (1) the materials and colors will match the existing, (2) similar color schemes are used on other houses in the neighborhood, and (3) the forested nature of the

neighborhood minimizes the visibility of the houses, the proposed building materials and exterior colors will be compatible with those of existing structures. To ensure that the applicants utilize the proposed color scheme, the Commission attaches Special Condition No. 5. The special condition requires that the colors of all the exterior materials of the approved addition and detached second unit shall be maintained to match or blend with the colors of the residence.

Therefore, for the reasons stated above, the Commission finds that the proposed project is consistent with CZC Section 20.504.020.

Consistency With LUP Policy 3.5-15 and CZC Sections 20.504.035

LUP Policy 3.5-15 and CZC Sections 20.504.035 require that exterior lighting be shielded and positioned so that they do not shine or glare beyond the limits of the development parcel where possible. As discussed above, the requirements of Special Condition No. 5 will ensure that exterior lighting associated with the development will be shielded and not shine past the boundaries of the parcel. The condition requires that all exterior lights be the minimum necessary for safe ingress, egress, and use of the structures, and shall be low-wattage, non-reflective, shielded, and have a directional cast downward such that no light will be directed to shine beyond the boundaries of the subject parcel. Furthermore, Special Condition No. 2 requires the applicants to record a deed restriction to impose the special conditions of the permit as covenants, conditions and restrictions on the use and enjoyment of the property. This special condition will ensure that future owners of the property will be informed of the restrictions of the permit on the use and installation of lighting at the site. Therefore, the Commission finds that the development as conditioned is consistent with LUP Policy 3.5-15 and CZC Sections 20.504.035.

Conclusion

For all of the above reasons, the Commission finds that the development as conditioned is consistent with the visual resource protection policies of the LCP, including LUP Policy 3.5-1, LUP Policy 3.5-2, LUP Policy 3.5-15, CZC Section 20.504.020, and CZC Sections 20.504.035.

CALIFORNIA COASTAL COMMISSION
NORTH COAST DISTRICT OFFICE
710 E STREET • SUITE 200
EUREKA, CA 95501-1865
VOICE (707) 445-7833
FACSIMILE (707) 445-7877

MAILING ADDRESS:
P. O. BOX 4908
EUREKA, CA 95502-4908

F17a

Filed:	May 24, 2007
49th Day:	July 12, 2007
Hearing Opened:	July 12, 2007
Staff:	Robert S. Merrill
Staff Report:	April 25, 2008
Hearing Date:	May 9, 2008
Commission Action:	

STAFF REPORT: APPEAL

DE NOVO

APPEAL NUMBER:	**A-1-MEN-07-021**
APPLICANTS:	**Greg and Sandra Moore**
LOCAL GOVERNMENT:	County of Mendocino
DECISION:	Approval with Conditions
PROJECT LOCATION:	Approximately one mile north of Gualala, on the west side of Highway One and Old Coast Highway, approximately 300 feet south of the intersection of Highway One and Old Coast Highway, at 37900 Old Coast Highway (APN 145-121-03).
PROJECT DESCRIPTION (As amended de novo):	Convert a legal non-conforming duplex into two single-family homes by: (1) remodeling the existing duplex structure into a single unit by constructing a 344-square-foot entry-way and laundry room addition and a 70-square-foot hot house addition, remodeling the interior of the structure in a manner that includes removing the second kitchen, and installing a 263-square-foot second-floor deck; (2) constructing a 556-square-foot detached second residential unit; (3) installing a total of 818 square feet of additional lower floor

	decking for both residences; and (4) connecting to utilities.
APPELLANTS:	Commissioners Mike Reilly and Sara Wan
SUBSTANTIVE FILE DOCUMENTS:	1) Mendocino County CDU No. 9-2006 and 2) Mendocino County Local Coastal Program

---

SUMMARY OF STAFF RECOMMENDATION *DE NOVO*: APPROVAL WITH CONDITIONS

Staff recommends that the Commission approve with conditions the coastal development permit for the proposed project. Staff believes that as conditioned, the development as amended for purposes of the Commission's de novo hearing would be consistent with the Mendocino County LCP.

For the purposes of *de novo* review by the Commission, the applicants have amended the project description and submitted a series of revised project plans that make changes to the originally proposed residential development as approved by the County. As amended, the proposed project description now is limited to: (1) remodeling the existing duplex structure into a single unit by constructing a 344-square-foot entry-way and laundry room addition and a 70-square-foot hot house addition, remodeling the interior of the structure in a manner that includes removing the second kitchen, and installing a 263-square-foot second-floor deck; (2) constructing a 556-square-foot detached second residential unit; (3) installing a total of 818 square feet of additional lower floor decking for both residences; and (4) connecting to utilities.

The primary issues raised by the proposed project are the project's consistency with the environmentally sensitive habitat area buffer policies and the geologic hazard policies of the LCP. The subject 0.95-acre property contains significant rare plant habitat and is a bluff top parcel.

The project revisions address concerns raised in the appeals that the project does not include sufficient buffers between proposed development and the ESHA contained on the property. The revisions to the project are designed to ensure that at least a 50-foot buffer can be established between the new development proposed and the coastal bluff morning glory habitat located landward of the existing residential structure by: (1) eliminating the proposed 510-square-foot barn/shed that would have been located as close as 24 feet to the coastal morning glory habitat, (2) eliminating the proposed new permanent fencing that would have been located adjacent to portions of the coastal morning glory habitat, and (3) eliminating the proposed gravel driveway addition that would have been located as close as 20 feet to the coastal morning glory habitat. The applicants were able to

eliminate the previously proposed driveway addition and new garage in the new residential structure by keeping the existing shared garage that will continue to serve both residential units.

These changes allow for a 50-foot buffer to be established between the new development proposed and the coastal morning glory ESHA located between the existing house and the road. Some of the proposed development would still be located less than 50 feet from the portion of the coastal morning glory habitat located on the seaward side of the house, but all of this remaining proposed development would be separated from this seaward coastal morning glory habitat by the existing house.

Staff believes the 50-foot buffer to be provided by the development as conditioned will be adequate to protect the rare plant habitat on the site and conforms to the minimum buffer requirements of the LCP policies. To ensure the protection of the ESHA on the site, staff recommends that the Commission impose Special Condition Nos. 6, and 7. Special Condition No. 6 requires that: (a) temporary construction exclusion fencing be installed and maintained during construction to protect the ESHA, (b) no invasive plants be planted on the property and all existing invasive plants be removed from all areas of the parcel, (c) seasonal high-weed mowing be conducted to keep weeds and brush from invading the rare plant habitat, (d) certain rodenticides not be used on the property. In addition, Special Condition No. 7 requires that any future additions to the residences that might be otherwise be exempt from permit requirements will require an amendment to the permit to enable the Commission to review such future development proposals to ensure that such development does not encroach into needed ESHA buffer areas.

With regard to geologic hazard concerns, the revisions to the project increase the setback of the second unit from the bluff edge (actually from the head scarp of a landslide area along the bluff) from 25 feet to 40 feet to provide an additional factor of safety to guard against bluff retreat hazards. A geotechnical report has been prepared which indicates the new structure will be safe from bluff retreat over the life of the development. Staff recommends that the Commission impose Special Condition Nos. 1, 8, and 9. These recommended conditions would require (1) conformance of the design and construction plans to the geotechnical report, (2) no future bluff or shoreline protective device, and (3) assumption of risk, waiver of liability and indemnity.

To ensure the protection of water quality, staff is recommending Special Condition No. 4, requiring implementation of standard Best Management Practices (BMPs) during construction to control the erosion of exposed soils and minimize sedimentation of coastal waters during construction.

To ensure the project's conformance with provisions in the certified LCP regarding lighting restrictions, staff recommends Special Condition No. 5 that requires all exterior lights to be the minimum necessary for the safe ingress, egress, and use of the structures, and shall be low-wattage, non-reflective, shielded, and have a directional cast downward such that no light will be directed to shine beyond the boundaries of the subject parcel.

Lastly, staff recommends Special Condition No. 2 that requires the applicants to record a deed restriction detailing the specific development authorized under the permit, identifying all applicable special conditions attached to the permit, and providing notice to future owners of the terms and limitations placed on the use of the property.

Therefore, as conditioned, staff recommends that the Commission find that the development as conditioned is consistent with the certified Mendocino County LCP and the public access policies of the Coastal Act.

The Motion to adopt the Staff Recommendation of Approval is found on page 6.

STAFF NOTES

1. Standard of Review

The Coastal Commission effectively certified the County of Mendocino's LCP in 1992. Pursuant to Section 30603(b) of the Coastal Act, after effective certification of an LCP, the standard of review for all coastal permits and permit amendments for development located between the first public road and the sea is the standards of the certified LCP and the public access and recreation policies of the Coastal Act.

2. Procedure

On July 12, 2007, the Coastal Commission found that the appeal of the County of Mendocino's approval of CDU No. 9-2006 for the subject development raised a substantial issue with respect to the grounds on which the appeal had been filed, pursuant to Section 30625 of the Coastal Act and Section 13115 of Title 14 of the California Code of Regulations. As a result, the County's approval is no longer effective, and the Commission must consider the project *de novo*. The Commission may approve, approve with conditions (including conditions different than those imposed by the County), or deny the application. Testimony may be taken from all interested persons at the *de novo* hearing.

3. Amended Project Description Submitted by Applicant for de novo Review

For the purposes of *de novo* review by the Commission, the applicants have amended the

project description and submitted a series of revised project plans that make changes to the originally proposed residential development as approved by the County. The most recent plans incorporating all project revisions are dated April 1, 2008.

The project revisions are designed to address concerns raised in the appeals that the project does not include sufficient buffers between proposed development and the ESHA contained on the property. The project revisions also increase the bluff setback of the proposed detached second unit from the bluff to further protect the new structure from future bluff retreat. With regard to the ESHA buffers, the revisions to the project are designed to ensure that at least a 50-foot buffer can be established between the new development proposed and the coastal bluff morning glory habitat located landward of the existing residential structure by: (1) eliminating the proposed 510-square-foot barn/shed that would have been located as close as 24 feet to the coastal morning glory habitat, (2) eliminating the proposed new permanent fencing that would have been located adjacent to portions of the coastal morning glory habitat, and (3) eliminating the proposed gravel driveway addition that would have been located as close as 20 feet to the coastal morning glory habitat. The barn had been proposed to house goats that the applicants had wanted to keep on the property. With the elimination of the proposed goat-keeping use, the proposed permanent fence, which had been proposed as a means to keep the goats out of the coastal morning glory habitat, is no longer needed and has been eliminated by the applicants. The applicants were also able to eliminate the previously proposed driveway addition and new garage in the new residential structure by keeping the existing garage in the existing residential structure as a shared garage that will continue to serve both residential units.

The changes described above allow for a 50-foot buffer to be established between the new development proposed and the coastal morning glory ESHA located between the existing house and the road. Some of the proposed development would still be located less than 50 feet from the portion of the coastal morning glory habitat located on the seaward side of the house, but all of this remaining proposed development would be separated from this seaward coastal morning glory habitat by the existing house.

With regard to increasing the bluff setback, the new detached second unit was originally proposed to be located 25 feet from the scarp of a slumping portion of bluff edge. The revisions to the project increase the setback of the second unit from this slump scarp to 40 feet to provide an additional factor of safety to guard against bluff retreat hazards.

As amended for purposes of the Commission's de novo review of the project, the proposed project description now is limited to: (1) remodeling the existing duplex structure into a single unit by constructing a 344-square-foot entry-way and laundry room addition and a 70-square-foot hot house addition, remodeling the interior of the structure in a manner that includes removing the second kitchen, and installing a 263-square-foot second-floor deck; (2) constructing a 556-square-foot detached second residential unit;

(3) installing a total of 818 square feet of additional lower floor decking for both residences; and (4) connecting to utilities.

The amended project description and supporting information address issues raised by the appeal where applicable, and provide additional information concerning the amended project proposal that was not a part of the record when the County originally acted to approve the coastal development permit.

4. Addendum

This staff report does not contain the complete findings for approval of the project. Staff was unable to complete the findings prior to the mailing of the staff report. However, staff will present the remaining portion of the recommended findings for approval of the project as part of the addendum at the Commission meeting. The findings contained in both this staff report and its addendum will reflect the basis for approval with conditions.

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

Motion:

I move that the Commission approve Coastal Development Permit No. A-1-MEN-07-021, subject to conditions.

Staff Recommendation of Approval:

Staff recommends a **YES** vote. Passage of this motion will result in approval of the permit as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

Resolution to Approve Permit:

The Commission hereby approves a coastal development permit for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the certified Mendocino County LCP and the public access policies of the Coastal Act. Approval of the permit complies with the California Environmental Quality Act because either: 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment; or 2) there are no further feasible mitigation measures or

alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

II. STANDARD CONDITIONS: See Attachment A.

III. SPECIAL CONDITIONS:

1. Conformance of the Design and Construction Plans to the Geotechnical Investigation Report

A. All final design and construction plans, including bluff setback, foundations, grading, and drainage plans, shall be consistent with the recommendations contained in the Geotechnical Investigation report dated June 24, 2005 prepared by Bace Geotechnical, except that the detached second unit and associated decks shall be set back 40 feet from the bluff edge and the headscarp of the incipient landslide southeast of the property as identified in the geotechnical report as proposed by the applicant. **PRIOR TO ISSUANCE OF COASTAL DEVELOPMENT PERMIT NO. A-1-07-021**, the applicant shall submit, for the Executive Director's review and approval, evidence that a licensed professional (Certified Engineering Geologist or Geotechnical Engineer) has reviewed and approved all final design, construction, foundation, grading and drainage plans and has certified that each of those plans is consistent with all of the recommendations specified in the above-referenced geotechnical report approved by the California Coastal Commission for the project site.

B. The permittee shall undertake development in accordance with the approved final plans. Any proposed changes to the approved final plans shall be reported to the Executive Director. No changes to the approved final plans shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

2. Deed Restriction

PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit to the Executive Director for review and approval documentation demonstrating that the applicant has executed and recorded against the parcel(s) governed by this permit a deed restriction, in a form and content acceptable to the Executive Director: (1) indicating that, pursuant to this permit, the California Coastal Commission has authorized development on the subject property, subject to terms and conditions that restrict the use and enjoyment of that property; and (2) imposing the Special Conditions of this permit as covenants, conditions

and restrictions on the use and enjoyment of the Property. The deed restriction shall include a legal description of the entire parcel or parcels governed by this permit. The deed restriction shall also indicate that, in the event of an extinguishment or termination of the deed restriction for any reason, the terms and conditions of this permit shall continue to restrict the use and enjoyment of the subject property so long as either this permit or the development it authorizes, or any part, modification, or amendment thereof, remains in existence on or with respect to the subject property.

3. Encroachment Permit

PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the permittee shall submit to the Executive Director a copy of the final, approved Encroachment Permit issued by the Mendocino County Department of Transportation for the installation of any needed driveway improvements onto Old Coast Highway right-of-way, or evidence that no permit is required. The applicant shall inform the Executive Director of any changes to the project required by the Mendocino County Department of Transportation. Such changes shall not be incorporated into the project until the applicant obtains a Commission amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.

4. Best Management Practices and Construction Responsibilities

The permittee shall comply with the following construction-related requirements:

A. Prior to the commencement of any other construction activities, the temporary exclusion/construction fencing depicted in the revised site plan dated April 1, 2008 shall be installed to protect coastal bluff morning glory (Calystegia purpurata ssp. Saxicola) habitat. The temporary/construction fencing shall be maintained in place until the authorized development is completed. No construction related activities shall be allowed to encroach into the areas protected by the temporary exclusion/construction fencing

B. Any and all excess excavated material resulting from construction activities shall be removed and disposed of at a disposal site outside the coastal zone or placed within the coastal zone pursuant to a valid coastal development permit;

C. Straw bales, coir rolls, or silt fencing structures shall be installed prior to and maintained throughout the construction period to contain runoff from construction areas, trap entrained sediment and other pollutants, and prevent discharge of sediment and pollutants downslope toward the ocean;

D. On-site vegetation shall be maintained to the maximum extent possible during construction activities;

E. Any disturbed areas shall be replanted or seeded as soon as feasible following completion of construction of the addition to the existing residential structure, installation of the deck additions, construction of the detached second residential unit, and connection to utilities, but in any event no later than May 1st of the next spring season consistent with the planting limitations required by Special Condition No. 6(D);

F. All on-site stockpiles of construction debris shall be covered and contained at all times to prevent polluted water runoff; and

G. The canopy and root zones of existing living trees on site shall be protected through temporary fencing or screening during construction.

5. Design Restrictions

A. The colors of all exterior siding, trim, roofing, and door of the approved addition to the existing residential structure and the approved detached second unit shall be maintained to match or blend with the colors of the residence. In addition, all exterior materials, including roof, windows, and doors, shall not be reflective to minimize glare;

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

6. Protection of Sensitive Plant Habitat

The permittee shall comply with the following requirements to protect sensitive plant habitat:

A. Comply with the temporary exclusion/construction fencing requirements of Special Condition No. 4(A).

B Invasive plants, including iceplant (*Carpobrotus* spp.), English ivy (*Hedera helix*), and periwinkle (*Vinca major*) shall be removed from all areas of the parcel in a manner consistent with Mitigation Measure1(c) of the Biotic Assessment & Rare Plant Survey dated Sept., 2006 and prepared by BioConsultant LLC included as Exhibit 10 of the Commission Staff De Novo Recommendation.

C. Conduct seasonal high-weed mowing in the area between the existing and authorized residential development and Old Coast Highway to keep weeds and brush from invading the coastal bluff morning glory (*Calystegia purpurata* ssp. *Saxicola*) habitat located in that area.

D. No plant species listed as problematic and/or invasive by the California Native Plant Society, the California Invasive Plant Council, or by the State of California shall be employed or allowed to naturalize or persist at the site of the proposed development. No plant species listed as a 'noxious weed' by the State of California or the U.S. Federal Government shall be utilized within the property.

E. Rodenticides containing any anticoagulant compounds, including but not limited to, Bromadiolone, Brodifacoum, or Diphacinone, shall not be used.

7. Future Development Restrictions

This permit is only for the development described in Coastal Development Permit No. A-1-MEN-07-021. Any future improvements to the single-family residence or other approved structures will require a permit amendment or a new coastal development permit.

8. No Future Bluff or Shoreline Protective Device

A. By acceptance of this permit, the applicant agrees, on behalf of himself and all successors and assigns, that no bluff or shoreline protective device(s) shall ever be constructed to protect the detached second residential unit and the new decking in the vicinity of the second unit authorized pursuant to Coastal Development Permit No. A-1-MEN-07-021, in the event that the second residential unit and the new decking are threatened with damage or destruction from waves, erosion, storm conditions, bluff retreat, landslides, ground subsidence, or other natural hazards in the future. By acceptance of this permit, the applicant hereby waives, on behalf of himself and all successors and assigns, any rights to construct such devices to protect the second residential unit and the new decking that may exist under Public Resources Code Section 30235 or under Mendocino County Land Use Plan Policy No. 3.4-12, and Mendocino County Coastal Zoning Code Section 20.500.020(E)(1).

B. By acceptance of this Permit, the applicant further agrees, on behalf of himself and all successors and assigns, that the landowner shall remove the detached second residential unit and the new decking in the vicinity of the second unit authorized by this permit if any government agency has ordered that the carport is not to be occupied due to any of the hazards identified above. In the event that

portions of the carport fall to the beach before they are removed, the landowner shall remove all recoverable debris associated with the development from the beach and ocean and lawfully dispose of the material in an approved disposal site. Such removal shall require a coastal development permit.

C. In the event the edge of the bluff recedes to within 10 feet of the detached second residential unit and the new decking in the vicinity of the second unit but no government agency has ordered that the second residential unit and the new decking not be occupied, a geotechnical investigation shall be prepared by a licensed geologist or civil engineer with coastal experience retained by the applicant, that addresses whether any portions of the structure are threatened by waves, erosion, storm conditions, or other natural hazards. The report shall identify all those immediate or potential future measures that could stabilize the carport without shore or bluff protection, including but not limited to, removal or relocation of portions of the second residential unit and the new decking. The report shall be submitted to the Executive Director and the appropriate local government official. If the geotechnical report concludes that the second residential unit and the new decking is unsafe for use, the permittee shall, within 90 days of submitting the report, apply for a coastal development permit amendment to remedy the hazard which shall include removal of the threatened portion of the second residential unit and the new decking.

9. Assumption of Risk, Waiver of Liability and Indemnity

By acceptance of this permit, the applicant acknowledges and agrees: (i) that the site may be subject to hazards from landslide, bluff retreat, erosion, subsidence, and earth movement; (ii) to assume the risks to the applicant and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (iv) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.

10. Conditions Imposed By Local Government

This action has no effect on conditions imposed by a local government pursuant to an authority other than the Coastal Act.

IV. FINDINGS AND DECLARATIONS

The Commission hereby finds and declares the following:

1. Incorporation of Substantial Issue Findings

The Commission hereby incorporates by reference the Substantial Issue Findings contained in the Commission staff report dated June 29, 2007.

2. Site Description

The subject property is located approximately one mile north of Gualala, on the west side of Highway One and Old Coast Highway, approximately 300 feet south of the intersection of Highway One and Old Coast Highway, at 37900 Old Coast Highway (See Exhibit Nos. 1-2). The 0.95-acre parcel is a bluff top lot that extends from Old Coast Highway to the mean high tide line of the ocean below the bluff.

The property is located in a small, mostly developed neighborhood of residential lots strung along the ocean side of the road. The parcel is designated in the Land Use Plan (LUP) and zoned in the Coastal Zoning Code (CZC) as Rural Residential which allow as the principally permitted use the development of one single-family residence. The LCP limits density to one unit per parcel. The property is currently developed with a residential duplex containing two residential units. The duplex is a legal non-conforming use that was developed in the early 1960s years prior to the Coastal Initiative of 1972. The attached garage was built in the 1980s pursuant to a permit waiver granted by the Executive Director in 1986. The duplex is served by an existing driveway.

The subject parcel occupies most of a small local promontory between two small coves. The existing duplex is located near the seaward end of the point and is flanked by 40 to 50-foot high bluffs around the sides of the promontory that face generally west, southwest, and southeast. The existing duplex is approximately 33 feet from the bluff edge (an existing deck encroaches to within 17 feet of the bluff edge. The blufftop area of the parcel is part of a nearly level marine terrace that slopes very gradually south-southwest towards the ocean at a gradient of approximately ten horizontal to one vertical ratio.

The parcel is vegetated primarily by mowed perennial grasses and forbs, with an over story of Bishop pine (*Pinus muricata*) and Monterey Cypress (Cupressus macrocarpa). An open forest consisting mostly of native bishop pine and non-native Monterey cypress covers about two-thirds of the parcel from the roadway to the duplex sited near the bluff edge. The existing gravel driveway runs along the northwest boundary of the parcel to the duplex and is flanked by a row of cypresses on the neighboring parcel to the north. A separate row of Monterey Pines exist along the southeastern boundary of the parcel on the property of the neighbor to the south. Near the bluff edge, the vegetation changes to a

northern coastal scrub community and a small remnant patch of coastal terrace prairie, a rare plant community.

A botanical survey was performed in September of 2006 (See Exhibit No. 10). The survey indicates that rare coastal bluff morning glory (*Calystegia purpurata ssp. Saxicola)* is present in five specific areas of the property, including within certain portions of the bishop pine forest area of the parcel between the road and the duplex and also within the coastal scrub community along the bluff. The total population is estimated to number between 258 and 300 individuals. As discussed in the Environmentally Sensitive Habitat Area (ESHA) Finding below, the coastal bluff morning glory habitat is considered to be ESHA. The botanical survey also identified blue violet (Viola adnunca) within the project area. Blue violet can serve as a host plant for endangered Behren's silverspot butterfly. However, a further survey of the suitability of the parcel to provide butterfly habitat was later performed in 2006 (See Exhibit No. 11), and based on the results of that study and the mitigation measures of the project, the U.S. Fish & Wildlife Service has determined that the project is unlikely to result in incidental take of Behren's silverspot butterfly (See Exhibit No. 12).

The subject parcel is not located within a designated highly scenic area, but is within a special neighborhood as designated in the Mendocino County Local Coastal Program (LCP). Because of existing vegetation and development, the subject parcel affords very little view of the ocean from Old Coast Highway, the public vantage point closest to the development.

3. Project Description

The development, as approved by the County involved converting an existing legal non-conforming duplex into two single-family homes by (1) remodeling the duplex into a single unit, including removing the second kitchen and constructing a 530-square-foot addition and a 517- square-foot deck addition; (2) constructing a 605-square-foot detached second residential unit with a 528-square-foot garage below; (3) constructing a 510-square-foot barn/shed with a maximum average height of 15 feet; and (4) performing associated development including constructing a gravel driveway addition and fence, and connecting to utilities.

For the purposes of *de novo* review by the Commission, the applicants have amended the project description and submitted a series of revised project plans that make changes to the originally proposed residential development as approved by the County (See Exhibit Nos. 3-7). The most recent plans incorporating all project revisions are dated April 1, 2008. The project revisions include: (1) eliminating the proposed 510-square-foot barn/shed that would have been located as close as 24 feet to the coastal morning glory habitat, (2) eliminating the proposed new permanent fencing that would have been located adjacent to portions of the coastal morning glory habitat, (3) eliminating the

proposed gravel driveway addition that would have been located as close as 20 feet to the coastal morning glory habitat, and (4) increasing the bluff setback of the new detached second unit from 25 feet from the head scarp of a slumping portion of bluff edge to 40 feet to provide an additional factor of safety to guard against bluff retreat hazards.

As amended for purposes of the Commission's de novo review of the project, the proposed project description now is limited to: (1) remodeling the existing duplex structure into a single unit by constructing a 344-square-foot entry-way and laundry room addition and a 70-square-foot hot house addition, remodeling the interior of the structure in a manner that includes removing the second kitchen, and installing a 263-square-foot second-floor deck; (2) constructing a 556-square-foot detached second residential unit; (3) installing a total of 818 square feet of additional lower floor decking for both residences; and (4) connecting to utilities.

The existing partial two-story, maximum 24-foot-high, 3,099-square-foot duplex structure would be remodeled into a 3,513-square-foot single unit that includes 2,827 square feet of habitable interior space, a 70-square-foot hot house, and 616 square feet of attached garage space. Most of the existing structure was built in the early 1960's prior to passage of the 1972 Coastal Initiative. The garage portion of the structure was built in the 1980s. pursuant to Coastal Development Permit Waiver No. 1-86-18, granted in February of 1986. The proposed 344-square foot entry way and laundry room addition would extend between two wings of the structure on the landward side of the structure. The proposed 818 square feet of lower floor deck additions (1,194 square feet total) would extend landward from the house addition between the two residential units and extend around the southeast corner of the main structure.

The proposed new second residential unit would be located along the southeastern side of the parcel. The new unit would be separated from the existing residential structure by a 5-foot-wide deck. The new one-story 556-square-foot second residential unit is now proposed to be located approximately 40 feet from the closest bluff edge (the head scarp of a bluff landslide feature to the south of the structure. The owners of the second residential unit would share much of the existing and proposed lower floor decking around both structures with the primary residence owners.

The proposed exterior materials and colors would generally match the existing materials and colors. The roof is composite and built-up tar and gravel. The siding is board and batt and colored gray. The trim is resawn cedar painted gray. The fascia is also resawn cedar painted gray. The proposed new windows would have aluminum frames. The roof gutters and flashing would be copper.

4. Planning and Locating New Development

LCP Policies

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

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

Discussion:

The subject parcel is located within an existing residential neighborhood and is planned and zoned in the Land Use Plan and Coastal Zoning Code as Rural Residential (RR). The Coastal Zoning Code (CZC) allows single-family residential development as a principal permitted use in the RR zoning district but does not allow for more than one residential unit per parcel in this location. As discussed in the Non-Conforming Use finding below, the duplex use of the property pre-existed certification of the LCP and is considered a legal non-conforming use. As is further explained in the Non-Conforming Use finding below, the development conforms to CZC provisions that allow for expansion of non-conforming uses and structures under certain criteria. Therefore, the two-residence use of the property is consistent with the LCP.

The development will not increase traffic on Highway One, as the net number of residential units on the property before and after the project will not increase. As the property had already been developed with a residential duplex prior to certification of the LCP, the significant cumulative adverse impacts on traffic capacity of Highway One from the two-residence use of the property was taken into account at the time the LCP was certified. Therefore, as conditioned, the proposed would not result in adverse impacts to the traffic capacity of Highway One consistent with the applicable provisions of LUP Policy 3.8-1.

The development will be served by municipal sewer and water systems. Water is supplied by the North Gualala Water Company and sewer service is provided by the Gualala Community Services District.

As discussed below, the proposed development has been conditioned to include mitigation measures, which will minimize all significant adverse environmental impacts. Therefore, the Commission finds that as conditioned, the proposed development is consistent with LUP Policies 3.9-1 and 3.8-1 because (1) the development is located within an existing developed area, (2) the two-residence use of the property is a legal non-conforming use of the site allowed under the LCP, (3) there are adequate services on the site to serve the proposed development, and (3) the development will not contribute to

adverse cumulative impacts on highway capacity, scenic values, water quality, or other coastal resources.

5. Expansion of Legal Non-Conforming Use of Property

LCP Policies

The LUP Rural Residential Land Use Classification

> The subject property is classified on the certified Land Use Plan Map as Rural Residential. The Rural Residential Land Use classification as set forth in the LUP states that uses allowed under this classification include the following:
>
> *Principal Permitted Use: Residential and associated utilities, light agriculture, home occupation.*
>
> *Conditional Uses: Cottage industry; conservation and development of natural resources; public facilities and utilities determined to be necessary on Rural Residential lands; recreation-education.*

CZC Section 20.376.010, *Principal Permitted Use for RR Districts*, states:

> *The following use types are permitted in the Rural Residential District:*
>
> *(A) Coastal Residential Use Types.*
>
> *Family Residential: Single-family;*
> *Vacation Home Rental.*
>
> *(B) Coastal Agricultural Use Types.*
>
> *Light Agriculture;*
> *Row and Field Crops;*
> *Tree Crops.*
>
> *(C) Coastal Open Space Use Types.*
>
> *Passive Recreation.*

CZC Section 20.376.015, *Conditional Uses for RR Districts*, states in applicable part:

> *The following are permitted uses upon the issuance of a coastal development use permit:*
>
> *A) Coastal Residential Use Types.*
>
> *Family Residential: Cluster Development (RR:L-10 Districts Only);*
> *Mobile Home Park.*

LUP Policy G3.2-3 (Section 4.14 of the Gualala Town Plan) states:

> *Notwithstanding other provisions of the Local Coastal Program that limit the number of residences to one per parcel, Second Residential Units shall be permitted on all legal parcels within the Gualala Town Plan area, with the exception of parcels located west of Highway 1, in accordance with standards established in the Coastal Zoning Code (Division II). Second Residential Units shall not be allowed on parcels located west of Highway 1 to protect against the possible conversion of such units to vacation home rentals which may adversely affect the character of existing residential neighborhoods.* (emphasis added)

CZC Section 20.458.020 Gualala Town Plan Second Residential Units states in applicable part:

> *(C) Permitted locations for Second Residential Units:*
>
> *(1) Notwithstanding other provisions of the Local Coastal Program that limit the number of residences to one (1) per unit per parcel, second residential units shall be permitted on all legal parcels within the Gualala Town Plan area, with the exception of parcels located west of Highway 1, up to a maximum of one hundred (100). Second residential units shall not be permitted on parcels located west of Highway 1*. (emphasis added)

CZC Section 20.480.005 states that:

> *To allow for the continued utilization of lawfully existing improvements and uses made nonconforming by the adoption of the Coastal Element of the Mendocino County General Plan and this Division, where the use is compatible with adjacent land uses and where it is not feasible to replace the activity with a confirming land use.*

(A) A nonconforming use is a use of a structure or land which was lawfully established and maintained prior to the adoption of this Division but which does not conform with the use regulations for the zone in which it is located.

(B) A nonconforming structure is a structure which was lawfully erected prior to the effective date of the application of these regulations but which, under this Division, does not conform with the standards of yard spaces, height of structures, distance between structures, parking, etc., prescribed in the regulations for the zone in which the structure is located. (Ord. No. 3785 (part), adopted 1991)

Mendocino County Zoning Code Section 20.480.010 states that:

(A) A legal nonconforming use or structure may be continued if it conforms to the following criteria:

(1) If the existing use is contained within a structure built or modified to accommodate the existing use, conformance is required with the applicable building code and/or zoning code in effect at the time of construction or modification.

(2) The use must be compatible with adjacent land uses, such that its hours of operation, noise levels, aesthetic impacts, and traffic to the site do not now significantly adversely impact adjacent land uses.

(B) Routing maintenance and repairs may be performed on a nonconforming structure or site. (Ord. No. 3785 (part), adopted 1991)

Mendocino County Zoning Code Section 20.480.025, *Expansion or Reduction of Nonconforming Uses***,** states that:

(A) Existing legal nonconforming uses conforming with Section 20.480.010 may be expanded or reduced to a use of lesser intensity through the issuance of a Coastal Development Use Permit provided the following findings are made: (emphasis added)

(1) That it is not reasonably economically or physically feasible to make the use of the property compatible with the applicable general plan designation; and

(2) That the use is, and, after expansion, will be compatible with adjacent land uses and that any increased adverse impacts on access or public facilities and services will be mitigated; and

(3) That the site is physically separate from surrounding properties such that continued nonconforming use is appropriate in that location; and

(4) The expansion is found consistent with all other applicable policies of the Coastal Element of the Mendocino County General Plan.

(B) A legal nonconforming mobile home may be replaced by a new mobile home without a use permit if no use permit was required for the original installation. (Ord. No. 3785 (part), adopted 1991)

6. Geologic Hazards

LCP Policies

LUP Policy 3.4-1 states:

> *The County shall review all applications for Coastal Development permits to determine threats from and impacts on geologic hazards arising from seismic events, tsunami run-up, landslides, beach erosion, expansive soils and subsidence and shall require appropriate mitigation measures to minimize such threats. In areas of known or potential geologic hazards, such as shoreline and bluff top lots and areas delineated on the hazards maps the County shall require a geologic investigation and report, prior to development, to be prepared by a licensed engineering geologist or registered civil engineer with expertise in soils analysis to determine if mitigation measures could stabilize the site. Where mitigation measures are determined to be necessary, by the geologist, or registered civil engineer the County shall require that the foundation construction and earthwork be supervised and certified by a licensed engineering geologist, or a registered civil engineer with soil analysis expertise to ensure that the mitigation measures are properly incorporated into the development.* [Emphasis added.]

LUP Policy 3.4-7 states that:

> *The County shall require that new structures be set back a sufficient distance from the edges of bluffs to ensure their safety from bluff erosion*

> *and cliff retreat during their economic life spans (75 years). Setbacks shall be of sufficient distance to eliminate the need for shoreline protective works. Adequate setback distances will be determined from information derived from the required geologic investigation and from the following setback formula:*
>
> *Setback (meters) = Structure life (years) x Retreat rate (meters/year)*
>
> *The retreat rate shall be determined from historical observation (e.g., aerial photographs) and/or from a complete geotechnical investigation.*
>
> *All grading specifications and techniques will follow the recommendations cited in the Uniform Building Code or the engineering geologist's report.*[1] [Emphases added.]

LUP Section 3.4-8 states that:

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

LUP Policy 3.4-10 states:

> *No development shall be permitted on the bluff face because of the fragility of this environment and the potential for resultant increase in bluff and beach erosion due to poorly-sited development. However, where they would substantially further the public welfare, developments such as staircase accessways to beaches or pipelines to serve coastal-dependent industry may be allowed as conditional uses, following a full environmental, geologic and engineering review and upon the determinations that no feasible less environmentally damaging alternative is available and that feasible mitigation measures have been provided to minimize all adverse environmental effects.*

Coastal Zoning Code Section 20.500.005 states with regard to the scope of applicability of the County's hazards chapter:

> *This Chapter shall apply to all development proposed in the Coastal Zone unless and until it is determined by the County Coastal Permit Administrator that the project is not subject to threats from geologic, fire, flood or other hazards.* [Emphasis added.]

---

[1] This language is reiterated in Coastal Zoning Code Sections 20.500.020(B)(1) and 20.500.020(E)(3).

Zoning Code Section 20.500.010(A) states that development in Mendocino County's Coastal Zone shall:

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

Coastal Zoning Code Section 20.500.015 states, in applicable part:

> *(A) Determination of Hazard Areas.*
>
> *(1) Preliminary Investigation. The Coastal Permit Administrator shall review all applications for Coastal Development Permits to determine threats from and impacts on geologic hazards.*
>
> *(2) Geologic Investigation and Report. In areas of known or potential geologic hazards such as shoreline and bluff top lots and areas delineated on the hazards maps, a geologic investigation and report, prior to development approval, shall be required. <u>The report shall be prepared by a licensed engineering geologist or registered civil engineer pursuant to the site investigation requirements in Chapter 20.532</u>.* [Emphasis added.]

CZC Section 20.500.020, entitled "Geologic Hazards – Siting and Land Use Restrictions," states in applicable part:

> *(B) Bluffs.* **…**
>
> *(2) Drought tolerant vegetation shall be required within the blufftop setback.*
>
> *(3) Construction landward of the setback shall not contribute to erosion of the bluff face or to instability of the bluff.*
>
> **…**

(E) Erosion.

*(1) Seawalls, breakwaters, revetments, groins, harbor channels and other structures altering natural shoreline processes or retaining walls shall not be permitted unless judged necessary for the protection of existing development, public beaches or coastal dependent uses***…** [Emphasis added.]

7. Environmentally Sensitive Habitat Areas

LCP Policies

Environmentally Sensitive Habitat Areas (ESHA) are defined on page 38 of the Mendocino County LUP as:

Any areas 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.

Coastal Zoning Code Section 20.496.010 "Environmentally Sensitive Habitat and other Resource Areas—Purpose" states (emphasis added):

…Environmentally Sensitive Habitat Areas (ESHA's) include: anadromous fish streams, sand dunes, rookeries and marine mammal haul-out areas, wetlands, riparian areas, areas of pygmy vegetation which contain species of rare or endangered plants and habitats of rare and endangered plants and animals.

LUP Policy 3.1-1 states: (emphasis added)

Development proposals in environmentally sensitive habitat areas such as wetlands, riparian zones on streams or sensitive plant or wildlife habitats (all exclusive of buffer zones) including, but not limited to those shown on the Land Use Maps, shall be subject to special review to determine the current extent of the sensitive resource. Where representatives of the County Planning Department, the California Department of Fish and Game, the California Coastal Commission, and the applicant are uncertain about the extent of sensitive habitat on any parcel such disagreements shall be investigated by an on-site inspection by the landowner and/or agents, County

Planning Department staff member, a representative of California Department of Fish and Game, a representative of the California Coastal Commission. The on-site inspection shall be coordinated by the County Planning Department and will take place within 3 weeks, weather and site conditions permitting, of the receipt of a written request from the landowner/agent for clarification of sensitive habitat areas.

If all of the members of this group agree that the boundaries of the resource in question should be adjusted following the site inspection, such development should be approved only if specific findings are made which are based upon substantial evidence that the resource as identified will not be significantly degraded by the proposed development. If such findings cannot be made, the development shall be denied. Criteria used for determining the extent of wetlands and other wet environmentally sensitive habitat areas are found in Appendix 8 and shall be used when determining the extent of wetlands.

LUP Policy 3.1-4 states: (emphasis added)

As required by the Coastal Act, development within wetland areas shall be limited to:

1. *Port facility construction or expansion, Section 30233(a)(1).*
2. *Energy facility construction or expansion, Section 30233(a)(1).*
3. *Coastal-dependent industrial facilities such as commercial fishing facilities, construction or expansion, Section 30233(a)(1).*
4. *Maintenance or restoration of dredged depths or previously dredged depths in: navigational channels, turning basins, vessel berthing and mooring areas, and associated with boat launching ramps.*
5. *In wetland areas, only entrance channels for new or expanded boating facilities may be constructed, except that in a degraded wetland, other boating facilities may be permitted under special circumstances, Section 30233(a)(3). New or expanded boating facilities may be permitted in estuaries, Section 30233(a)(4).*
6. *Incidental public services purposes, including, but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.*
7. *Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.*
8. *Nature study purposes and salmon restoration projects.*
9. *Aquaculture, or similar resource dependent activities excluding ocean ranching. (See Glossary)*

In any of the above instances, the diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes, shall be permitted in accordance with all

> *other applicable provisions of this plan. Such requirements shall include a finding that there is no feasible less environmentally damaging alternative and shall include mitigation measures required to minimize adverse environmental effects, in accordance with Sections 30233 and 30607, and other provisions of the Coastal Act*

LUP Policy 3.1-7 states (emphasis added):

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 significant degradation resulting from future developments. The width of the buffer area shall be a minimum of 100 feet, unless an applicant can demonstrate, after consultation and agreement with the California Department of Fish and Game, and County Planning Staff, that 100 feet is not necessary to protect the resources of that particular habitat area and the adjacent upland transitional habitat function of the buffer 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 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 and must comply at a minimum with each of the following standards:

1. *It shall be sited and designed to prevent impacts which would significantly degrade such areas;*
2. *It 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; and*
3. *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.* [emphasis added]

Coastal Zoning Code Section 20.496.020 "Environmentally Sensitive Habitat and other Resource Areas—Development Criteria" states (emphasis added):

(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.*

(1) 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.*

Standards for determining the appropriate width of the buffer area are as follows:

(a) Biological Significance of Adjacent Lands. *Lands adjacent to a wetland, stream, or riparian habitat area vary in the degree to which they are functionally related to these habitat areas. Functional relationships may exist if species associated with such areas spend a significant portion of their life cycle on adjacent lands. The degree of significance depends upon the habitat requirements of the species in the habitat area (e.g., nesting, feeding, breeding, or resting).*

Where a significant functional relationship exists, the land supporting this relationship 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. Where no significant functional relationships exist, the buffer shall be measured from the edge of the wetland, stream, or riparian habitat that is adjacent to the proposed development.

(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 after consultation with the Department of Fish and Game or others with similar expertise:*

(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.

(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.*

(d) Use of Natural Topographic Features to Locate Development. *Hills and bluffs adjacent to ESHA's shall be used, where feasible, to buffer habitat areas. Where otherwise permitted, development should be located on the sides of hills away from ESHA's. Similarly, bluff faces should not be developed, but shall be included in the buffer zone.*

(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.*

(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 (100) 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.*

(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 shall be made on a case-by-case basis depending upon the resources involved, the degree to which adjacent lands are already developed, and the type of development already existing in the area…*

(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 riparian vegetation or the top of the bluff).*

(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.*

(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.

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

(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 natural stream channels. The term "best site" shall be defined as the site having the least impact on the maintenance of the biological and physical integrity of the buffer strip or critical habitat protection area and on the maintenance of the hydrologic capacity of these areas to pass a one hundred (100) year flood without increased damage to the coastal zone natural environment or human systems.

(d) 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.

(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.

(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. [emphasis added]

(g) Where riparian vegetation is lost due to development, such vegetation shall be replaced at a minimum ratio of one to one (1:1) to restore the protective values of the buffer area.

(h) Aboveground structures shall allow peak surface water flows from a one hundred (100) year flood to pass with no significant impediment.

(i) Hydraulic capacity, subsurface flow patterns, biological diversity, and/or biological or hydrological processes, either terrestrial or aquatic, shall be protected.

(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 wherever 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. Piers may be allowed on a case by case basis.

(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. (Ord. No. 3785 (part), adopted 1991)

LUP Policy 3.1-10 states: (emphasis added)

Areas where riparian vegetation exists, such as riparian corridors, are environmentally sensitive habitat areas and development within such areas shall be limited to only those uses which are dependent on the riparian resources. All such areas shall be protected against any significant disruption of habitat values by requiring mitigation for those uses which are permitted. No structure or development, including dredging, filling, vegetation removal and grading, which could degrade the riparian area or diminish its value as a natural resource shall be permitted in the Riparian Corridor except for:

- *Channelizations, dams, or other substantial alterations of rivers and streams as permitted in Policy 3.1-9;*
- *pipelines, utility lines and road crossings, when no less environmentally damaging alternative route is feasible;*
- *existing agricultural operations;*
- *removal of trees for disease control, public safety purposes, or for firewood for the personal use of the property owner at his or her residence. Such activities shall be subject to restrictions to protect the habitat values.*

LUP Policy 3.1-29 states: (emphasis added)

The California Department of Fish and Game, the California Native Plant Society, and the U.S. Fish and Wildlife Service shall be requested to maintain and augment mapped inventory of all rare, endangered, threatened and protected plant and wildlife habitats on the Mendocino Coast based on up-to-date survey information. Symbols indicating rare or endangered plants and wildlife are placed on the Land Use Maps to generally locate listed species and will be pinpointed as necessary to prevent degradation prior to issuing any development permit. Furthermore, the Department of Fish and Game is requested to work with the county during the planning and permit process to evaluate the significance of mapped sites as they apply to individual development applications.

8. Visual Resources

LCP Policies:

LUP Policy 3.5-1 states in applicable part:

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

LUP Policy 3.5-5 states in applicable part:

Providing that trees will not block coastal views from public areas such as roads, parks and trails, tree planting to screen buildings shall be encouraged. In specific areas, identified and adopted on the land use plan maps, trees currently blocking views to and along the coast shall be required to be removed or thinned as a condition of new development in those specific areas. New development shall not allow trees to block ocean views. [emphasis added]

LUP Policy 3.5-15 states in applicable part:

Installation of satellite receiving dishes shall require a coastal permit. In highly scenic areas, dishes shall be located so as to minimize visual impacts. Security lighting and floodlighting for occasional and/or emergency use shall be permitted in all areas. Minor additions to existing nightlighting for safety purposes shall be exempt from a coastal permit. In any event no lights shall be installed so that they distract motorists and they shall be shielded so that they do not shine or glare beyond the limits of the parcel wherever possible. [emphasis added]

Coastal Zoning Ordinance Section 20.388.060 states: emphasis added:

Development in Westport, Caspar, Little River, Albion, Elk, Manchester, Anchor Bay and Gualala shall be subject to the development criteria in Section 20.504.020. [emphasis added]

Coastal Zoning Ordinance Section 20.504.020 states in applicable part:

(B) The communities and service centers, designated as CRV or CFV, of Westport, Caspar, Albion, Elk and Manchester, and the additional areas of Little River, Anchor Bay and Gualala, as described below, shall have special protection as set forth in Section 20.504.020(C):

> *(3) Gualala: The Sonoma County Line on the south to Big Gulch on the north including all commercial and industrially zoned parcels on the east side of Highway 1 and all parcels west of Highway 1.*

(C) Development Criteria.

> *(1) The scale of new development (building height and bulk) shall be within the scope and character of existing development in the surrounding neighborhood.*
>
> *(2) New development shall be sited such that public coastal views are protected.*
>
> *(3) 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.*

(4) Building materials and exterior colors shall be compatible with those of existing structures.

(D) The scenic and visual qualities of Mendocino County Coastal Areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas designated by the County of Mendocino Coastal Element shall be subordinate to the character of its setting. (Ord. No. 3785 (part), adopted 1991) [emphasis added]

Coastal Zoning Ordinance Section 20.504.035 states in applicable part:

(A) Essential criteria for the development of night lighting for any purpose shall take into consideration the impact of light intrusion upon the sparsely developed region of the highly scenic coastal zone.

(1) No light or light standard shall be erected in a manner that exceeds either the height limit designated in this Division for the zoning district in which the light is located or the height of the closest building on the subject property whichever is the lesser.

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

(3) Security lighting and flood lighting for occasional and/or emergency use shall be permitted in all areas.

(4) Minor additions to existing night lighting for safety purposes shall be exempt from a coastal development permit.

(5) No lights shall be installed so that they distract motorists.

9. Water Quality

LCP Policies

LUP Policy 3.1-25 states:

> *The Mendocino Coast is an area containing many types of marine resources of statewide significance. Marine resources shall be maintained, enhanced and, where feasible, restored; areas and species of special biologic or economic significance shall be given special protection; and the biologic productivity of coastal waters shall be sustained.*

Coastal Zoning Code Section 20.492.020(B) incorporates sedimentation standards and states in applicable part:

> *(B) To prevent sedimentation of off-site areas, vegetation shall be maintained to the maximum extent possible on the development site. Where necessarily removed during construction, native vegetation shall be replanted to help control sedimentation.*
>
> *(C) Temporary mechanical means of controlling sedimentation, such as hay baling or temporary berms around the site may be used as part of an overall grading plan, subject to the approval of the Coastal Permit Administrator.*

Discussion

LUP Policy 3.1-25 requires the protection of the biological productivity of coastal waters. CZC Section 20.492.020 sets forth sedimentation standards to minimize sedimentation of off-site areas. Specifically, CZC Section 20.492.020(B) requires that the maximum amount of vegetation existing on the development site shall be maintained to prevent sedimentation of off-site areas, and where vegetation is necessarily removed during construction, native vegetation shall be replanted afterwards to help control sedimentation. CZC Section 20.492.020(C) suggests the use of temporary mechanical methods as a means of controlling sedimentation.

The proposed project involves converting an existing residential duplex structure into two separated residences by (1) remodeling the existing residential structure by constructing a 344-square-foot entry-way and laundry room addition and a 70-square-foot hot house addition, remodeling the interior of the structure in a manner that includes removing the second kitchen, and installing a 263-square-foot second-floor deck; (2) constructing a 556-square-foot detached second residential unit; (3) installing a total of 818 square feet of additional lower floor decking for both residences; and (4) connecting to utilities.

As discussed previously, the subject parcel is located on a bluff top property. Runoff originating from the development site that is allowed to drain down the bluff toward the ocean could contain entrained sediment and other pollutants in the runoff that would contribute to degradation of the quality of coastal waters. The increase in impervious surface area associated with the proposed development will decrease the infiltrative function and capacity of the existing permeable land on site. The reduction of permeable

surface area will lead to a small increase in the volume and velocity of stormwater runoff that can be expected to leave the site. Sediment and other pollutants entrained in stormwater runoff from the development that is carried down the bluff to the ocean contribute to degradation of the quality of coastal waters and any intervening sensitive habitat. Other than removing vegetation from within the building site, the applicants propose to retain the majority of the site in a vegetated condition which would continue to allow for infiltration of stormwater, thereby greatly reducing the potential that runoff from the completed development would affect coastal waters.

Therefore, sedimentation impacts from runoff would be of greatest concern during construction. Construction of the proposed development would expose soil to erosion and entrainment in runoff, particularly during the rainy season. To ensure that best management practices (BMPs) are implemented to control the erosion of exposed soils and minimize sedimentation of coastal waters during construction, the Commission attaches Special Condition No. 4. This condition requires the implementation of Best Management Practices (BMPs) to control erosion and sedimentation during and following construction. These required BMPs include (a) disposing of any excess excavated material resulting from construction activities at a disposal site outside the coastal zone or within the coastal zone pursuant to a valid coastal development permit; (b) installing straw bales, coir rolls, or silt fencing structures to prevent runoff from construction areas from draining down the bluff toward the ocean, (c) maintaining on-site vegetation to the maximum extent possible during construction activities; (d) replanting any disturbed areas as soon as feasible following completion of construction, but in any event no later than May 1st of the next spring season consistent with the planting limitations of Special Condition No. 6(d); (e) covering and containing all on-site stockpiles of construction debris at all times to prevent polluted water runoff; and (f) protecting the canopy and root zones of existing living trees on site through temporary fencing or screening during construction.

Therefore, the Commission finds that as conditioned, the proposed development is consistent with Section 20.492.020 because erosion and sedimentation will be controlled and minimized. Furthermore, the Commission finds that the proposed development as conditioned is consistent with the provisions of LUP Policy 3.1-25 requiring that the biological productivity of coastal waters be sustained because stormwater runoff from the proposed development would be directed away from the bluff that drains to the ocean.

10. California Environmental Quality Act

Section 13906 of the Commission's administrative regulation requires Coastal Commission approval of Coastal Development Permit applications to be supported by a finding showing the application, as modified by any conditions of approval, is consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being

approved if there are any feasible alternatives or feasible mitigation measures available, which would substantially lessen any significant adverse effect the proposed development may have on the environment.

The Commission incorporates its findings on Coastal Act consistency at this point as if set forth in full, including all associated environmental review documentation and related technical evaluations incorporated-by-reference into this staff report. Those findings address and respond to all public comments regarding potential significant adverse environmental effects of the project that were received prior to preparation of the staff report. As discussed above, the proposed project has been conditioned to be consistent with the policies of the Coastal Act. As specifically discussed in these above findings, which are hereby incorporated by reference, mitigation measures that will minimize or avoid all significant adverse environmental impacts have been required. As conditioned, there are no other feasible alternatives or feasible mitigation measures available that would substantially lessen any significant adverse impacts that the activity may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified impacts, can be found consistent with the requirements of the Coastal Act and to conform to CEQA.

EXHIBITS:

1. Regional Location
2. Vicinity Map
3. Site Plan
4. Existing Floor Plans
5. Proposed Floor Plans
6. Existing Elevations
7. Proposed Elevations
8. Appeal
9. Notice of Final Local Action
10. Biological Assessment
11. Behrens Silverspot Butterfly Habitat Assessment
12. U.S. Fish & Wildlife Service Comment Letter on Butterfly Habitat
13. Excerpts from Geotechnical Report
14. Mendocino County Correspondence

ATTACHMENT A

STANDARD CONDITIONS

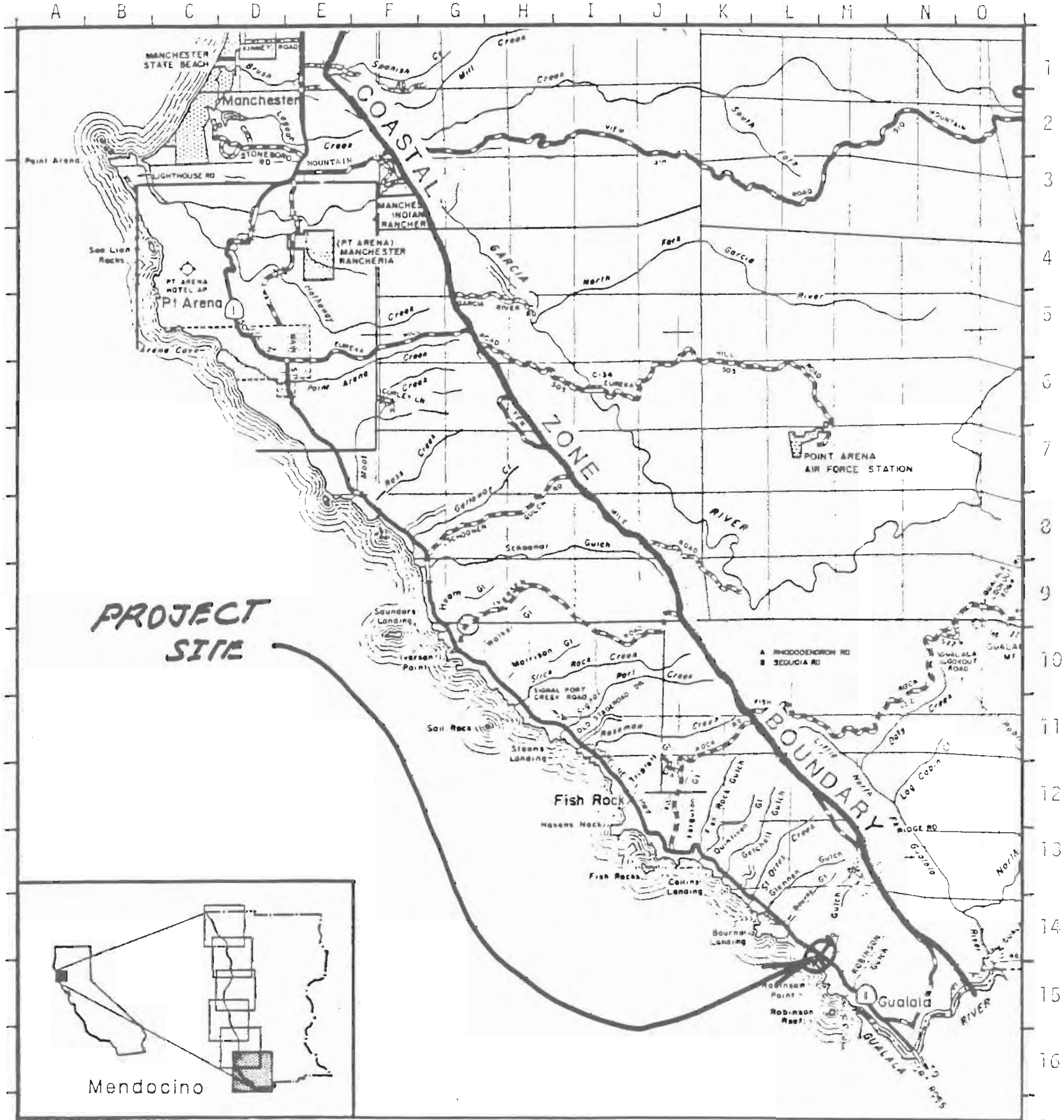
1. Notice of Receipt and Acknowledgement. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.

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

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

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

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


MANCHESTER STATE BEACH
Manchester
Point Arena
LIGHTHOUSE RD
STONEBORO RD
MOUNTAIN
Sea Lion Rocks
PT ARENA HOTEL AP
Pt Arena
Arena Cove
(PT ARENA) MANCHESTER RANCHERIA
COASTAL ZONE BOUNDARY
GARCIA
North Fork Garcia River
POINT ARENA AIR FORCE STATION
PROJECT SITE
Saunders Landing
Iversen Point
Schooner Gulch
A RHODODENDRON RD
B SEQUOIA RD
Fish Rock
Fish Rocks
Havens Neck
Saddle Rock
Stevens Landing
Collins Landing
Bourns Landing
Robinson Point
Robinson Reef
Gualala
GUALALA RIVER
Mendocino

LOCATION MAP

California Coastal Commission

County of Mendocino

EXHIBIT NO. 1

APPEAL NO.

A-1-MEN-07-021

MOORE

REGIONAL LOCATION

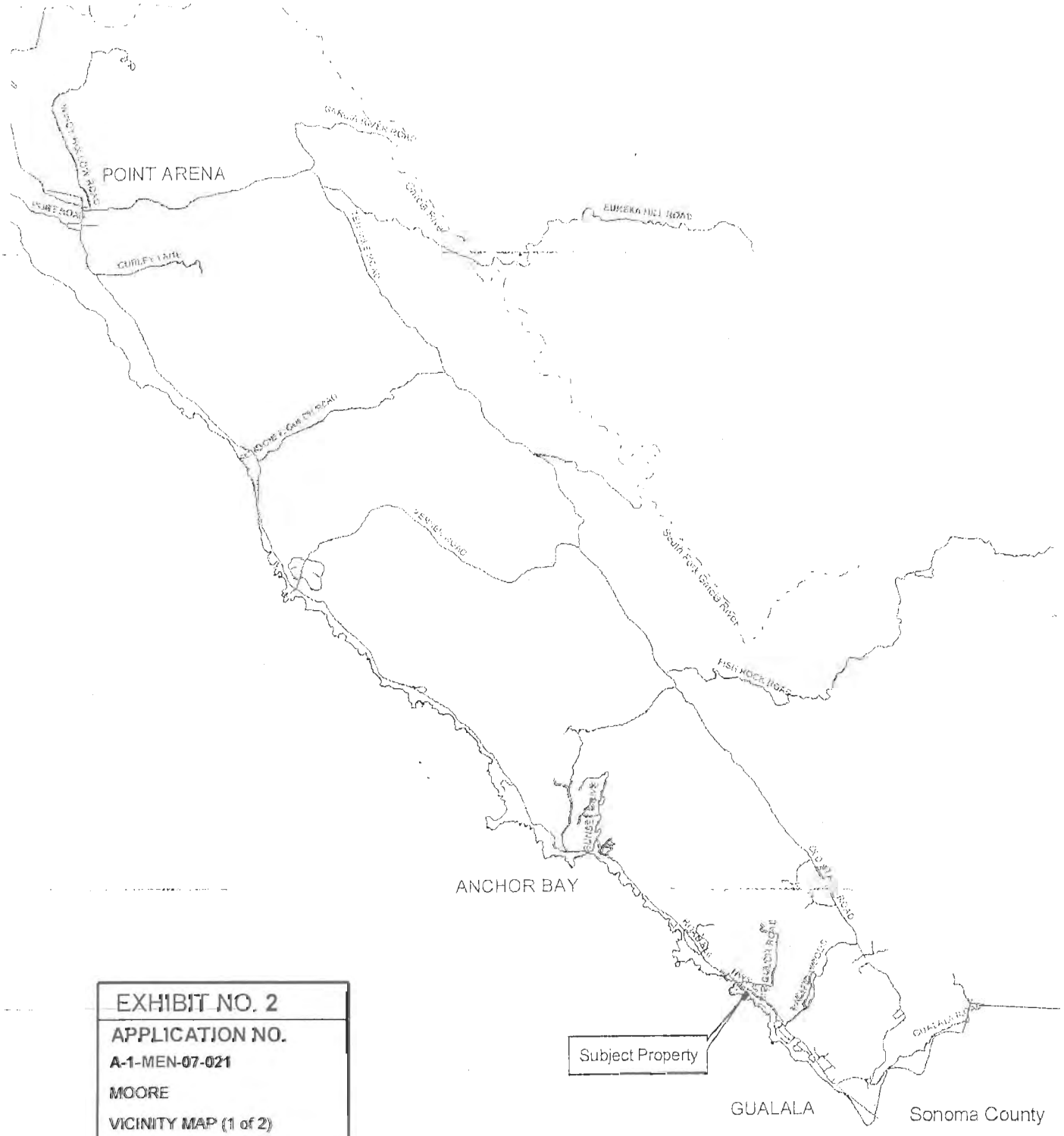


EXHIBIT NO. 2

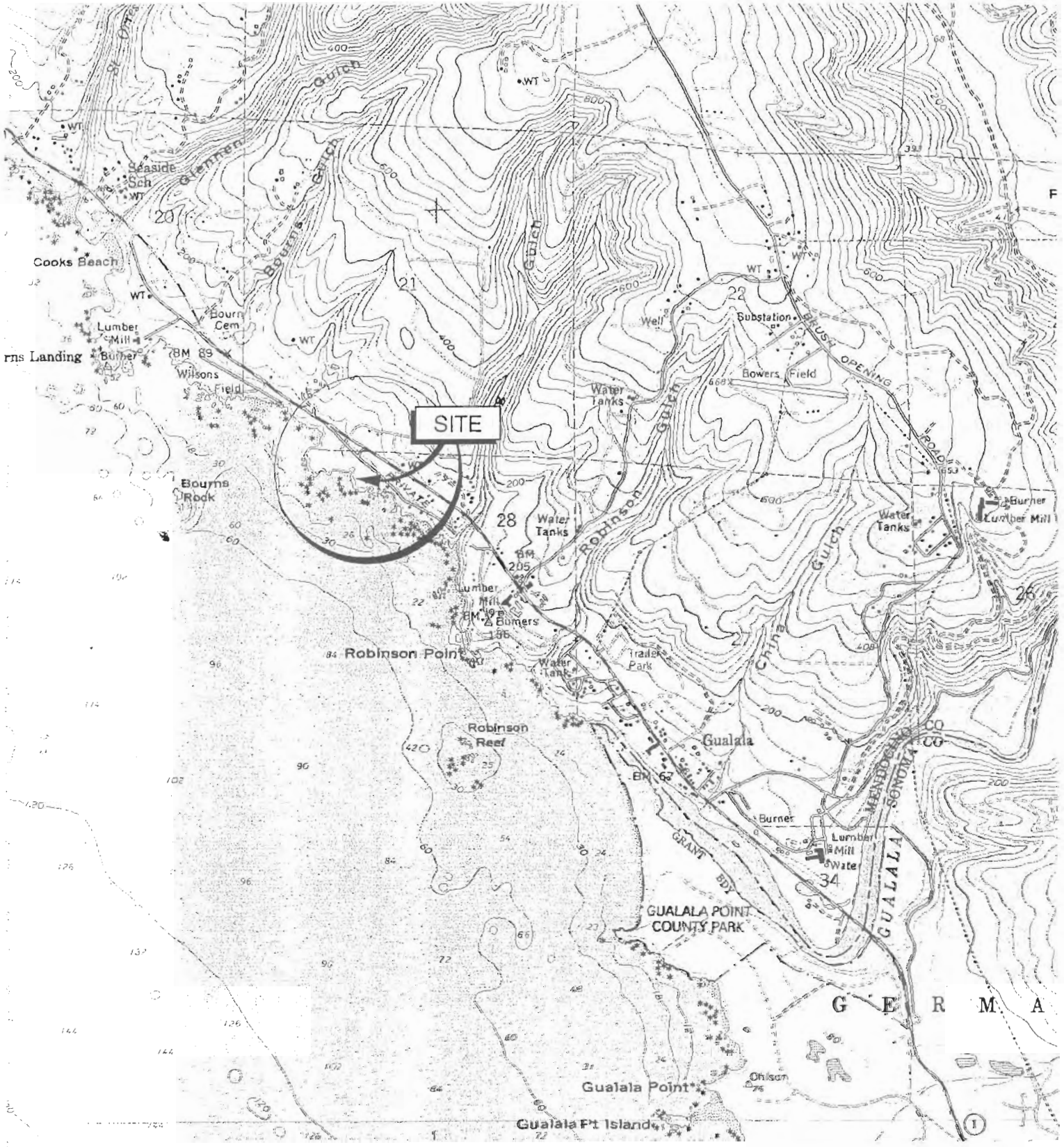
APPLICATION NO.

A-1-MEN-07-021

MOORE

VICINITY MAP (1 of 2)

LOCATION MAP



REFERENCE:
Gualala, 1977
7.5 Minute Quadrangle Topographic Maps, USGS.

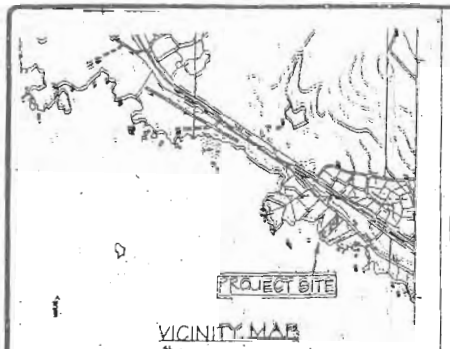
NORTH

APPROXIMATE SCALE (FEET)
0 1,000 2,000 4,000

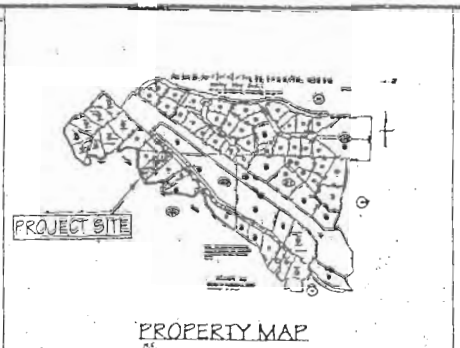
2 of 2

EXHIBIT NO. 3

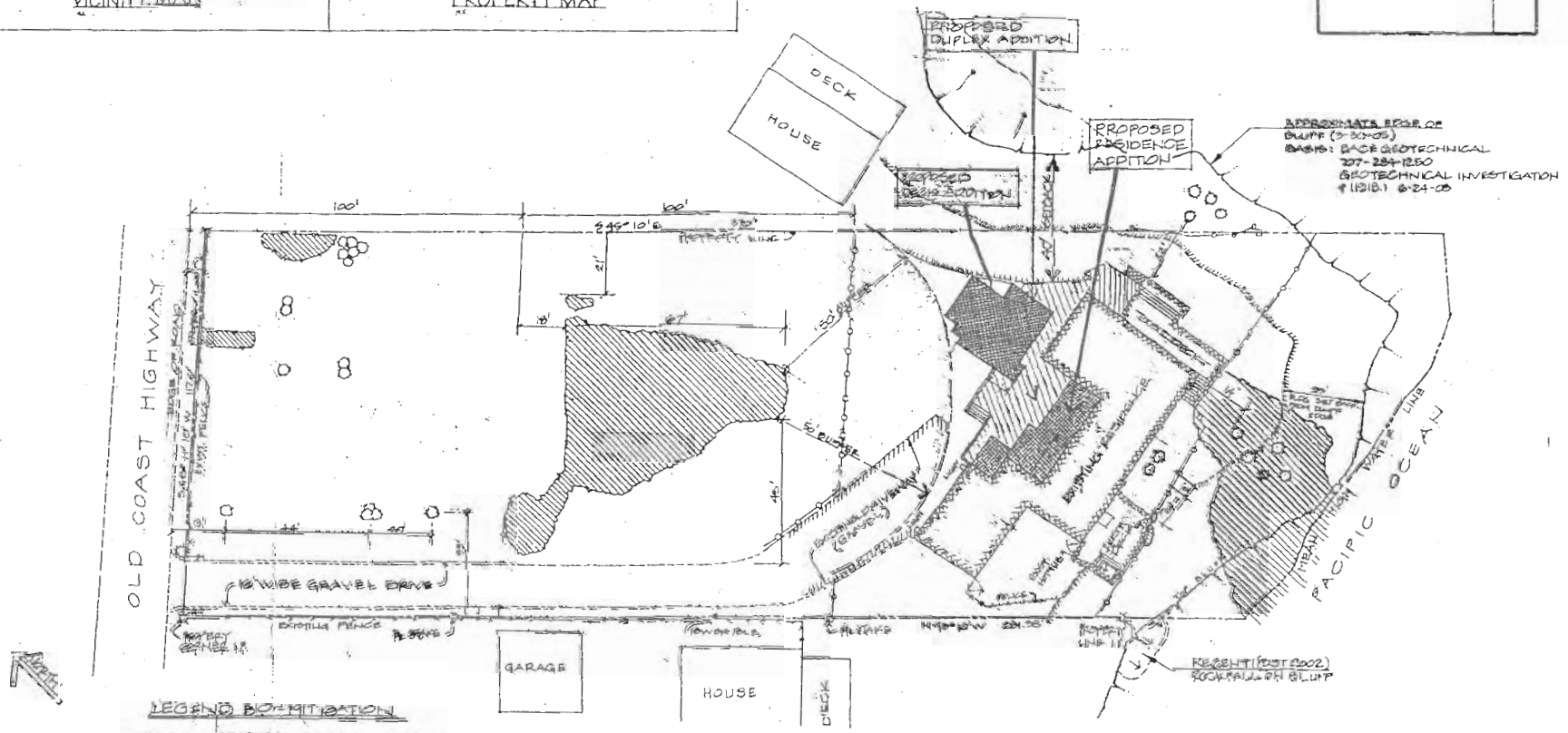
APPLICATION NO.
A-1-MEN-07-021
MOORE
SITE PLAN



VICINITY MAP



PROPERTY MAP



LEGEND BIO-MITIGATION

- CONSTRUCT PERMANENT FENCE
- CONSTRUCT "TEMPORARY/EXCLUSIONARY" FENCE PRIOR TO ANY CONST. ACTIVITY MAY BE REMOVED UPON COMPLETION OF PROJECT
- PLUG VIABLE
- COASTAL BLUFF MONITORING GRID

SITE PLAN
Visit. 1"=20'

NOTE: BIO INFORMATION SHOWN ON THIS SITE PLAN BASED ON "BIOTIC ASSESSMENT & RARE PLANT SURVEY" PREPARED BY [illegible] REPORT DATED APR., 2006

GRAPHIC SCALE — FEET

REVISED SITE PLAN
2-28-2008

Appeal No. A-1-MEN-07-021
Applicants: Greg and Sandra Moore
Local Government: County of Mendocino

REVISIONS	BY
4/21/2008	HEC
9/20/2007	HEC
Rev 2/28/07	HEC

HOWARD E. CURTIS AIA
ARCHITECT
P.O. BOX 679 GUALALA, CALIFORNIA 95445
707-884-3390 FAX 707-884-3308
C14187

SITE PLAN
PROPOSED RESIDENCE ADDITIONS
DUPLEX ADDITION
AND BIO INFORMATION

MOORE RESIDENCE
REMODEL & ADDITION
APN 145-20-03
37000 S.H. COAST HIGHWAY, GUALALA, CA

DRAWN HEC
CHECKED
DATE 1-07
JOB NO. 0501
SHEET 1 OF 2 SHEETS

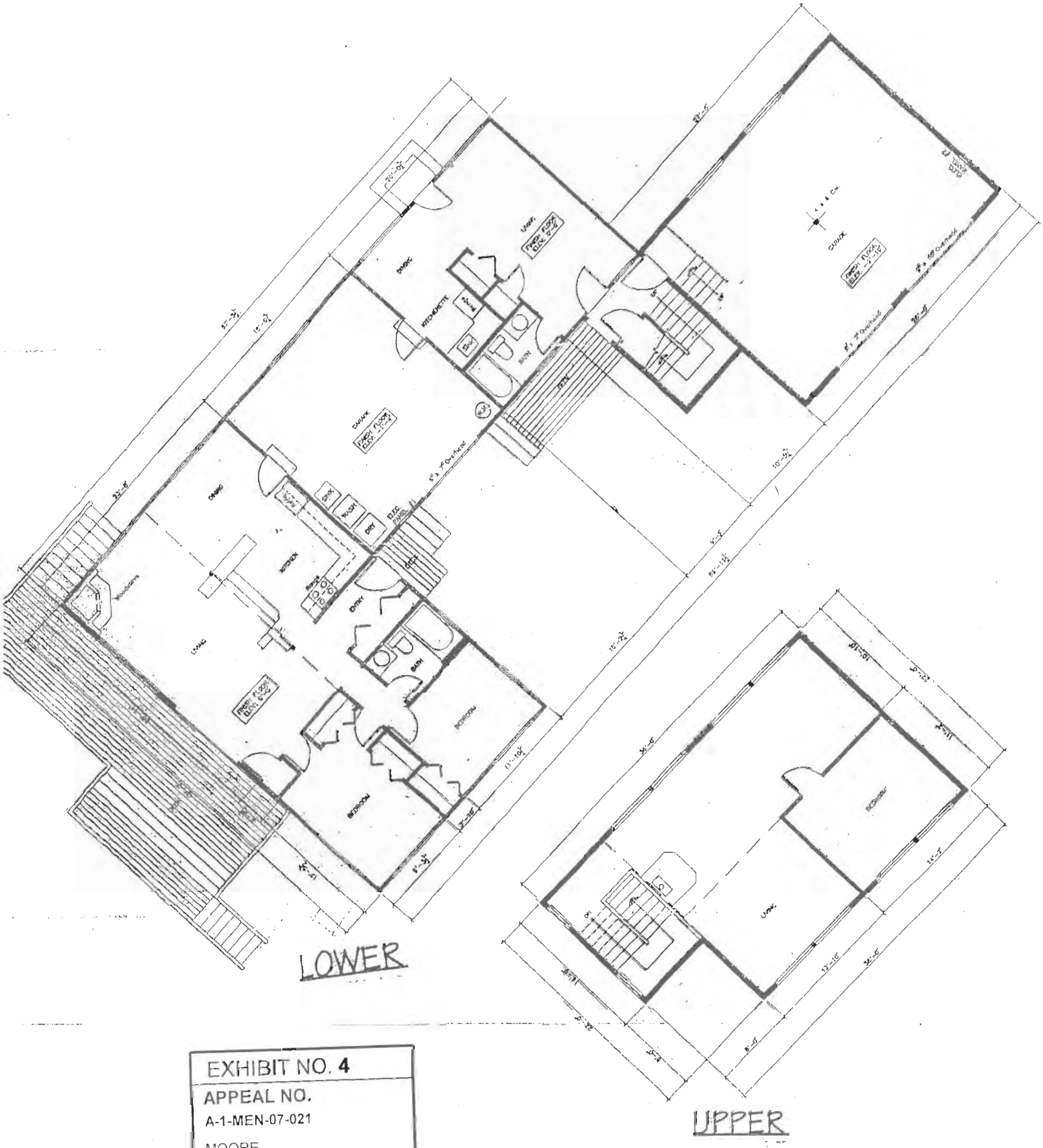


EXHIBIT NO. 4

APPEAL NO.
A-1-MEN-07-021

MOORE

FLOOR PLANS - EXISTING

FLOOR PLANS - EXISTING

NO SCALE

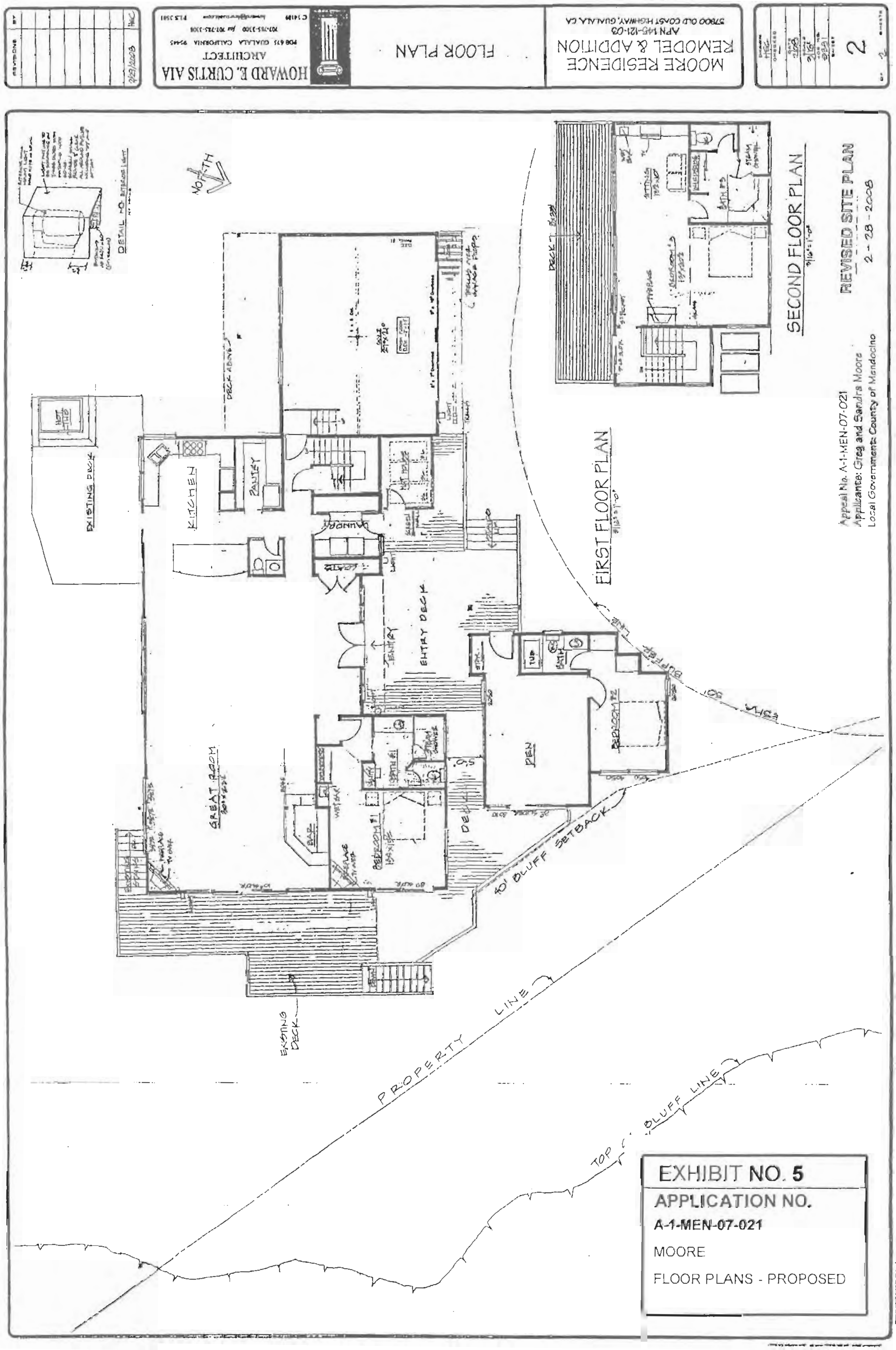


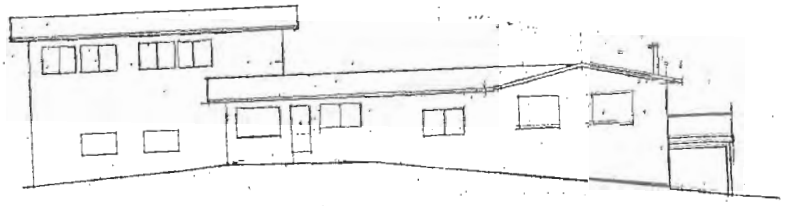
EXHIBIT NO. 5

APPLICATION NO.

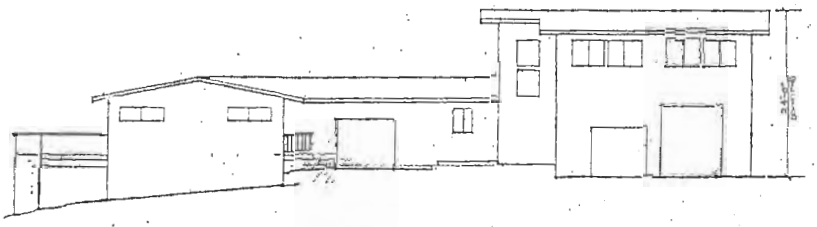
A-1-MEN-07-021

MOORE

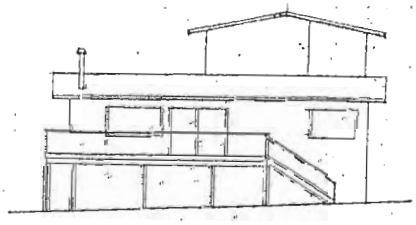
FLOOR PLANS - PROPOSED



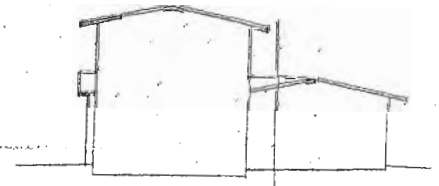
SOUTH ELEVATION (EXISTING)



NORTH ELEVATION (EXISTING)



WEST ELEVATION (EXISTING)



EAST ELEVATION (EXISTING)

EXHIBIT NO. 6

APPEAL NO.

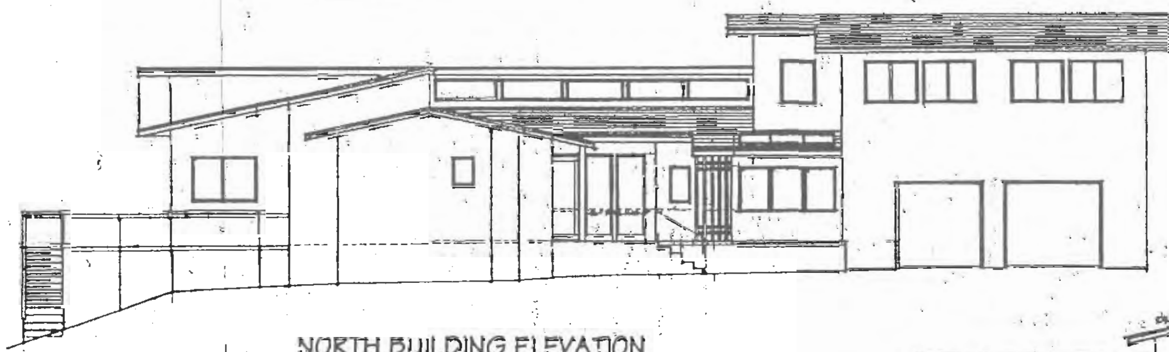
A-1-MEN-07-021

MOORE

ELEVATIONS - EXISTING

ELEVATIONS - EXISTING

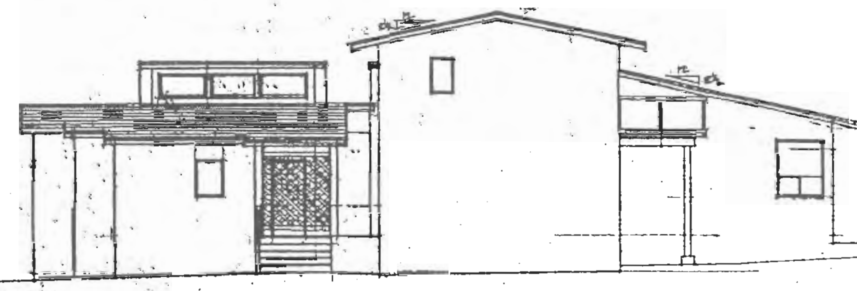
NO SCALE



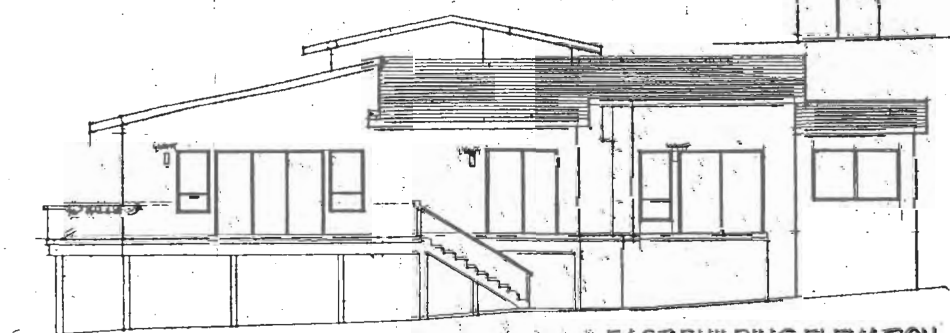
NORTH BUILDING ELEVATION

FINISH SCHEDULE

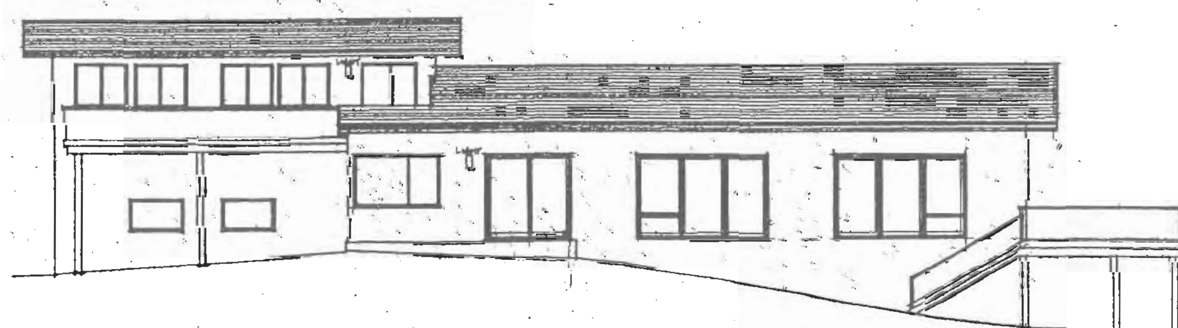
ROOF: COMPOSITE & BUILT-UP TAR/GRAVEL
SIDING: BOARD & BATT – Color: Gray
TRIM: RESAWN CEDAR – Color: Gray
FASCIA: RESAWN CEDAR – Color: Gray
DECK: TREX – Color: Gray
WINDOWS & SLIDING DOORS: MILGARD ALUMINUM SERIES
GUTTERS AND FLASHING: COPPER GUTTERS & FLASHING
ENTRY DOOR: V.G.D.F. 1-LITE GLASS



WEST BUILDING ELEVATION



EAST BUILDING ELEVATION



SOUTH BUILDING ELEVATION

Appeal No. A-1-MEN-07-021
Applicants: Greg and Sandra Moore
Local Government: County of Mendocino

EXHIBIT NO. 7
APPLICATION NO.
A-1-MEN-07-021
MOORE
ELEVATIONS - PROPOSED

HOWARD E. CURTIS AIA
ARCHITECT
POB 673 GUALALA CALIFORNIA 95445

REVISIONS

3
OF 4 SHEETS

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)

RECEIVED
MAY 24 2007
CALIFORNIA
COASTAL COMMISSION

Name:

Mailing Address: SEE ATTACHMENT 1

City: Zip Code: Phone:

SECTION II. Decision Being Appealed

1. Name of local/port government:

County of Mendocino

2. Brief description of development being appealed:

The County of Mendocino approved Coastal Development Use Permit #9-2006 to: (1) convert an existing legal non-conforming duplex to two single-family residences; (2) remodel the existing duplex by removing the second kitchen, adding 530 square feet of interior floor area and adding 517 square feet of deck; (3) construct a 605-square-foot detached second residential unit with a 528-square-foot garage below; (4) construct a 510-square-foot barn/shed; (5) expand the existing driveway to serve the new second residence, and (6) install fencing and utility connections.

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

Approximately 1 mile north of Gualala, on the west side of Old Coast Highway, 300 feet south of its intersection with South Highway 1, at 37900 Old Coast Highway, Gualala, Mendocino County (APN 145-121-03).

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

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

EXHIBIT NO. 8
APPLICATION NO.
A-1-MEN-07-021
MOORE
APPEAL (1 of 14)

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-07-021

DATE FILED: 5/24/07

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 26, 2007

7. Local government's file number (if any): CDU #9-2006

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:

Greg & Sandra Moore
P.O. Box 23036
Oakland, CA 94623

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)

(2)

(3)

(4)

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.

See ATTACHMENT 2

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.)

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

SECTION V. Certification

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

Signed: Signature on File
Appellant or Agent

Date: May 24, 2007

Agent Authorization: I designate the above identified person(s) to act as my agent in all matters pertaining to this appeal.

Signed: _____

Date: _____

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.)

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

SECTION V. Certification

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

Signed: Signature on File
Appellant or Agent

Date: May 24, 2007

Agent Authorization: I designate the above identified person(s) to act as my agent in all matters pertaining to this appeal.

Signed: _____

Date: _____

ATTACHMENT 1

SECTION I. Appellant(s)

1. Sara J. Wan
45 Fremont Street, Suite 2000
San Francisco, CA 94105

Phone: (415) 904-5201

2. Mike Reilly, Supervisor
County of Sonoma
575 Administration Drive, Room 100
Santa Rosa, CA 95403-2887

Phone: (707) 565-2241

ATTACHMENT 2

Appealable Project:

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

Section 30603 states that an action taken by a local government on a coastal development permit application may be appealed to the Commission for certain kinds of developments, including developments located within certain geographic appeal areas, such as those located between the sea and the first public road paralleling the sea, or within three hundred feet of the inland extent of any beach, or of the mean high tide line of the sea where there is no beach, or within one hundred feet of any wetland or stream, or within three hundred feet of the top of the seaward face of any coastal bluff, or those located in a sensitive coastal resource area.

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

The subject development is appealable to the Commission pursuant to 30603(a)(1), (2), and (4) of the Coastal Act because the approved development is (1) located between the first public road paralleling the sea, (2) within three hundred feet of the top of the seaward face of a coastal bluff, and (3) not designated the principal permitted use under the certified LCP.

Reasons for Appeal:

The County of Mendocino approved Coastal Development Use Permit #9-2006 to: (1) convert an existing legal non-conforming duplex to two single-family residences; (2) remodel the existing duplex by removing the second kitchen, adding 530 square feet of interior floor area and adding 517 square feet of deck; (3) construct a 605-square-foot detached second residential unit with a 528-square-foot garage below; (4) construct a 510-square-foot barn/shed; (5) expand the existing driveway to serve the new second residence, and (6) install fencing and utility connections.

Portions of the approved project involving construction of a barn/shed and driveway expansion are located as close as 20 feet from a population of coastal bluff morning glory (*Calystegia purpurata* sp. *saxicola*), a rare CNPS List 1B plant. The County's LCP includes habitats of rare and endangered plants in the definition of Environmentally Sensitive Habitat Areas (ESHAs). The approval of this development is inconsistent with

the County LCP policies to protect Environmentally Sensitive Habitat Areas (ESHAs), including habitats of rare and endangered plants, with appropriate buffer areas that shall not be less than 50-100 feet in width, and shall be an appropriate width based on an analysis of seven standards.

1. LCP PROVISIONS

Environmentally Sensitive Habitat Areas (ESHA) are defined on page 38 of the Mendocino County LUP as:

Any areas 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.

Coastal Zoning Code Section 20.496.010 "Environmentally Sensitive Habitat and other Resource Areas—Purpose" states (emphasis added):

...Environmentally Sensitive Habitat Areas (ESHA's) include: anadromous fish streams, sand dunes, rookeries and marine mammal haul-out areas, wetlands, riparian areas, areas of pygmy vegetation which contain species of rare or endangered plants and habitats of rare and endangered plants and animals.

LUP Policy 3.1-7 states:

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 significant degradation resulting from future developments. The width of the buffer area shall be a minimum of 100 feet, unless an applicant can demonstrate, after consultation and agreement with the California Department of Fish and Game, and County Planning Staff, that 100 feet is not necessary to protect the resources of that particular habitat area and the adjacent upland transitional habitat function of the buffer 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 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 and must comply at a minimum with each of the following standards:

1. *It shall be sited and designed to prevent impacts which would significantly degrade such areas;*
2. *It 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; and*

3. *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.*

Coastal Zoning Code Section 20.496.020 "Environmentally Sensitive Habitat and other Resource Areas—Development Criteria" states:

(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.*

(1) 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* [emphasis added].

Standards for determining the appropriate width of the buffer area are as follows:

(a) Biological Significance of Adjacent Lands. *Lands adjacent to a wetland, stream, or riparian habitat area vary in the degree to which they are functionally related to these habitat areas. Functional relationships may exist if species associated with such areas spend a significant portion of their life cycle on adjacent lands. The degree of significance depends upon the habitat requirements of the species in the habitat area (e.g., nesting, feeding, breeding, or resting).*

Where a significant functional relationship exists, the land supporting this relationship 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. Where no significant functional relationships exist, the buffer shall be measured from the edge of the wetland, stream, or riparian habitat that is adjacent to the proposed development.

(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 after consultation with the Department of Fish and Game or others with similar expertise:

(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.

(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.*

(d) Use of Natural Topographic Features to Locate Development. *Hills and bluffs adjacent to ESHA's shall be used, where feasible, to buffer habitat areas. Where otherwise permitted, development should be located on the sides of hills away from ESHA's. Similarly, bluff faces should not be developed, but shall be included in the buffer zone.*

(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.*

(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 (100) 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.*

(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 shall be made on a case-by-case basis depending upon the resources involved, the degree to*

which adjacent lands are already developed, and the type of development already existing in the area...

(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 riparian vegetation or the top of the bluff).*

(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.*

(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.

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

(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 natural stream channels. The term "best site" shall be defined as the site having the least impact on the maintenance of the biological and physical integrity of the buffer strip or critical habitat protection area and on the maintenance of the hydrologic capacity of these areas to pass a one hundred (100) year flood without increased damage to the coastal zone natural environment or human systems.

(d) 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.

(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.

(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.

(g) Where riparian vegetation is lost due to development, such vegetation shall be replaced at a minimum ratio of one to one (1:1) to restore the protective values of the buffer area.

(h) Aboveground structures shall allow peak surface water flows from a one hundred (100) year flood to pass with no significant impediment.

(i) Hydraulic capacity, subsurface flow patterns, biological diversity, and/or biological or hydrological processes, either terrestrial or aquatic, shall be protected.

(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 wherever 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. Piers may be allowed on a case by case basis.

(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. (Ord. No. 3785 (part), adopted 1991)

Coastal Zoning Code Section 20.496.050 "Other Resource Areas" states:

Sec. 20.496.050 Other Resource Areas.

(A) ***General.*** *Other designated resource areas as identified on Pages 39, 40 and 41 of the Coastal Element dated November 5, 1985 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.*

(B) Development of Resource Areas*. Any development within designated resource areas shall be reviewed and established in accord with conditions which could allow some development under mitigating conditions but which assures the continued protection of the resource area. (Ord. No. 3785 (part), adopted 1991)*

DISCUSSION

The project as approved by the County is inconsistent with provisions of the certified Mendocino County LCP, including, but not limited to, LCP provisions regulating development near Environmentally Sensitive Habitat Areas (ESHA), and the establishment of appropriate buffer areas.

A. Development Adjacent to Environmentally Sensitive Habitat Areas (ESHA)

The approved development allows (1) construction of a 510-square-foot barn/shed, and (2) a 2,500-square-foot driveway expansion that would be located within 24 and 20 feet respectively from a population of coastal bluff morning glory located at the central portion of the site.

As noted above, the County's definition of Environmentally Sensitive Habitat Areas (ESHAs) set forth in Coastal Zoning Code Section 20.496.010 includes habitats of rare and endangered plants. As ESHA, habitats of rare and endangered plants are subject to the ESHA buffer requirements of LUP Policy 3.1-7 and Coastal Zoning Code Section 20.496.020. According to these policies, a buffer area of a minimum of 100 feet shall be established adjacent to all ESHAs, unless an applicant can demonstrate, after consultations and agreement with the California Department of Fish and Game that 100 feet is not necessary to protect the resources of that particular habitat area from possible significant disruption caused by the proposed development. The policies state that in that event, the buffer shall not be less than 50 feet in width. Coastal Zoning Code Section 20.496.020 states that the standards for determining the appropriate width of the buffer area are the seven standards of subsections (a) through (g) of that Section, including (a) the biological significance of adjacent lands, (b) sensitivity of species to disturbance, (c) susceptibility of the parcel to erosion, (d) use of natural topographic features to locate development, (e) use of existing cultural features to locate buffer zones, (f) lot configuration and location of existing development, and (g) the type and scale of the development proposed.

The County's approval is inconsistent with these policies for two reasons. First, the policies do not allow a buffer under any circumstances to be less than 50 feet. The 20-foot-wide buffer from the driveway expansion and the 24-foot-wide buffer from the barn/shed structure approved by the County clearly do not meet this standard. In allowing a rare plant buffer of less than 100 feet, the County's findings do address the seven buffer reduction standards of subsection (a) through (g) of Coastal Zoning Code Section 20.496.020. However, as noted above, Section 20.496.020 first requires a buffer to be no less than 50 feet. The policies then *further* require that the determination of an appropriate buffer width less than 100 feet, but in no case less than 50 feet, be based on the seven standards of subsections (a)-(g) of Section 20.496.020(A)(1).

Second, the County's approval relied on the erroneous application of Coastal Zoning Code Section 20.496.050 regarding "Other Resource Areas" to allow the approved development within the rare plant ESHA buffer. As cited above, LUP Policy 3.1-7 and CZC Section 20.496.020 do allow for development to be permitted within a buffer area if the development is the same as those uses permitted in the adjacent environmentally sensitive habitat area, and if the development is (1) sited and designed to prevent impacts which would significantly degrade such areas, (2) compatible with the continuance of the habitat, and (3) allowed only if no other feasible site is available on the parcel and mitigation is provided to replace any particular value of the buffer lost by the development. The County's findings correctly point out that, unlike other ESHAs such as wetlands and riparian areas, the certified LCP is silent with regard to allowable uses in rare plant habitat, and thus allowable uses within a rare plant buffer. In its findings for approval, the County applied CZC Section 20.496.050, which allows development within designated resource areas under mitigating conditions when the continued protection of the resource area is assured. However, CZC Section 20.496.050 refers to very specific geographic "Resource Areas" enumerated under LUP Section 3.1 including specific State Parks and Reserves, Underwater Parks and Reserves, Areas of Special Biological Significance (e.g., Saunders Reef Kelp Beds, Pygmy Forest Ecological Staircase), Natural Areas (e.g., Ten Mile River Marsh Wetlands, Haven's Neck, etc.), Special Treatment Areas designated by the California Division of Forestry, Fishing Access Points, and Areas of Special Biological Importance (including rookeries, osprey nesting sites, and specific coastal wetlands). CZC Section 20.496.050 and LUP Section 3.1 do not address development allowable within general environmentally sensitive habitat areas not otherwise addressed under CZC Section 20.496, such as rare plant habitat. Therefore, in the absence of specific enumerated allowable uses within rare plant habitat - and thus within the rare plant ESHA buffer - in the certified LCP, the minimum 50-foot buffer required by LUP Policy 3.1-7 and CZC Section 20.496.020 must be applied.

Furthermore, the County's findings fail to consider alternatives that would avoid locating new development within the rare plant ESHA buffer such as eliminating the barn/shed structure from the project, and utilizing the existing driveway and parking areas to serve the second residence.

Therefore, for all of the above reasons, the project as approved by the County is inconsistent with LUP Policy 3.1-7 and Coastal Zoning Code Section 20.496.020.

COUNTY OF MENDOCINO
DEPARTMENT OF PLANNING AND BUILDING SERVICES
790 SOUTH FRANKLIN · FORT BRAGG · CALIFORNIA · 95437

RAYMOND HALL, DIRECTOR
Telephone 707-964-5379
FAX 707-961-2427
pbs@co.mendocino.ca.us
www.co.mendocino.ca.us/planning

May 7, 2007

NOTICE OF FINAL ACTION

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

CASE#: CDU #9-2006
OWNER: Greg & Sandra Moore
AGENT: Howard Curtis Architect
REQUEST: Convert existing legal non-conforming duplex to two single-family residences. Existing structure to remain 24± feet in height. Remodel existing duplex, including removal of second kitchen, 530± sq. foot addition, and 517± sq. foot deck addition; construct a 605± sq. foot detached second residential unit with a 528± sq. foot garage below; and construct a 510± sq. foot barn/shed with a maximum average height of 15± feet. Associated development includes gravel driveway addition, fence, and connect to utilities.
LOCATION: In the Coastal Zone, approximately 1 mile north of Gualala, on the west side of Old Coast Highway (CR 513), 300± feet south of its intersection with South Highway 1, at 37900 Old Coast Highway; Gualala (APN 145-121-03).
PROJECT COORDINATOR: Teresa Beddoe

HEARING DATE: April 26, 2007

APPROVING AUTHORITY: Coastal Permit Administrator

ACTION: Approved with Conditions.

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

The project was not appealed at the local level.

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

EXHIBIT NO. 9
APPLICATION NO.
A-1-MEN-07-021
MOORE
NOTICE OF FINAL LOCAL ACTION (1 of 29)

COASTAL PERMIT ADMINISTRATOR ACTION SHEET

CASE#: CDU #9-2006 HEARING DATE: 4/26/07

OWNER: Moore

ENVIRONMENTAL CONSIDERATIONS:

X Categorically Exempt

_____ Negative Declaration

_____ EIR

FINDINGS:

X Per staff report

_____ Modifications and/or additions

ACTION:

✓ Approved

_____ Denied

_____ Continued _____

CONDITIONS:

✓ Per staff report + revision to Condition 3 (See below)

_____ Modifications and/or additions

_____
Signed: Coastal Permit Administrator

"... survey report prior to final inspection of the building permit. Planning staff shall verify removal."

COUNTY OF MENDOCINO
DEPARTMENT OF PLANNING AND BUILDING SERVICES
790 SOUTH FRANKLIN · FORT BRAGG · CALIFORNIA · 95437

RAYMOND HALL, DIRECTOR
Telephone 707-964-5379
FAX 707-961-2427
pbs@co.mendocino.ca.us
www.co.mendocino.ca.us/planning

notice moore cdu 9-2006

April 13, 2007

PUBLIC NOTICE OF PENDING ACTION
STANDARD COASTAL DEVELOPMENT PERMIT

The Mendocino County Coastal Permit Administrator, at a regular meeting to be held Thursday, April 26, 2007 in the Planning and Building Services Conference Room, 790 South Franklin Street, Fort Bragg, at 10:00 a.m. or as soon thereafter as the item may be heard, will hear the below described project that is located in the Coastal Zone.

CASE #: CDU #9-2006
DATE FILED: 3/1/2006
OWNER: Greg & Sandra Moore
AGENT: Howard Curtis Architect
REQUEST: Convert existing legal non-conforming duplex to two single-family residences. Existing structure to remain 24± feet in height. Remodel existing duplex, including removal of second kitchen, 530± sq. foot addition, and 517± sq. foot deck addition; construct a 605± sq. foot detached second residential unit with a 528± sq. foot garage below; and construct a 510± sq. foot barn/shed with a maximum average height of 15± feet. Associated development includes gravel driveway addition, fence, and connect to utilities.
LOCATION: In the Coastal Zone, approximately 1 mile north of Gualala, on the west side of Old Coast Highway (CR 513), 300± feet south of its intersection with South Highway 1, at 37900 Old Coast Highway, Gualala (APN 145-121-03).
PROJECT COORDINATOR: Teresa Beddoe

As you are an adjacent property owner and/or interested party, you are invited to appear at the hearing, or to direct written comments to this office at the above address. If you would like to be notified of the Coastal Permit Administrator's action, please submit a written request to this office. All correspondence should contain reference to the above noted case number.

The decision of the Coastal Permit Administrator shall be final unless a written appeal is submitted to the Board of Supervisors with a filing fee within 10 calendar days thereafter. If appealed, the decision of the Board of Supervisors to approve the project shall be final unless appealed to the Coastal Commission in writing within 10 working days following Coastal Commission receipt of a Notice of Final Action on this project.

If you challenge the above case in court, you may be limited to raising only those issues described in this notice or that you or someone else raised at the public hearing, or in written correspondence delivered to the Coastal Permit Administrator at or prior to, the public hearing.

Additional information regarding the above noted case may be obtained by calling the Planning and Building Services Department at 964-5379, Monday through Friday.

Raymond Hall, Coastal Permit Administrator

OWNERS/APPLICANTS:	Greg & Sandra Moore P.O. Box 23036 Oakland, CA 94623
AGENT:	Howard Curtis Architect P.O. Box 675 Gualala, CA 95445
REQUEST:	Convert existing legal non-conforming duplex to two single-family residences. Existing structure to remain 24± feet in height. Remodel existing duplex, including removal of second kitchen, 530± sq. foot addition, and 517± sq. foot deck addition; construct a 605± sq. foot detached second residential unit with a 528± sq. foot garage below; and construct a 510± sq. foot barn/shed with a maximum average height of 15± feet. Associated development includes gravel driveway addition, fence, and connect to utilities.
LOCATION:	In the Coastal Zone, approximately 1 mile north of Gualala, on the west side of Old Coast Highway (CR 513), 300± feet south of its intersection with South Highway 1, at 37900 Old Coast Highway, Gualala (APN 145-121-03).
APPEALABLE AREA:	Yes – ESHAs, Bluff top lot
PERMIT TYPE:	Use Permit – Alteration of a legal non-conforming structure
TOTAL ACREAGE:	0.95 Acres
GENERAL PLAN:	RR-5 [RR-1]
ZONING:	RR: L-5 [RR]
EXISTING USES:	Duplex
ADJACENT ZONING:	RR: L-5 [RR]
SURROUNDING LAND USES:	Residential
SUPERVISORIAL DISTRICT:	5
CA COASTAL RECORDS PROJECT:	Image 200504186
ENVIRONMENTAL DETERMINATION:	Categorically exempt from CEQA, Class 1 and Class 3

OTHER RELATED APPLICATIONS:

BC 2004-0005 closed 10-8-2004

BF 2004-1036 – Building permit to replace two electric meters. Utility bills from 2003 indicated that the structure previously had two meters.

PROJECT DESCRIPTION: The applicants propose an addition to and conversion of an existing legal non-conforming duplex to two single-family residences. A legal residence and a legal non-conforming second residence currently exist on the parcel, and the proposed removal of one of the residences from the existing structure and construction of a new residence would result in a net of one legal residence and one legally non-conforming second residence, therefore the intensity of non-conforming use would remain the same. The remodel of the existing duplex would include a 530± sq. foot interior addition and 517± sq. foot deck addition to the existing 2,241± sq. foot residence, existing 1,134± sq. feet of attached garages and existing 376± sq. feet of decking, for a total structural size of 3,905± sq. feet. The interior remodel would include removal of the second kitchen, therefore the duplex would become a single-family residence. An approximately 1.5 foot by 8-foot skylight would adorn the new east-facing roof. The existing structure would retain its maximum 24±-foot height, as the addition to the existing structure would have a maximum average height of 17± feet above finished grade. The applicants propose to construct a 605± sq. foot detached second residential unit with a maximum average height of 21± feet above finished grade. The proposed second residential unit would share the proposed deck with the existing residential structure, and an additional 280± sq. feet of decking would be constructed around the proposed second residence. A new 528± sq. foot garage would be constructed under the second residence and deck addition; the garage addition would also share a wall with the existing residential structure. The existing gravel driveway would be extended by 2,500± sq. feet to allow vehicular access to the new garage. The applicants additionally propose to construct a 510± sq. foot barn/shed with a maximum average height of 15± feet above finished grade. A permanent 100± foot long 5-foot high wood fence would be constructed to protect existing rare plants. The new residence would be connected to utilities.

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

Gualala Municipal Advisory Council

At the regularly scheduled meeting held May 4, 2006, GMAC reviewed the project and voted that the project be approved as presented, with the provision that the Planning and Building Department check the project area to assure that the height restriction mandated by the Gualala Town Plan is followed. Conformance with height limits is discussed in the Land Use section below.

Land Use

The parcel is classified on the Coastal Plan Map as Rural Residential Five Acres Minimum with an alternate density of One Acre Minimum (RR-5 [RR-1]). The parcel is similarly zoned; RR:L-5 [RR]. The proposed single-family residence addition, and associated development are permitted uses within the Rural Residential Zoning District, and are consistent with the Rural Residential land use classification.

The existing second residential unit is a permitted legal non-conforming use within the Rural Residential Zoning District. Chapter 20.480 of the Mendocino County Coastal Zoning Code (MCCZC) outlines non-conforming uses and structures and describes a nonconforming use as: *"...a use of a structure or land*

which was lawfully established and maintained prior to the adoption of this Division by which does not conform with the use regulations for the zone in which it is located." Our records indicate that the second residence existed on the parcel previous to the Local Coastal Program and Coastal Act regulations, and our records reflect that the non-conforming use has been maintained to date. The proposed development would allow continuance of the non-conforming second residence. The intensity of use would not be expanded or reduced as a result of this proposed project, but would be reconfigured.

The required yard setbacks for a parcel in an RR zone are 20 feet from front and rear property lines, and 6 feet from side property lines. A corridor preservation setback of 25 feet applies along Old Coast Highway (CR 513), resulting in a front yard setback of either 45-feet from the road corridor centerline or 20 feet from the property line, whichever is greater. As shown on the Site Plan, the structures comply with setbacks required by the County Zoning Code.

Section 20.444.015(G) of the Mendocino County Coastal Zoning Code requires that: "Barns, stables, chicken houses and similar accessory buildings shall be not less than fifty feet from any property line, and not less than (40) feet from any dwelling." As shown on the site plan, the proposed barn meets the required setbacks as outlined.

The site is not within a designated Highly Scenic Area, therefore the height limit is 28 feet above average finish grade. The proposed 17± foot height of the proposed residence addition, 21± foot height of the proposed second residential unit, and 15± foot height of the proposed barn are in compliance with the height limit.

Maximum lot coverage for a lot less than 2 acres in size in an RR zone is 20%. Lot coverage is the percentage of the gross lot area covered by structures. The lot is approximately 0.95 acres, or 41,382 square feet. The Site Plan shows approximately 5,121 square feet of coverage, or 12%. The project complies with lot coverage limits.

Public Access

The project site is located west of Highway 1, but is not designated as a potential public access trail location on the LUP maps. There is no evidence of prescriptive access on the developed site, and in fact access is prohibited by the presence of steep bluffs. The nearest public access is the proposed "Bourne's Landing Blufftop Access," located ¼± mile north of the subject parcel. The project would have no effect on public access to the coast.

Hazards

The property is in an area that has a "moderate" fire hazard severity rating as determined by the California Department of Forestry and Fire Prevention. The project site is less than one acre in size and is exempt from CDF's fire safety regulations. Fire safety issues are addressed as part of the building permit process.

The parcel is located on a bluff top. The proposed development would not encroach further toward the coastal bluff than existing development. Nevertheless, a draft Geotechnical Investigation by BACE Geotechnical, dated June 24, 2005, was submitted with the application.

The LUP contains policies relating to development on parcels subject to threats from geologic hazards.

Policy 3.4-7 of the Coastal Element of the General Plan states:

The County shall require that new structures be set back a sufficient distance from the edges of bluffs to ensure their safety from bluff erosion and cliff retreat during their economic life spans (75 years). Setbacks shall be of sufficient distance to eliminate the need for shoreline protective works. Adequate setback distances will be determined from information derived from the required geologic investigation and from the following setback formula:

Setback (meters) = Structure life (years) x Retreat rate (meters/year)

The retreat rate shall be determined from historical observation (e.g., aerial photographs) and/or from a complete geotechnical investigation.

All grading specifications and techniques will follow the recommendations cited in the Uniform Building Code or the engineering geologists report

Blufftop setback requirements for new structures pursuant to Coastal Element Policy 3.4-7 are codified by Section 20.500.020(B)(1) of the MCCZC. Based on the 75-year economic lifespan, and applying a factor of safety of two, the geotechnical report recommends a building setback from the bluff edge of 25 feet. As shown on the site plan, the proposed structures meet the 25-foot bluff edge setback.

The geotechnical report states the following regarding seismic safety:

> A minor inactive (ancient) fault was observed on the lower southeast-facing bluff along the southwest edge of the landslide headscarp. The fault orientation consists of a north-northwesterly trending strike, with a steep dip, about 65 degrees from horizontal, to the southwest. Several minor, inactive faults located on the west-facing bluff are apparent from offset sandstone beds, as can be observed on Plate 14. No evidence of active faulting was observed at the site, and none of the published references that we reviewed show faults on, or directed towards, the property.
>
> The subject property is within the Coast Ranges geomorphic province, a zone of high seismic activity associated with the active San Andreas Fault system, located within the canyon of the South Fork of the Gualala River, approximately 2.3 miles (3.7 kilometers) northeast of the site. Future earthquakes could occur on this active fault during the lifetime of the proposed residence.
>
> In general, the intensity of ground shaking at the site will depend on the distance to the causative earthquake epicenter, the magnitude of the shock, and the response characteristics of the underlying earth materials. Generally, wood-frame structures founded in firm materials, and designed in accordance with current building codes are well suited to resist the effects of ground shaking (BACE 2005).

Seismic safety issues are addressed as part of the Building Permit process. Standard Condition Number 5 is included to require that the Coastal Permit be subject to acquisition of the Building Permit.

Landslides and rockfalls are known to occur in the area and are analyzed in the geotechnical report, including documentation of the following recent rockfall and landslide in the vicinity:

- The recent (post 2002) rock fall that occurred on the bluff in the northwest part of the property appears to have involved several large blocks of rock, approximately 6 to 8 feet across, now resting on the beach. This rock fall likely occurred along existing fracture surfaces in the bedrock. Other large blocks of rock adjacent to the fall area also exhibit similar fracturing.

- An arc-shaped, incipient landslide headscarp is located on the south southeast-facing bluff approximately 20 feet southeast of the property line...The scarp area is well vegetated with

grasses and weeds, and not evidence of recent, "fresh" ground fracturing was observed. No landslides are shown at the property on the published geologic maps we reviewed for this investigation (BACE 2005).

The geotechnical setback was determined with landslide and rockslide concerns in mind. The project area is reasonably safe from rockslides and landslides.

The project area is not located in a tsunami zone or 100-year flood zone.

Staff is confident that the proposed development complies with Chapter 20.500 of the MCCZC.

It is the policy of the Coastal Commission and the County to require recordation of a deed restriction as a condition of development on blufftop parcels, prohibiting the construction of seawalls and requiring that developments, both existing and proposed, 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 existing or proposed development that might fall onto a beach. Special Condition Number 1 is recommended to address this issue.

Visual Resources

The project site is not located within a designated "highly scenic" area, therefore, it is not subject to the policies within the Coastal Element relating to visual resources except for the following policy which applies to all parcels within the Coastal Zone:

Policy 3.5-1 of the Coastal Element states:

...The scenic and visual qualities of Mendocino County coastal areas shall be considered and projected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas and, where feasible, to restore and enhance visual quality in visually degraded areas...

The parcel and existing residence are visible from Gualala Point County Park to the north. The areas of proposed development would be minimally if at all visible from Gualala Point County Park, as these areas are blocked from view by the existing structure and existing vegetation. The proposed exterior colors would be dark natural wood colors, matching the existing structure, and would blend well with surrounding development and the environment. The maximum height of the proposed additions, approximately 21 feet above existing grade, is visually insignificant as the existing residence is approximately 24 feet in height and would visually buffer the addition in terms of height. The applicant proposes the addition of a small (approximately 1.5 foot by 8-foot) "velux" skylight on the east (landward) elevation. The skylight would not be visible to public view.

Section 20.504.035 of the Coastal Zoning Code (Exterior Lighting Regulations) states:

(A) Essential criteria for the development of night lighting for any purpose shall take into consideration the impact of light intrusion upon the sparsely developed region of the highly scenic coastal zone.

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

(5) No lights shall be installed so that they distract motorists.

Exterior lighting is proposed as "Halo H2411" or equal, to be screened on three sides with matching wood siding (shown on Sheet 2 of full sized plans). As proposed, the exterior lighting meets the downcast and shielded criteria. Special Condition Number 2 is recommended to ensure that exterior lights match the screened and downcast light presented in the coastal permit application.

The proposed development conforms to visual resources code.

Natural Resources

The .95 acre bluff top parcel is vegetated primarily by mowed perennial grasses and forbs with an overstory of bishop pine (*Pinus muricata*) and Monterey cypress (*Cupressus macrocarpa*). Approaching the vicinity of the coastal bluff, the vegetation changes to a northern coastal scrub community (Element Code 32100[1]). A small remnant patch of coastal terrace prairie (Element Code CTT41100CA), a rare plant community, intergrades with the coastal scrub community near the bluff edge. The project area was surveyed for rare plants and wildlife by BioConsultant. The survey report, dated September of 2006 is located in the project file. The survey results indicate that rare coastal bluff morning glory (*Calystegia purpurata* ssp. *saxicola*) is present within the project area. The results also indicate that blue violet (*Viola adunca*), the Behren's silverspot butterfly larval host plant, is present within project area. The United States Fish & Wildlife Service (USFWS) was consulted, and determined that a site assessment and a one time presence and absence survey conducted by Richard Arnold of Entomological Consulting Services, Ltd. would be sufficient for determining Behren's silverspot butterfly habitat suitability. The survey occurred and the survey report, dated August 24, 2006, is located in the project file. The butterfly survey report summarizes that the Behrens silverspot butterfly is not likely to occur near the project site because suitable habitat conditions are absent, despite the presence of the larval food plant, *Viola adunca*. The project has been redesigned to best protect natural resources, however development is still proposed within the Environmentally Sensitive Habitat Area (ESHA) buffer; development would be located as close as 24 feet from the ESHA. The survey reports follow recommended protocol, and a reduced buffer analysis per section 20.496.020 of the Mendocino County Coastal Zoning Code has been provided. An analysis of the proposed developmental impact upon these present natural resources of concern is outlined below.

The County of Mendocino Coastal Element describes an Environmentally Sensitive Habitat Area (ESHA) as follows:

Any areas 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 area of coastal terrace prairie, and areas containing coastal bluff morning glory (*Calystegia purpurata* ssp. *saxicola*) and blue violet (*Viola adunca*) were initially considered as natural resource areas of value. However, since the habitat assessment for the Behren's silverspot butterfly indicates that the site lacks the

[1] California Department of Fish and Game Natural Diversity Database.

necessary habitat conditions to be considered rare butterfly habitat, blue violet (*Viola adunca*) areas are omitted from ESHA status. The remnant area of coastal terrace prairie is similarly omitted from ESHA status because the area is too small and isolated to provide natural resource value. Therefore the areas containing coastal bluff morning glory (*Calystegia purpurata* ssp. *saxicola*) and their natural habitat areas are the only areas within the project site that are considered ESHAs for County purposes.

Chapter 20.496 and Section 20.532.060, et. seq. of the MCCZC contain specific requirements for protection of ESHAs and development within the buffer area of an ESHA. A sufficient buffer area is required to be established and maintained to protect ESHAs from disturbances related to proposed development. Section 20.496.020(A)(1) of the MCCZC states:

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.

The project initially proposed additions to the residential structure, a detached guest cottage, and a barn. When the ESHAs were found, the project was redesigned. Additions to the residential structure that were proposed on the west (bluff facing) side were omitted, the guest cottage[2] was moved closer to the existing residence, the barn was pushed as far forward as possible, and a permanent fence was additionally proposed to further protect the ESHA. With the exception of the barn, the proposed redesign resulted in the proposed structures meeting the minimum required 50-foot buffer. Section 20.444.015(G) of the MCCZC requires barns to be "not less than 50 feet from any property line, and not less than 40 feet from any dwelling." The proposed barn is in the only location on the parcel where it can meet this requirement. As shown on the site plan, this location is approximately 24 feet from an ESHA. The project would also require that a section of proposed gravel driveway be located within the 50-foot butter area. As shown on the site plan, the proposed gravel driveway extension would be located approximately 20 feet from an ESHA.

Improvements attached to the existing dwelling, including proposed new deck area, second residential unit, and garage, are within 50 feet of the natural habitat area for coastal bluff morning glory, and within 50 feet of coastal bluff morning glory (*Calystegia purpurata* ssp. *saxicola)* individuals located within the natural habitat area. However, the proposed development areas are not within the ESHAs themselves, and are separated from these ESHA areas by the existing residential structure.

At its closest point, the proposed attached addition would be approximately 35 feet from the natural habitat area for the coastal bluff morning glory (*Calystegia purpurata* ssp. *saxicola*), located west of the existing structure. Actual coastal bluff morning glory (*Calystegia purpurata* ssp. *saxicola*) individuals within this area are more than 50 feet from the proposed development. The proposed development areas are separated from the westerly habitat area and rare plant individuals by the presence of the existing structure, and therefore the proposed developments would not result in any possible reduction of natural habitat area and would not otherwise impede upon the area west of the existing structure.

To the east of the proposed attached developments, other coastal bluff morning glory (*Calystegia purpurata* ssp. *saxicola*) protection areas are shown. Additional proposed development in this area

[2] The guest cottage became a second residence at this point.

includes the proposed barn, as shown on the site plan. While protection is being provided for the rare coastal bluff morning glory (*Calystegia purpurata* ssp. *saxicola*) individuals located on the lawn east of the existing residence, this area is not considered a valuable habitat area. The native habitat for coastal bluff morning glory (*Calystegia purpurata* ssp. *saxicola*) within the project area is the northern coastal scrub community located along the west side of the existing structure (Hickman 1993). In the project area, coastal bluff morning glory (*Calystegia purpurata* ssp. *saxicola*) is found in its natural habitat directly adjacent to the existing residence on the west (bluff top) side. The coastal bluff morning glory is also found in the grassy area between the residence and the road (Old Coast Highway). This area appears to be highly disturbed bishop pine forest that, due to years of mowing, has an understory dominated by exotic grasses and forbs. In the Moore Biological Survey report by BioConsultant dated October 2006, the botanist describes the biological significance of the habitat areas as follows:

> The coastal scrub habitat west of the duplex is the preferred habitat type for the rare morning glory; therefore, it is important to maintain the integrity of the natural habitat in this area. The bishop pine forest, with its highly modified understory, is not a preferred habitat for the rare species (Fitts 2006).

The rare plant's presence within this area of the parcel appears partially due to proximity to native habitat and primarily to mowing disturbance, which has allowed a sunny opening for the low growing species. This disturbance has artificially created habitat for the plant, and continued disturbance is needed to stunt the natural successional changes that would displace the rare species. Chapman III et al. reference Tilman and Clements in the following passage, which describes the direction the disturbed area would take should the current disturbance discontinue:

> After disturbance, ecosystems undergo succession, a directional change in ecosystem structure and functioning resulting from biotically driven changes in a resource supply. Disturbances that remove live or dead organic matter, for example, are colonized by plants that gradually reduce the availability of light at the soil surface and alter the availability of water and nutrients (Tilman 1985). If there were no further disturbance, succession would proceed toward a climax, the end point of succession (Clements 1916)(Chapin III et al. 2002).

As noted by the botanist, the historic climax community in this disturbed area is the northern bishop pine forest community, a rare community in and of itself, in pristine condition. While protection of the area to preserve the presence of coastal bluff morning glory (*Calystegia purpurata* ssp. *saxicola*) individuals through prescribed annual mowing runs counter to possible restoration of the area back to its natural condition, such preservation is important to allow for existing rare plant species diversity and continuance. Should coastal bluff morning glory (*Calystegia purpurata* ssp. *saxicola*) recover in number sufficiently to be removed from endangered status, retention of the coastal scrub habitat area in its natural condition would provide sufficient protection, and restoration of the eastern lawn area to northern bishop pine forest would be most ecologically appropriate. Mitigation measures proposed by the botanist have been carefully designed to best address protection given the unique circumstances.

Section 20.496.020(A)(1) states that development within an ESHA buffer area shall generally be the same as those uses permitted in the adjacent Environmentally Sensitive Habitat Area. County staff finds that uses allowed in rare plant habitats are not specifically called out in the manner that wetlands and estuaries (Sec. 20.496.025), open coastal waters, lakes, streams, rivers (Sec. 20.496.030), riparian corridors and other riparian resource areas (Sec. 20.496.035), dunes (Sec. 20.496.040), and pygmy forests (Sec. 20.496.045) are called out. Section 20.496.050 (other resource areas), is the only additional category, and is outlined as follows:

Sec. 20.496.050 Other Resource Areas.

(A) General. Other designated resource areas as identified on Pages 39, 40 and 41 of the Coastal Element dated November 5, 1985 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.

(B) Development of Resource Areas. Any development within designated resource areas shall be reviewed and established in accord with conditions which could allow some development under mitigating conditions but which assures the continued protection of the resource area. (Ord. No. 3785 (part), adopted 1991)

Pages 39, 40, and 41 of the Coastal Element dated November 5, 1985 list definitions of the following:

- Anadromous Fish Stream
- Coastal Marine Ecoystem
- Development
- Dunes
- Environmentally Sensitive Habitat Areas
- Minor Amendment
- Pygmy Vegetation
- Pygmy Type Vegetation
- Riparian Habitats
- Special Plant Habitat
- Special Treatment Area

Definitions continue on page 42 as follows:

- Special Wildlife Habitat
- Wetlands

It makes little sense that "Other resource areas" was meant to encompass all of the above listed definitions, particularly when definitions for "development" and "minor amendment" are included, as are areas already specifically outlined in sections 20.496.025 thru 20.496.045. It would seem logical that the writer meant to reference the Resource Areas listed on Pages 43 thru 45 as follows:

- State Parks and Reserves
- Underwater Parks and Reserves
- Areas of Special Biological Significance
- Natural Areas
- Special Treatment Areas (designated by the California Division of Forestry)
- Fishing Access Points
- Areas of Special Biological Importance
- Significant California Ecosystem
- Coastal Marine Ecosystem

The problem with this assumption is that most of these areas are already specifically outlined in sections 20.496.025 thru 20.496.045. To grasp this rationalization, one must first understand that specific areas are called out under each of these above listed headings. For example, under Significant California

Ecosystem, Big River Estuary is listed. Permitted development within Big River Estuary would already be outlined under (Sec. 20.496.025), Wetlands and Estuaries, therefore inclusion would be superfluous. Similarly, most of the listed Natural Areas are estuaries, riparian areas, creeks, wetlands, etc., and most of the listed Special Treatment Areas are rivers or creeks. When added to the fact that the pages don't match up to those referenced, it makes little sense to assume that the author intended to exclude these specified areas from more detailed analysis. Similarly, it makes little sense to isolate natural resource areas not otherwise discussed, such as rare plant and animal habitat from this last category of "Other Resource Areas," as rare plant and animal habitats clearly are natural resource areas that have otherwise not been clarified in terms of development allowed within the resource area. Inasmuch as Sec. 20.496.050(A) appears to require further modification to impart insight, Section 20.496.050(B) broadly captures the essence of the chapter and of the LCP itself. One could reasonably argue that it was the intent of the authors to provide a section that outlined in broad terms, common sense guidelines for natural resources such as rare plants and rare plant habitats, which are not specifically covered in other sections. Therefore, while the project does not propose development within the rare plant resource area, development is proposed within the buffer, and that development must comply with Section 20.496.020(A)(1), which states that development within an ESHA buffer area shall generally be the same as those uses permitted in the adjacent Environmentally Sensitive Habitat Area. Lacking any other definition of allowable development within the buffer, Sec. 20.496.050 of the MCCZC, Other Resource Areas, is used, which allows some development under mitigating conditions, but assures protection of the resource.

As the proposed development would be located less than 50 feet from ESHAs, the minimum buffer size allowed per Section 20.496.020(A)(1) of the MCCZC as outlined above, a reduced buffer analysis as outlined in Section 20.496.020 is required, and has been provided by the botanist. As discussed in a meeting between the Fort Bragg Planning Division and Bob Merrill and Tiffany Tauber of the California Coastal Commission held April 6, 2007, the Coastal Commission requires that for development within an ESHA buffer area, Section 20.496.020(4)(a-k), for permitted development within the buffer, shall be detailed in the staff report. The following discussion addresses this requirement:

Table 1. Reduced buffer analysis, permitted development.

Section 20.496.020(A) of the Mendocino County Coastal Zoning Code	Analysis by BioConsultant, Moore Biological Survey, October 2006	Staff Report Analysis
(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 functional capacity and sustainability of the rare plant habitat ESHA will be protected during development with the implementation of mitigation measures (exclusionary/protective fencing, erosion control measures). Seasonal high-weed mowing to keep weeds and brush from invading the rare plant habitat in the pine forest, invasive species removal, and provisions to keep the preferred coastal scrub habitat west of the existing duplex free from development, accessory structures, landscaping, and non-native invasive plants will help to maintain the functional capacity and natural species diversity of the ESHA.	As mitigated, the proposed development is compatible with the continuance of the adjacent habitat area by maintaining the functional capacity and ability to be self-sustaining and maintain natural species diversity.
(b) Structures will be allowed within the buffer area only if there is no other feasible site available on the parcel.	The remodel portion is minimal and the plans have been redesigned to place the additions in the only remaining areas outside of the delineated ESHA polygons with the largest buffers possible. The granny unit will be sited closer to the duplex in the area largely devoid of understory with a buffer of 25 feet from the closest part of Polygon 1. The barn will be reconfigured and sited in the area between Polygons 1-2 and 3-4, with a buffer of at least 30 ft. between the polygons. These are the most feasible and least environmentally damaging locations for the additions.	The project has been further modified since the botanist analysis. The remodel portion on the west side of the structure has been omitted. The "granny unit" (second residence) is now an additional 25 feet from Polygon 1, so it is now 50 feet from that ESHA, and outside the buffer area. The barn has been pushed as far from the ESHAs as possible, while still meeting the 50 foot from all property lines requirement per Section 20.444.015(G) of the MCCZC. As revised, there is no other feasible site available on the parcel.

(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 natural stream channels. The term "best site" shall be defined as the site having the least impact on the maintenance of the biological and physical integrity of the buffer strip or critical habitat protection area and on the maintenance of the hydrologic capacity of these areas to pass a one hundred (100) year flood without increased damage to the coastal zone natural environment or human systems.	All development is proposed for a nearly level area and sited to avoid the rare plant constraints. The hazard of water erosion is slight for the soils present at the site.	The proposed development is sited and designed to prevent impacts which would degrade adjacent habitat areas. The determination of the best site included consideration of drainage, access, soil type, vegetation, hydrological characteristics, elevation, topography, and distance from natural stream channels.
(d) 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.	The functional capacity and sustainability of the rare plant habitat ESHA will be protected during development with the implementation of mitigation measures (exclusionary/protective fencing, erosion control measures). Seasonal high-weed mowing to keep weeds and brush from invading the rare plant habitat in the pine forest, invasive species removal, and provisions to keep the preferred coastal scrub habitat west of the existing duplex free from development, accessory structures, landscaping, and non-native invasive plants will help to maintain the functional capacity and natural species diversity of the ESHA.	As mitigated, the proposed development is compatible with the continuance of the adjacent habitat area by maintaining the functional capacity and ability to be self-sustaining and maintain natural species diversity.
(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.	As described in 4 (b), the proposed construction will occur in the most feasible and least environmentally damaging location. Mitigation measures are proposed.	There is no other feasible site available on the parcel. Mitigation measures proposed replace the protective values of the buffer areas lost due to development at a ratio of at least 1:1.

(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.	The areas proposed for the additions are largely devoid of vegetation - no riparian or coastal scrub vegetation will be removed. No bare soil areas will result from the development. The Project as described will cause minimal noise, dust, artificial light and air pollution.	The development minimizes impervious surfaces in that required driveway addition is permeable gravel. The proposal minimizes removal of vegetation, bare soil, noise, dust, artificial light, nutrient runoff, air pollution, and human intrusion. No wetland areas are present. The project minimizes alteration of natural landforms.
(g) Where riparian vegetation is lost due to development, such vegetation shall be replaced at a minimum ratio of one to one (1:1) to restore the protective values of the buffer area.	No riparian vegetation will be removed.	No riparian vegetation loss will occur.
(h) Aboveground structures shall allow peak surface water flows from a one hundred (100) year flood to pass with no significant impediment.	The proposed development does not include structures that would significantly impede the flow of water during large storm events.	The proposed development is not located in a 100-year flood zone.
(i) Hydraulic capacity, subsurface flow patterns, biological diversity, and/or biological or hydrological processes, either terrestrial or aquatic, shall be protected.	Biological diversity in the rare plant habitat ESHA will be protected and enhanced by the mitigation measures. Measures to eradicate non-native invasive species and to keep the rare plant habitat free from development and landscaping will also help to protect biological diversity.	The project allows for protection of hydrologic capacity, subsurface flow patterns, biological diversity, and/or hydrological processes, both terrestrial and aquatic.
(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 wherever 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. Piers may be allowed on a case by case basis.	Natural stream environment zones do not occur in the development area.	Natural stream environment zones will not be impacted by the proposed development.

(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. *(Ord. No. 3785 (part), adopted 1991)*	The proposed development will not have a significant impact on the environment if the recommended mitigation measures are adopted.	The proposed mitigations are required as a condition of the project approval.

The project redesign prioritizes the protection of the coastal scrub habitat area by omitting proposed development from that area. The survey report describes coastal bluff morning glory (*Calystegia purpurata* ssp. *saxicola*) as "hardy and resilient" (Fitts 2006). With proposed mitigations, as outlined in the survey report and included as Special Condition Number 3, the project provides a buffer of a minimum of 20 feet to present rare plants located outside the natural habitat area, and all proposed project aspects are separated from the coastal bluff morning glory (*Calystegia purpurata* ssp. *saxicola*) natural habitat area by the existing structure. To the extent possible, structures would be located outside the 50-foot buffer to present rare plants located outside the natural habitat area. The exception to this is the proposed barn, which would be located a distance of 24 feet from rare plants located outside the natural habitat area. A permanent fence is proposed between the barn and the central present rare plant location to protect that area from animal and human disturbances. As proposed, the project would not result in direct impacts to rare plants located outside the natural habitat area, would not result in a reduction of natural rare plant habitat, and complies with the intent of the LCP for natural resources protection, as mitigation measures have been recommended to reduce potential impacts.

Archaeological/Cultural Resources

The project site is currently developed and not located in an area likely to contain archaeological or cultural resources. The site is a developed lot in a developed subdivision. Nevertheless, Standard Condition Number 8 is recommended, advising the applicant of the requirements of the County's Archaeological Ordinance (Chapter 22.12 of the Mendocino County Code) in the event that archaeological or cultural materials are unearthed during site preparation or construction activities.

Groundwater Resources

The site is located within an area designated as a Critical Water Resources area (CWR) as shown in the 1982 Coastal Groundwater Study prepared by the Department of Water Resources. Domestic water is currently provided to the site by North Gualala Water. The proposed project was referred to North Gualala Water, who responded with "no comment." A clearance letter will be required as part of the building permit process.

Sewage disposal is currently provided to the site by the Gualala Community Services District. The proposed project was referred to the Gualala Community Services District, who responded with a "will serve" letter, indicating a willingness to serve the proposed project. No adverse impacts to groundwater resources are anticipated.

Transportation/Circulation

There is an existing driveway approach serving the site. The application was referred to the Mendocino County Department of Transportation (DoT) for comment. DoT recommended improvement of the existing encroachment to County standards, and submitted a recommended condition of approval for encroachment improvements to be constructed within the County road right-of-way. The Department's recommended condition is included as Special Condition Number 4.

The project will not intensify the use of the site, and therefore will not result in additional impacts to local and regional roadways.

Zoning Requirements

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

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

FINDINGS:

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

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

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

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

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

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

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

STANDARD CONDITIONS:

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

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

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

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

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

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

   a. The permit was obtained or extended by fraud.

   b. One or more of the conditions upon which the permit was granted have been violated.

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

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

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

8. If any archaeological sites or artifacts are discovered during site excavation or construction activities, the applicant shall cease and desist from all further excavation and disturbances within one hundred (100) feet of the discovery, and make notification of the

discovery to the Director of the Department of Planning and Building Services. The Director will coordinate further actions for the protection of the archaeological resources in accordance with Section 22.12.090 of the Mendocino County Code.

SPECIAL CONDITIONS:

1. Prior to the issuance of the Coastal Development Permit, the applicant as landowner shall execute and record a deed restriction, in a form and content acceptable to the Coastal Permit Administrator which shall provide that:

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

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

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

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

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

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

2. Prior to final clearance of the building permit, verification shall be provided by the Building Division that exterior lighting is downcast and shielded, as shown in the coastal development permit application.

3. All mitigation measures recommended by BioConsultant (September 2006 report for subject parcel) shall be incorporated into the project. Prior to issuance of the building permit and construction activities, the applicant shall provide proof to the Planning Division that temporary exclusionary/construction and permanent fencing as shown on

the site plan and outlined in the survey report, has been installed in a manner appropriate to protect coastal bluff morning glory (*Calystegia purpurata* ssp. *saxicola*) individuals and habitat. All construction related activities must be contained by the fencing, which shall remain undisturbed during all phases of construction.

Prior to the issuance of the Coastal Development Permit, the applicant as landowner shall execute and record a deed restriction, in a form and content acceptable to the Coastal Permit Administrator which shall provide that the "Northern Coastal Scrub Rare Plant Habitat Area" located between the existing residential structure and the coastal bluff shall be protected from development and disturbance in perpetuity. Invasive plant removal shall occur by hand within this area, and shall be the only disturbance allowed within this sensitive resource area. Exhibit G, which outlines the area labeled "Northern Coastal Scrub Rare Plant Habitat Area" and shows the boundaries of this area as the side yard property lines, the mean high water line, and the western edge of the existing residential structure, all outlined in bold, shall be attached to the deed restriction.

Seasonal high weed mowing shall occur to vegetated areas of parcel on the inland side of the existing residential structure, under and near existing pine trees. The intent of the mowing is to keep higher growing weeds and brush from crowding out existing rare plants.

Invasive plants iceplant (*Carpobrotus* spp.), English ivy (*Hedera helix*), and periwinkle (*Vinca major*) shall be removed by hand from all areas of the parcel as outlined in the survey report.

The contractor shall follow industry best management practices for erosion control.

A copy of the staff report and coastal permit for CDU 9-2006 must be provided to the contractor and all sub-contractors conducting the work, and must be in their possession at the work site. This requirement is intended to ensure that the project construction is done in a manner consistent with the submitted application and all other supplemental information contained in the staff report.

4. Prior to commencement of construction activities for the residence, applicant shall obtain an encroachment permit from the Mendocino County Department of Transportation and construct appropriate improvements to protect the County road during the construction phase of the project. In conformance with encroachment permit procedures administered by the Mendocino County Department of Transportation, applicant shall construct a Standard Private Driveway onto Old Coast Highway (CR 513), to a minimum width of ten (10) feet, area to be improved fifteen (15) feet from the edge of the County road, to be surfaced with surfacing comparable to that on the County road.

Staff Report Prepared By:

April 11, 2007
Date

Teresa Beddoe
Planner I

Attachments:

Exhibit A	Location Map
Exhibit B	Site Plan
Exhibit C	Floor Plans - Existing
Exhibit D	Floor Plans - Proposed
Exhibit E	Elevations – Existing
Exhibit F	Elevations – Proposed
Exhibit G	Deed Restriction Area

Appeal Period: Ten calendar days for the Mendocino County Board of Supervisors, followed by ten working days for the California Coastal Commission following the Commission's receipt of the Notice of Final Action from the County.

Appeal Fee: $795 (For an appeal to the Mendocino County Board of Supervisors.)

SUMMARY OF REFERRAL AGENCY COMMENTS:

Planning – Ukiah	Check lot coverage, barn needs to be 50' from property lines.
Department of Transportation	Standard private drive encroachment/permit needed.
Environmental Health – Fort Bragg	Comments may be solicited from North Gualala Water and Gualala Community Service District.
Building Inspection – Fort Bragg	No comment.
Assessor	No response.
Department of Fish & Game	Concurrence with proposed mitigations.
Coastal Commission	No response.
GMAC	Voted to recommend approval. GMAC comments outlined in GMAC section above.
North Gualala Water Co.	No comment.
Gualala Community Services District	Will serve.
U.S. Fish and Wildlife Service	The project with the mitigation measures proposed is unlikely to result in incidental take of Behren's silverspot butterfly.

WORKS CITED:

Arnold, Richard A., Ph.D. 2006. *Habitat Assessment for the Endangered Behren's Silverspot Butterfly, Greg and Sandra Moore's Property at 37900 Old Coast Highway in Gualala, CA.* Entomological Consulting Services, Ltd., Pleasant Hill, CA.

BACE Geotechnical 2005. *Draft Geotechnical Investigation, Proposed Residence, Moore Property, 37900 Old Coast Highway, Gualala, Mendocino County, California.* Brunsing Associates, Inc., Santa Rosa, CA.

Chapman, Stuart F. III, Pamela A. Matson and Harold A. Mooney 2002. *Principles of Terrestrial Ecosystem Ecology.* Springer-Verlag New York, Inc.

Fitts, Kim 2006. *Biotic Assessment & Rare Plant Survey, Moore Project (APN 145-121-03).* BioConsultant LLC, Santa Rosa, CA.

Hickman, James C. 1993. *The Jepson Manual, Higher Plants of California.* Third Printing with Corrections. University of California Press, Berkeley and Los Angeles, CA.

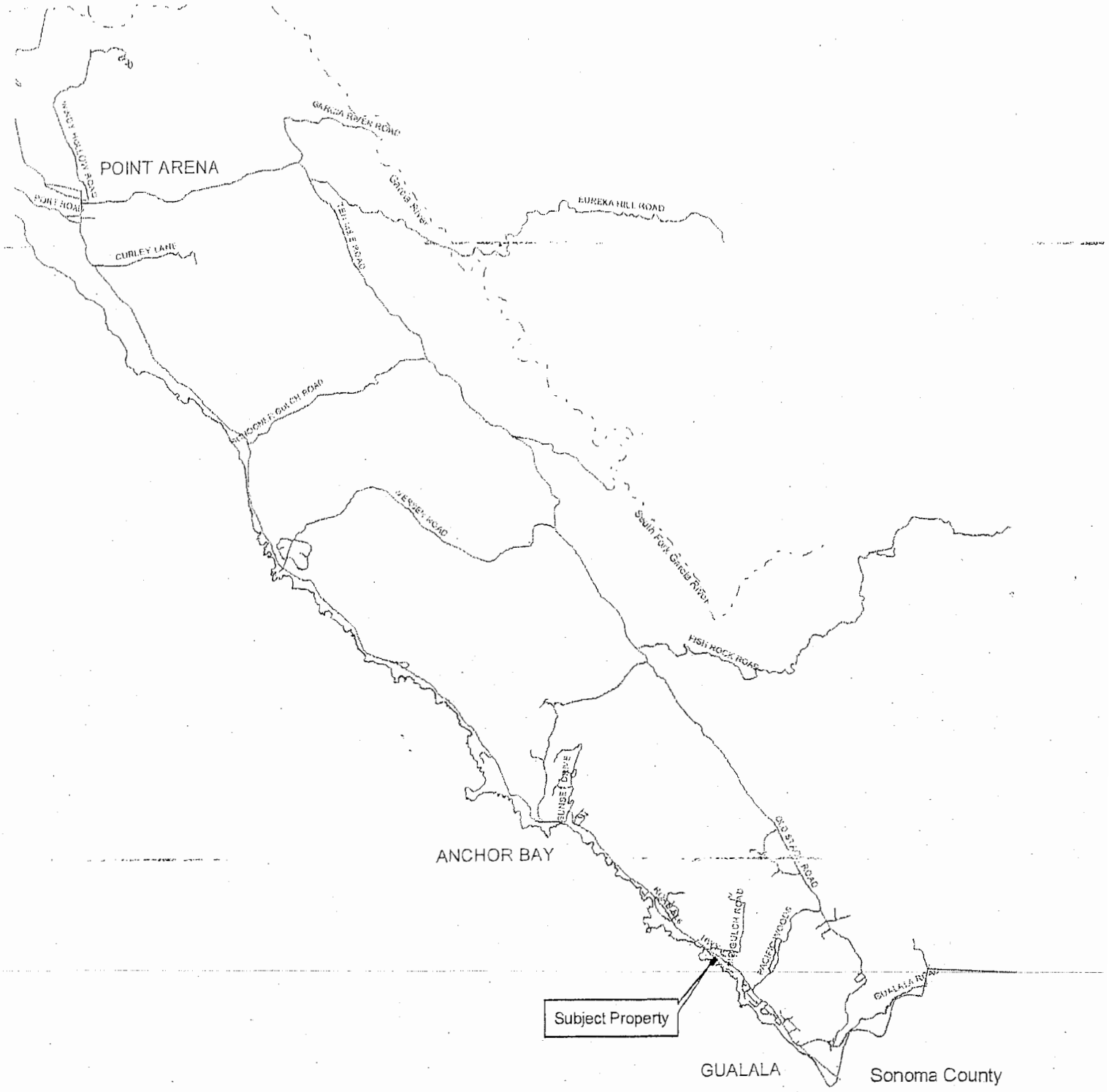
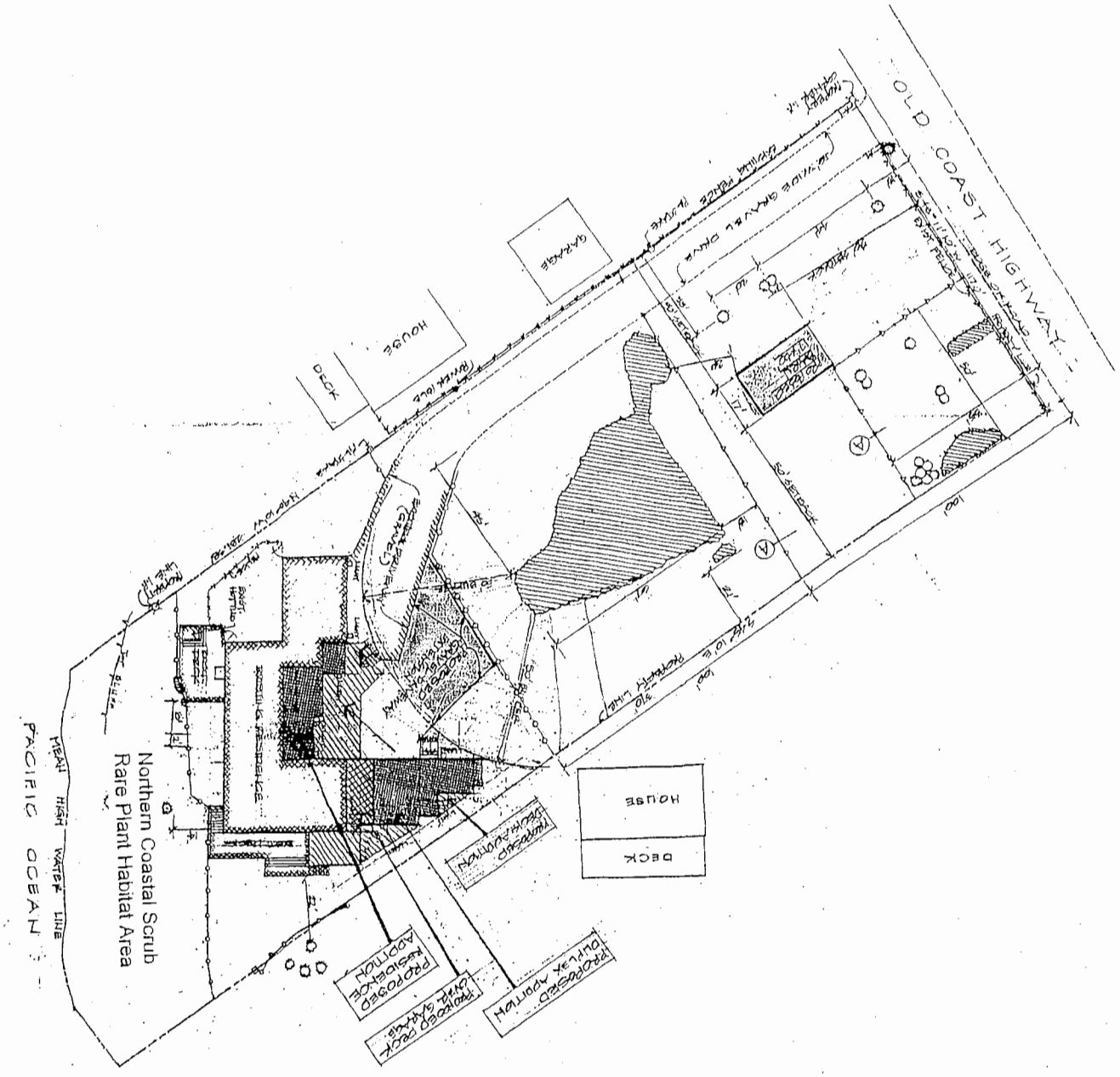
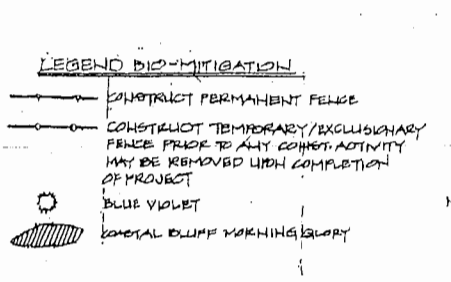


EXHIBIT A

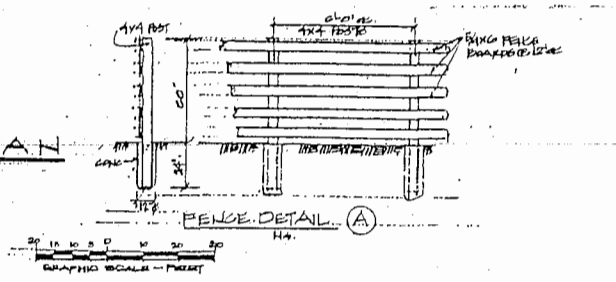
LOCATION MAP





SITE PLAN

NOTE: BIO INFORMATION SHOWN ON THIS SITE PLAN BASED ON "BIOTIC ASSESSMENT & RARE PLANT SURVEY" PREPARED BY BIOCONSULTANT LLC, SANTA ROSA, CA REPORT DATED SEPT, 2006



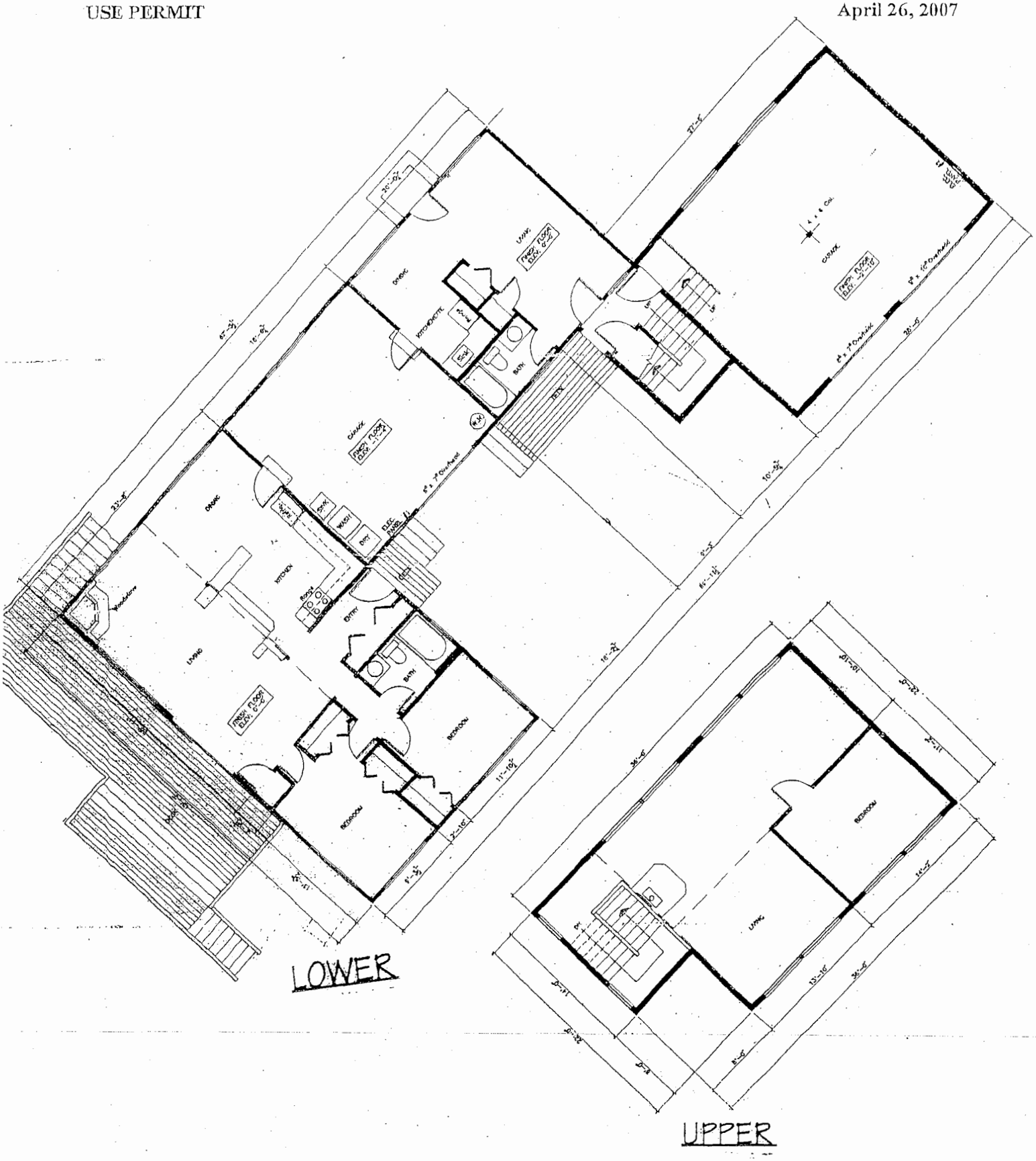


EXHIBIT C

FLOOR PLANS - EXISTING

NO SCALE

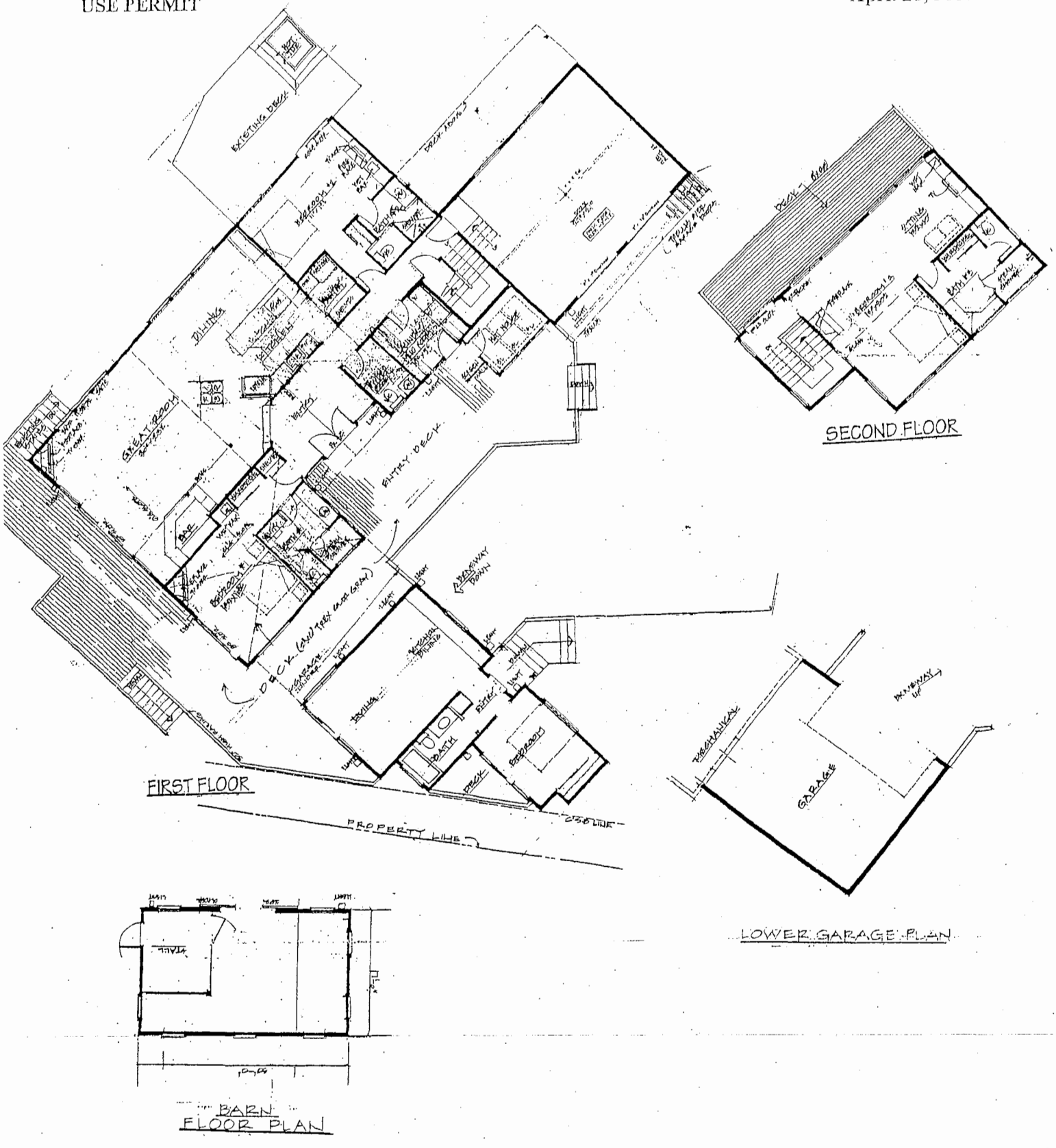
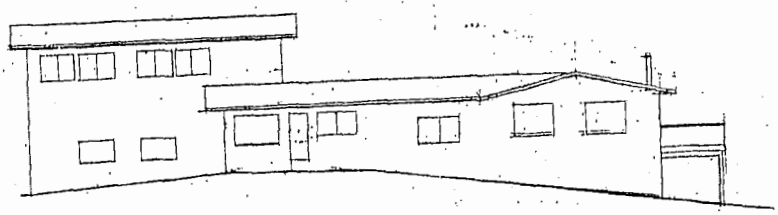


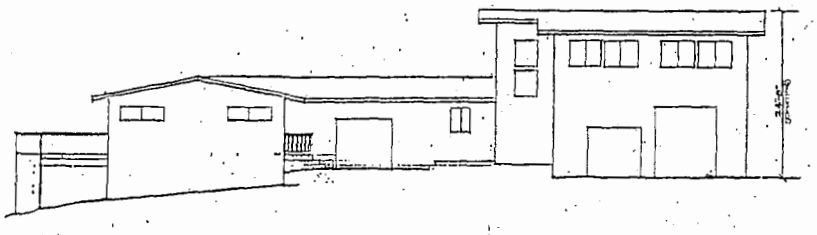
EXHIBIT D

FLOOR PLANS - PROPOSED

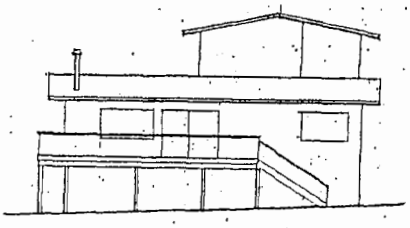
NO SCALE



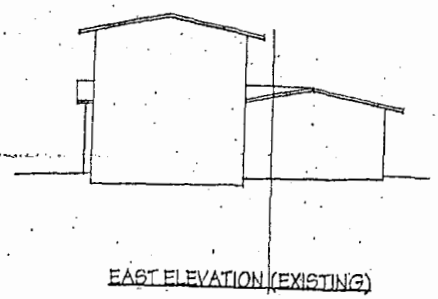
SOUTH ELEVATION (EXISTING)



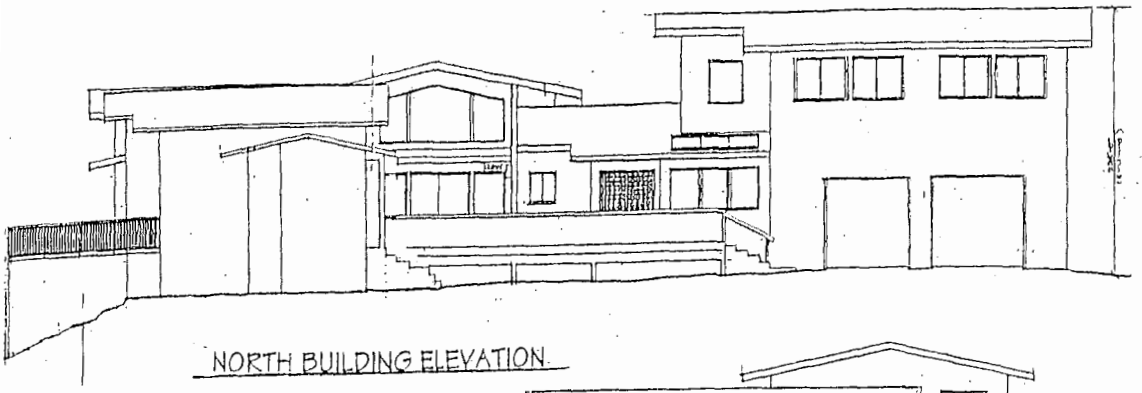
NORTH ELEVATION (EXISTING)



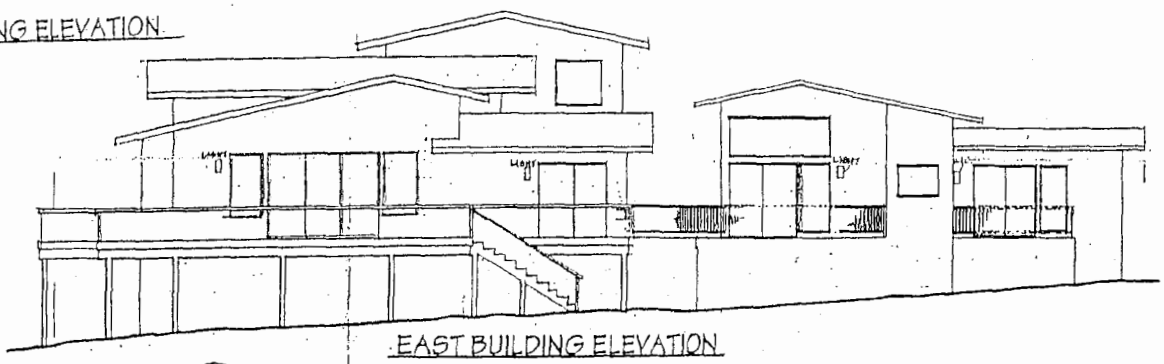
WEST ELEVATION (EXISTING)



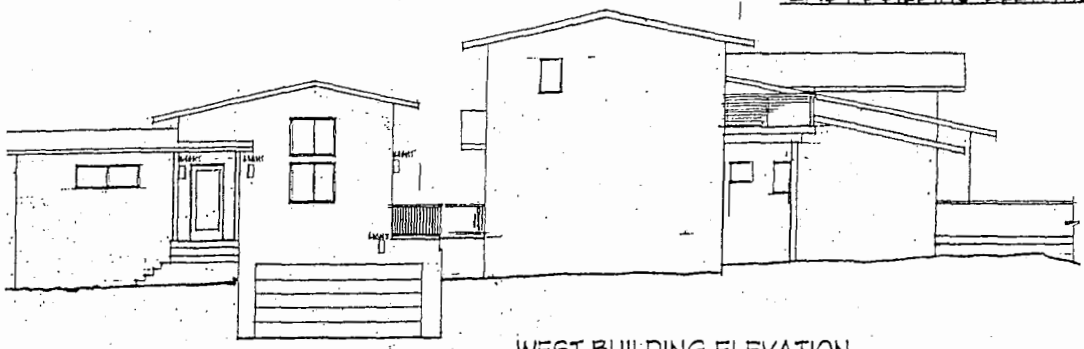
EAST ELEVATION (EXISTING)



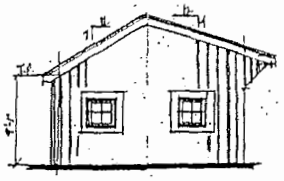
NORTH BUILDING ELEVATION



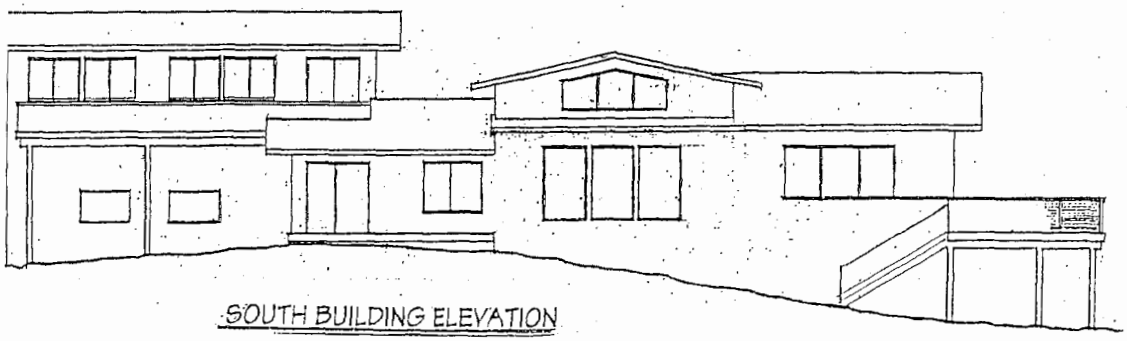
EAST BUILDING ELEVATION



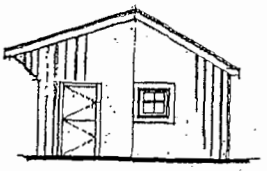
WEST BUILDING ELEVATION



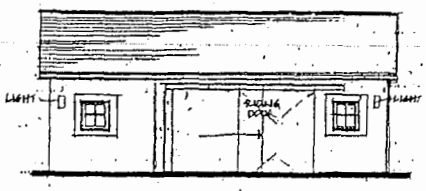
BARN - EAST



SOUTH BUILDING ELEVATION



BARN - WEST



BARN - NORTH

EXHIBIT F

ELEVATIONS - PROPOSED

NO SCALE

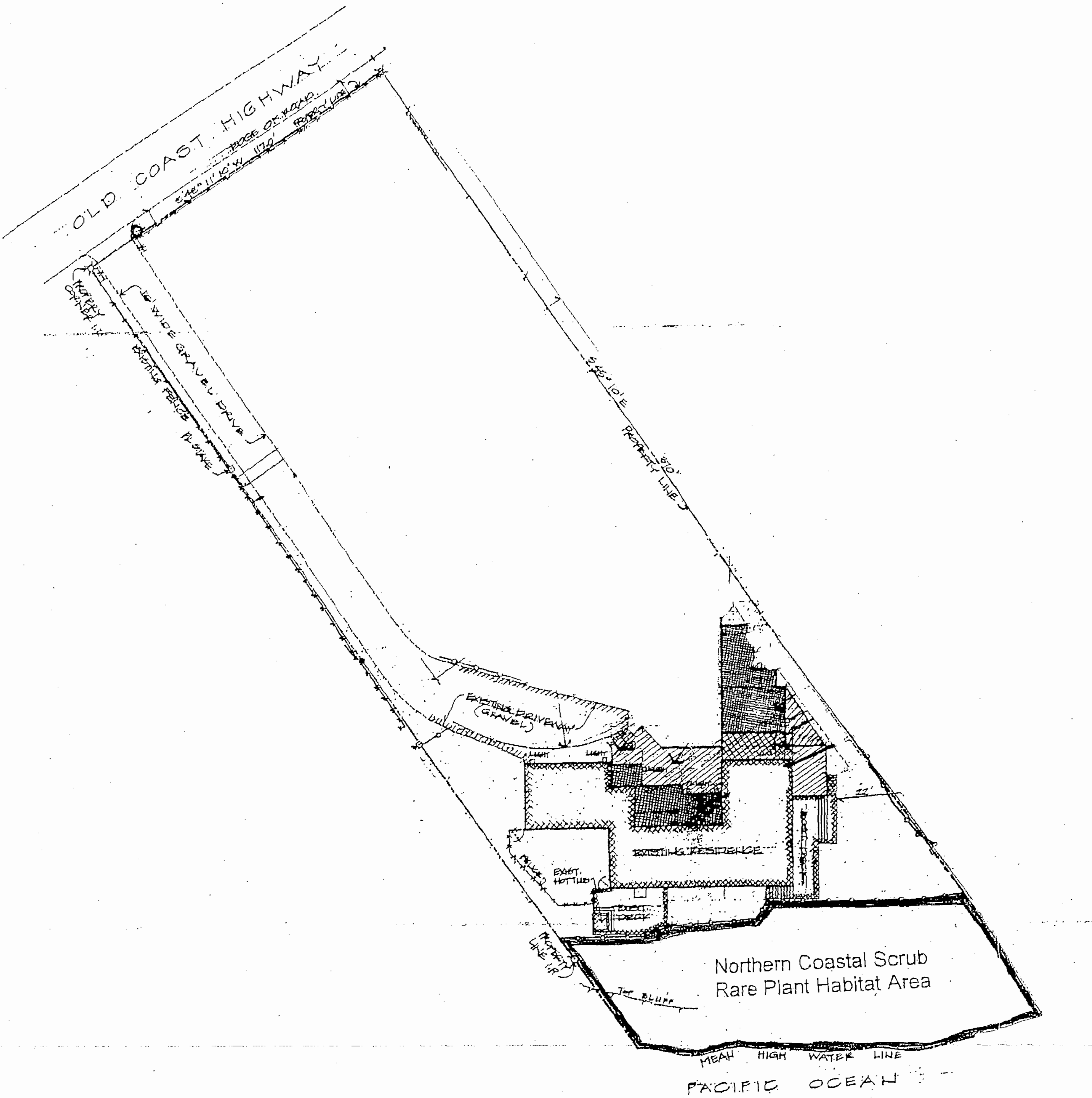


EXHIBIT G

DEED RESTRICTION AREA

NO SCALE

BIOTIC ASSESSMENT
&
RARE PLANT SURVEY

Moore Project

(APN 145-121-003)

Sept., 2006

Prepared for:

Greg & Sandra Moore

Prepared by:

BioConsultant LLC
122 Calistoga Rd. #360
Santa Rosa, CA 95409
Ph/Fx: 539-4488
dmarshall@bioconsultant.net
www.bioconsultant.net

TABLE OF CONTENTS

BIOTIC ASSESSMENT AND RARE PLANT SURVEY

Greg and Sandra Moore (APN 145-121-03)

SUMMARY

A biotic assessment and rare plant survey conducted at parcel APN 145-121-03 *on May 26, August 7, and September 1, 2006 resulted in the discovery of coastal bluff morning-glory* (Calystegia purpurata *ssp.* saxicola)*, a CNPS List 1B taxon. Approximately 213 morning-glory plants were observed in an open stand of bishop pine and Monterey cypress located between Old Coast Highway and an existing duplex. An estimated 45 individuals were observed within and alongside northern coastal scrub habitat on the coastal bluff.*

The survey also detected a limited population of early blue violet (Viola adunca)*, the primary larval host plant for the federally endangered Behren's silverspot butterfly* (Speyeria zerene behrensii)*. Due to the presence of the on-site host plant and other potential habitat features, an additional site assessment and survey for the silverspot butterfly was conducted by Richard Arnold, Ph.D., with negative results. The Project Site was assessed as containing only limited resources for special-status wildlife and none were observed during the three-day site visits.*

The rare morning-glory plants and their habitat meet the definition within the County of Mendocino's Local Coastal Program (LCP) as an "environmentally sensitive habitat area" (ESHA). The project proposes a reduced buffer width for the rare plant ESHA. This report presents a buffer zone analysis addressing the reduced buffer to the rare plant occurrences, and it offers mitigation measures to avoid, reduce, and mitigate potential negative impacts of the proposed development.

INTRODUCTION

Howard E. Curtis, AIA has applied for Coastal Development Permit (CDP) # 18-2006 on behalf of property owners Greg and Sandra Moore. The CDP application is a remodel and improvement project on a single parcel (APN 145-121-03) in Gualala, California.

The Mendocino County Department of Planning and Building Services is responsible for protecting biotic resources during planned developments in the Coastal Zone, and consequently requires biological studies be submitted with development applications when environmentally sensitive habitat areas (ESHAs) are thought to be nearby. To comply with county regulations to protect rare species and environmentally sensitive habitats, Mr. and Mrs. Moore contracted BioConsultant LLC to perform a site assessment and survey for the presence of potentially occurring special-status plant species and /or sensitive habitat areas on the Project Site. The results of these surveys are presented in this report and will be submitted to the Mendocino County Planning Department representative and to the landowners.

Project Site Location
The Project Site is located one mile north of Gualala and west of State Highway 1. The physical address is 37900 Old Coast Highway, Gualala, CA (APN 145-121-03) (**Figure 1**). Situated on a coastal bluff in a low-density residential neighborhood, the Project Site lies between Old Coast Highway and the Pacific Ocean and is oriented to the southwest. It is bounded by developed parcels to the north and south.

Proposed Development
The project proposes to convert an existing duplex to a single-family residence with the addition of 450 sq. ft. of living space, 280 sq. ft. of upper deck, and 1315 sq. ft. of lower decking. Part of the addition includes a room extension that will lengthen a portion of the west wall out 4 ft. and extend it 22 ft. to an existing deck. A 510 sq. ft. barn/utility shed and a 640 sq. ft. "granny unit" will be also constructed.

The residence will be serviced by existing utilities and an on-site well and septic system. An existing gravel driveway provides access. Minimal cypress tree (1-2) removal may be necessary for the placement of the granny unit. The development site plan and rare and sensitive plant locations are shown in **Figure 2.**

Project Site Description
The Project Site's configuration, boundaries, existing and proposed structures, and rare and sensitive plant locations are mapped on Figure 2. A color aerial photo shows the Project Site and the surrounding environmental setting (**Figure 3**). Used together, Figures 2 and 3 provide a complete representation of the site and its environs.

The rectangular-shaped, 0.95 acre parcel is situated on a level marine terrace, extending from Old Coast Highway to the outer edge of the coastal bluff (see Figure 3). An open forest consisting mostly of native bishop pine and non-native Monterey cypress covers about two thirds of the parcel, from the roadway to the existing duplex. South and west of the duplex, the windswept outer bluff area is primarily composed of dense northern coastal scrub, which spills over the lip of the bluff onto near-vertical sea cliffs.

A gravel driveway runs along the northwest boundary leading to the duplex, and it is flanked by a row of cypresses on the neighboring parcel to the north. A wide mowed path and a row of Monterey pines on the neighboring parcel to the south define the southeast boundary.

According to the Soil Survey of Mendocino County, California, Western Part (2001), the Project Site is underlain by soil mapping unit *225: Windyhollow loam, 0 to 5 percent slopes.* This very deep, somewhat poorly drained loam is on marine terraces, where it formed in alluvium derived from mixed rock sources. The vegetation is mainly perennial grasses and forbs. Permeability is moderately slow and available water capacity is high. The soil is saturated with water for brief or long periods following episodes of heavy rain from December through April. Surface runoff is very slow or slow, and the hazard of water erosion is slight if the surface is left bare. The main limitations affecting homesite development on the Windyhollow soil are the seasonally saturated soil conditions and the moderately slow permeability in the subsoil. Surface drainage is needed for roads and buildings.

Literature Review
Prior to conducting the field surveys, the California Department of Fish and Game Natural Diversity Database (CNDDB) [2006] was queried for special-status species and natural communities reported from the Gualala, Point Arena, Saunders Reef, and Stewart's Point USGS 7.5 minute quadrangles. The resulting CNDDB list, which includes 12 animal species and 27 plant species categorized as endangered, threatened, rare, sensitive, and/or species of special concern as well as 5 rare natural communities, is attached as **Appendix A.**

A review of the California Native Plant Society's *Electronic Inventory of Rare and Endangered Plants of California* (CNPS 2006) for the 4-quadrangle area resulted in 14 additional plant species. **Appendix B** combines the results of the CNDDB and CNPS queries and is a comprehensive list of all 41 special-status plants with potential to occur in the Project Site vicinity.

The following six plant species have cited CNDDB occurrences within one mile of the Project Site: coastal bluff morning-glory, swamp harebell, supple daisy, thin-lobed horkelia, coast lily, and purple-stemmed checkerbloom. An overlapping polygon of the Townsend's big-eared bat and Behren's silverspot butterfly (occurrence #3) located 1.16 miles to the north are the only nearby wildlife records.

SITE ASSESSMENT AND SURVEY RESULTS

BioConsultant LLC staff, Derek Marshall and Linda Esposito, conducted a habitat-based assessment and survey for rare and endangered species on May 26, 2006. The two-person survey effort duration totaled 4.25 hours. The investigators walked the entire site, making a careful search for potentially occurring special-status species. They noted and recorded details of terrain, hydrology, plant communities, and the presence of individual plant and animal species. Plant samples were obtained for diagnostic review in the laboratory.

Having determined the identity of specimens collected May 26 as the special-status coastal bluff morning-glory, they returned to the site on August 7 with BioConsultant LLC staff Kim Fitts to document the size and extent of the population and its proximity to the proposed structures and also to survey for late-flowering special-status plants. Rare plant habitat and other sensitive resources were mapped with GPS. The three-person follow-up survey effort duration totaled 3.5 hours. Kim Fitts and Derek Marshall made a final brief visit on September 1, to count rare plants in the area of impact following the redesign of the project.

Special-status Plant Assessment
The entire parcel was surveyed on foot to the bluff edge. As shown in Figure 3, the sea cliffs at the southwest boundary are mostly sheer rock, with vegetation limited to the upper cliff faces. This vegetation was visually inspected from vantage points on the bluff.

Vegetation Communities

The outer bluff is open except for a half dozen non-native Monterey cypresses (*Cupressus macrocarpa*) located south of the existing duplex. Most of the outer bluff west of the duplex is covered with northern coastal scrub. From the cypress trees to the south edge of the duplex, the ground is variously duff covered, bare, or sparsely vegetated with non-native weeds such as rattlesnake grass (*Briza maxima*) and rough cat's-ear (*Hypochaeris radicata*) and native plants including manycolored lupine (*Lupinus variicolor*), pussy ears (*Calochortus tolmiei*), and tufted hairgrass (*Deschampsia cespitosa*). This bearish, duff covered area gives way to a very small remnant of coastal terrace prairie, which grades into the scrub. A single large, sprawling, wind-pruned native grand fir (*Abies grandis*) is centered at the bluff edge. As previously described, an open stand of pine and cypress covers the inner two thirds of the parcel, from the duplex to the roadway, and the boundaries with neighboring parcels are marked by a cypress and a Monterey pine row. There is a cypress-dominated area just east of the duplex.

The pattern of native vegetation suggests that the historical natural communities of the site included coastal terrace prairie as well as northern bishop pine forest and northern coastal scrub. It is likely that coastal terrace prairie was once more extensive, covering the present site of the duplex and some or all of the cypress-dominated area east of the duplex. Bishop pine may be naturally occurring, but it is conceivable that some or all of the trees were planted. Although bishop pine is a native tree and northern bishop pine forest is a component of the local plant community mosaic, the Windyhollow soils of the site typically support perennial grasses and forbs. Bishop pine, which is tolerant of saturated soil conditions, is a suitable tree species to plant as a windbreak on this soil unit, according to the Mendocino County Soil Survey.

Northern bishop pine forest

According to Holland (1986), this community often occurs on sterile, rocky soil and is typically dominated by pure stands of bishop pine (*Pinus muricata*). An understory of shrubs and perennial herbs is nearly continuous in open stands on moist sites and nearly absent from dense stands or dry, rocky sites. Characteristic understory species are bracken (*Pteridium aquilinum var. pubescens*), sword fern (*Polystichum munitum*), coffeeberry (*Rhamnus californica*), poison oak (*Toxicodendron diversilobum*), black huckleberry (*Vaccinium ovatum*), and *Rubus* species.

At the Project Site, widely spaced bishop pine and Monterey cypress form the overstory of the forested area along with two small diameter Douglas-firs. A shrub layer is lacking except for a single coffeeberry about 15 ft. tall. Cypress is the sole tree species in the area immediately east of the duplex; here the ground is covered with cypress needles and is devoid of understory vegetation. The remaining forest floor is covered with a thick layer of duff and is relatively sparsely vegetated with ferns, vines, and annual and perennial grasses and forbs. Typical forest natives such as bracken, sword fern, bedstraw (*Galium triflorum, G. aparine*), milkwort (*Polygala californica*), yerba buena (*Satureja douglasii*), and trailing California blackberry (*Rubus ursinus*) co-occur with non-native forbs and grasses such as velvet grass (*Holcus lanatus*), bull thistle (*Cirsium vulgare*), and fireweed (*Erechtites glomerata*). There is also a scattering of native plants more

typical of coastal scrub and open grassland, including coast paintbrush (*Castilleja wightii*), coastal bluff morning-glory, and beach strawberry (*Fragaria chiloensis*).

This community is similar to northern bishop pine forest, but in contrast to the native community, there are many planted and/or naturalized cypress trees and a highly modified understory. According to the Holland description, an open bishop pine stand on a moist site such as the subject parcel would typically have a continuous understory with numerous shrubs.

Northern coastal scrub

Holland (1986) describes northern coastal scrub as a community of usually dense shrubs from 0.5 to 2 m. in height with scattered grassy openings, typically occurring on windy, exposed sites with shallow, rocky soils. This community has a patchy distribution along the coast where it is often interspersed with coastal terrace prairie.

At the Project Site, the scrub community is strongly dominated by densely mounded native bearberry (*Arctostaphylos uva-ursi*). It is entirely native in composition, with characteristic species including Henderson's angelica (*Angelica hendersonii*), California blackberry, Carmel ceanothus (*Ceanothus griseus*), coffeeberry, California-aster (*Lessingia filaginifolia* var. *californica*), coast goldenrod (*Solidago spathulata* ssp. *spathulata*), yarrow (*Achillea millefolium*), cows clover (*Trifolium wormskioldii*), California brome (*Bromus carinatus*), and Douglas's iris (*Iris douglasiana*). As seen from the bluff edge, the coastal scrub vegetation on the upper cliff face is similar in composition but also includes liveforever (*Dudleya* sp.), a native succulent.

A stated, a small remnant patch of coastal terrace prairie grades into the scrub habitat. The most important species is tufted hairgrass, a perennial native bunchgrass. Coastal terrace prairie is considered a rare natural community, according to the CNDDB.

Non-native invasive species

A portion of the outer bluff edge (between the wind-pruned grand fir and the cypresses) is covered by common hottentot fig, also known as highway ice plant (*Carpobrotus edulis*). Highway ice plant is a rapidly growing, succulent perennial that has been widely planted for soil stabilization and landscaping. It forms deep, impenetrable mats that spread easily beyond landscape plantings to invade native plant communities. A portion of the ice plant occurrence has apparently been treated with herbicide as evidenced by a grey, tangled mass of dead stems; however, vigorous regrowth is present throughout the treated area. The mat spills over the lip of the bluff onto the upper cliff.

English ivy (*Hedera helix*) is present within the forested area, where it covers the lower trunks of some bishop pines and also occurs as scattered small plants in the understory. Just beyond the east corner of the Project Site, a source plant covers some wooden fencing along the roadway. English ivy also grows against the existing duplex on the east side. This perennial non-native can damage fences, smother forest trees, and destroy understory vegetation.

Greater periwinkle (*Vinca major*) occurs in a single location on the east side of the duplex, in the opening between the existing residences. It is adjacent to the English ivy

occurrence described above. Greater periwinkle forms dense carpets and competes with native species.

Rare, Threatened and Endangered Plants

Of the 41 special-status plant species with potential to occur in the Project Site vicinity (see Appendix B), 24 have potential to occur in habitats present at the Project Site, based upon the May 26, 2006 site assessment. **Table 1** lists these species with their common names, blooming times, status, and the plant communities in which they occur.

Table 1. Rare, threatened and endangered plants with potential to occur in habitats present at the Project Site.

Scientific Name	Common Name	Plant Communities	Bloom Time	Status
Agrostis blasdalei	Blasdale's bent grass	Coastal bluff scrub, coastal dunes, coastal prairie	May-Jul	CNPS List 1B.2
Angelica lucida	sea-watch	Coastal bluff scrub, coastal dunes, coastal scrub, marshes & swamps (coastal salt)	May-Sep	CNPS List 4.2
Calamagrostis bolanderi	Bolander's reed grass	Bogs and fens, broadleafed upland forest, closed-cone coniferous forest, coastal scrub, meadows & seeps, marshes & swamps, north coast coniferous forest/mesic	May-Aug	CNPS List 4.2
Calamagrostis foliosa	leafy reed grass	Coastal bluff scrub, north coast coniferous forest/rocky	May-Sep	CNPS List 4.2; CA Rare
Calandrinia breweri	Brewer's calandrinia	Chaparral, coastal scrub/sandy or loamy, disturbed sites and burns	Mar-Jun	CNPS List 4.2
Calystegia purpurata ssp. *saxicola*	coastal bluff morning-glory	Coastal dunes, coastal scrub	May-Sep	CNPS List 1B.2
Campanula californica	swamp harebell	Bogs & fens, closed-cone coniferous forest, coastal prairie, meadows & seeps, marshes & swamps (freshwater), north coast coniferous forest/mesic	Jun-Oct	CNPS List 1B.2
Carex californica	California sedge	Bogs & fens, closed-cone coniferous forest, coastal prairie, meadows & seeps, marshes and swamps (margins)	May-Aug	CNPS List 2.3
Carex saliniformis	deceiving sedge	Coastal prairie, coastal scrub, meadows & seeps, marshes & swamps (coastal salt)/mesic	Jun	CNPS List 1B.2
Castilleja mendocinensis	Mendocino coast Indian paintbrush	Coastal bluff scrub, closed-cone coniferous forest, coastal dunes, coastal prairie, coastal scrub	Apr-Aug	CNPS List 1B.2
Erigeron supplex	supple daisy	Coastal bluff scrub, coastal prairie	May-Jul	CNPS List 1B.2
Fritillaria roderickii	Roderick's fritillary	Coastal bluff scrub, coastal prairie, valley & foothill grassland	Mar-May	CNPS List 1B.1; CA Endangered
Gilia capitata ssp. *pacifica*	Pacific gilia	Coastal bluff scrub, chaparral, coastal prairie, valley & foothill grassland	Apr-Aug	CNPS List 1B.2
Gilia capitata ssp. *tomentosa*	woolly-headed gilia	Coastal bluff scrub (rocky, outcrops)	May-Jul	CNPS List 1B.1
Lasthenia macrantha ssp. *bakeri*	Baker's goldfields	Closed-cone coniferous forest, coastal scrub, meadows & seeps, marshes & swamps	Apr-Oct	CNPS List 1B.2

Lasthenia macrantha ssp. *macrantha*	perennial goldfields	Coastal bluff scrub, coastal dunes, coastal scrub	Jan-Nov	CNPS List 1B.2
Leptosiphon acicularis	bristly leptosiphon	Chaparral, cismontane woodland, coastal prairie, valley & foothill grassland	Apr-Jul	CNPS List 4.2
Lilium maritimum	coast lily	Broadleafed upland forest, closed-cone coniferous forest, coastal prairie, coastal scrub, marshes & swamps (freshwater), north coast coniferous forest	May-Aug	CNPS List 1B.1
Lotus formosissimus	harlequin lotus	Broadleafed upland forest, coastal bluff scrub, closed-cone coniferous forest, cismontane woodland, coastal prairie, coastal scrub, meadows & seeps, marshes & swamps, north coast coniferous forest, valley & foothill grassland/wetlands, roadsides	Mar-Jul	CNPS List 4.2
Perideridia gairdneri ssp. *gairdneri*	Gairdner's yampah	Broadleafed upland forest, chaparral, coastal prairie, valley & foothill grassland, vernal pools/mesic	Jun-Oct	CNPS List 4.2
Sidalcea malachroides	maple-leaved checkerbloom	Broadleafed upland forest, coastal prairie, coastal scrub, north coast coniferous forest, riparian woodland/often in disturbed areas	Apr-Jul	CNPS List 1B.2
Sidalcea malviflora ssp. *purpurea*	purple-stemmed checkerbloom	Broadleafed upland forest, coastal prairie	May	CNPS List 1B.2
Stellaria littoralis	beach starwort	Bogs & fens, coastal bluff scrub, coastal dunes, coastal scrub, marshes & swamps	Mar-Jul	CNPS List 4.2
Veratrum fimbriatum	fringed false-hellebore	Bogs & fens, coastal scrub, meadows & seeps, north coast coniferous forest/mesic	Jul-Sep	CNPS List 4.3

CNPS List:

1B – Rare or Endangered in California and elsewhere
2 – Rare or Endangered in California, more common elsewhere
3 – Plants for which we need more information – Review list
4 – Plants of limited distribution – Watch list

CNPS Threat Code extension:

1 – Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
2 – Fairly endangered in California (20-80% occurrences threatened)
3 – Not very endangered in California (<20% of occurrences threatened or no current threats known)

Early blue violet (*Viola adunca*) is also found in habitats present at the site; this species flowers from April to June.

The ideal time to survey for special-status plants is during the season of active growth and at the blooming time of the target species, and two or more surveys are sometimes required to detect early and late flowering plants. The May 26 and August 7, 2006 rare plant surveys coincided with the blooming period of early blue violet and all but one of the above-listed 24 special-status plants, deceiving sedge, which blooms in June.

Plant Survey Results

Coastal bluff morning-glory, a special-status plant, was discovered at the Project Site. The Behren's silverspot butterfly larval host plant, early blue violet, was also found (see below). No other special-status plants were observed during the surveys.

A careful search revealed only one plant belonging to the sedge (*Carex*) genus, foothill sedge (*Carex tumulicola*), which occurs in the forested area. We can therefore reasonably conclude that deceiving sedge is not present at the Project Site.

Coastal bluff morning-glory

The May 26 survey identified coastal bluff morning-glory (*Calystegia purpurata* ssp. *saxicola*) in the forest and coastal scrub habitats. Noting morphological variation within the population, the investigators collected a sample of plants to analyze in the laboratory and to press as vouchers. On August 7, they mapped the rare plant population extent and counted individuals in each of 5 discrete polygons (Figure 2) by first outlining polygon boundaries with flagging and then walking parallel transects 2 ft. apart. In order to determine the taxonomic affinity of the population to the rare subspecies, they collected additional voucher specimens representing the complete range of morphological variation present at the site.

The population was estimated to number between 258 and 300 individuals. Within four polygons, 213 morning-glory plants were counted in the bishop pine forest (**Figure 4**), and approximately 45 occur in Polygon 5 in coastal scrub on the outer bluff (**Figure 5**). Plants ranged from sprawling vines on the forest floor, to clambering vines in coastal scrub and growing up through grand fir on the bluff, to tiny vines in bare soil alongside the existing duplex. The rare morning-glory habitat extent totals 4,365 sq. ft. or 0.1 acre.

Table 2 provides the numbers of individual plants at each location, polygon areas, distances from project-related impacts, and proximity to proposed structures or proposed buffer zones.

Table 2. Species found on Project Site, *Calystegia purpurata ssp. saxicola; August, 2006*

Species ID	# of Plants	Distance From Impact (ft)	Area (Sq')	Description
East of existing duplex- distances measure on-site				
Poly 1	127	25ft.(granny) 30ft.(barn)	2500	Located between granny unit and barn
Poly 2	9	80ft.(granny) 40ft.(barn)	30	Located between granny unit and barn
Poly 3	46	45ft.(barn)	145	Protected with permanent fencing
Poly 4	31	50ft.(barn)	90	Protected with permanent fencing
West of existing duplex- distances measured on-site				
Poly 5	45	0-60(duplex)	1600	>5 plants impacted – construction fencing
TOTAL	**258**		4,361 (0.1ac)	

Coastal bluff morning-glory is a perennial herb belonging to the family Convolvulaceae. According to the CNPS *Electronic Inventory* (2006), it occurs between 10 and 105 meters elevation in Contra Costa, Lake, Mendocino, Marin, and Sonoma counties in coastal dune and coastal scrub habitats and is endemic to California. Coastal bluff morning-glory has no state or federal threatened or endangered status. However, it is a CNPS List 1B.2 taxon. The code "2" in the listing indicates that this taxon is fairly endangered in California, with 20-80% of occurrences threatened.

List 1B plants are rare throughout their range. They are judged to be vulnerable under present circumstances or to have a high potential for becoming so because of their limited or vulnerable habitat, their low numbers of individuals per population (even though they may be wide ranging), or their limited numbers of populations. It is mandatory that they be fully considered during preparation of environmental documents relating to CEQA (CNPS, 2006). Coastal bluff morning-glory is eligible for listing under the California Endangered Species Act (CESA), and as such, the plants and their habitat meet the definition within the County of Mendocino's Local Coastal Program (LCP) as an "environmentally sensitive habitat area" (ESHA).

Coastal bluff morning-glory is one of two subspecies of *Calystegia purpurata.* The common subspecies, climbing morning-glory (*C. purpurata* ssp. *purpurata*), overlaps the rare subspecies in range and grows in chaparral as well as coastal scrub habitats. According to *The Jepson Manual* (Hickman, 1993), features that distinguish coastal bluff morning-glory from the common subspecies are a trailing or weakly climbing growth habit; stems <1 meter long; leaves ovate-triangular to kidney-shaped, with sinuses generally more-or-less closed, tips generally rounded to notched, lobes rounded, and margins more-or-less wavy; and flower bractlets often alternate and lobed. Contrasting features in climbing morning-glory are a strongly climbing growth habit; stems >1 meter long; leaves triangular in shape, with sinuses v-shaped, tips narrowly pointed, lobes strongly angled, and margins not wavy; and flower bractlets opposite and unlobed. Intergradation between the subspecies is common.

Specimens from the Project Site were carefully examined and found to possess the trailing to weakly climbing growth habit as well as an overall preponderance of other features that distinguish the rare taxon from the common one. There were no plants perfectly matching the common ssp. *purpurata*, but numerous individuals matched ssp. *saxicola* in all respects. Some plants displayed intermediate characters, and a small number possessed clear ssp. *purpurata* traits such as triangular leaf shape, narrowly pointed tips, and somewhat angled lobes. However, traits of the rare taxon were more prevalent overall. We therefore determined that the Project Site contains an occurrence of coastal bluff morning-glory.

To confirm our findings, we compared specimens from the Project Site to a digital photograph of a herbarium specimen at the California Consortium of Herbaria website (http://ucjeps.berkeley.edu/consortium). In addition, during the August 7 survey, we visited a reference population approximately 200 ft. from the Project Site, CNDDB occurrence #23, and compared the plants to those of the subject parcel. Richard Brummitt, the recognized authority on the genus Calystegia, has positively identified

occurrence #23. We noted that two additional CNDDB occurrences of the rare taxon (#13 and #22) are located within one mile of the Project Site.

It is our opinion that the on-site population shows evidence of intergradation with the common ssp. *purpurata* but has an overall greater affinity to the rare ssp. *saxicola*. In a brief phone consultation, CDFG staff Corrine Grey stated that pursuit of further expert confirmation was unnecessary. We therefore treat the population as coastal bluff morning-glory in this report (**Figure 6**).

Early blue violet

A small population of early blue violet (*Viola adunca*) was discovered in two areas at the Project Site (see Figure 2). Violet clusters were flagged and individual plants were counted during the May 26 survey, when the violets were in bloom. A total of 26 to 28 individuals were counted: 19 in the understory of the bishop pine forest; 4-5 west of the duplex in northern coastal scrub; and 3-4 just off-site. **Table 3** provides the numbers of individual plants at each location, proximity to proposed structures, and protective measures.

Table 3. Species found on Project Site, early blue violet, *viola adunca;* August, 2006.

Species ID	# of Plants	Description
Viola 1	1	Near barn in pasture area
Viola 2	3	Near barn in pasture area
Viola 3	1	Near barn in pasture area
Viola 4	1	Near barn in pasture area
Viola 5	1	Protected with permanent fencing
Viola 6	2	Protected with permanent fencing
Viola 7	8	Protected with permanent fencing
Viola 8	2	Protected with permanent fencing
Viola 9	4-5	West of existing duplex- construction fencing
Viola 10	3-4	Off site- South of existing duplex- construction fencing
TOTAL	**26-28**	

Early blue violet is a perennial herb with stems clustered on thin, much-branched rhizomes. Because this species forms patches of interconnected plants, it is not always possible to make precise counts of numbers of individuals; however, individual plants were more easily counted under the bishop pine forest due to the sparseness of the understory vegetation.

Wildlife Habitat Assessment and Survey Methodology

Based upon the site assessment and the literature review, the Project Site contains limited resources for special-status wildlife. The absence of aquatic environs and Douglas-fir dominated forested habitat within the Project Site eliminates the majority of the species

on the list. The Project Site is outside of the Point Arena mountain beaver distribution range, and the limited on-site suitable habitat removed this species from consideration. Nesting raptors have no resource due to the lack of appropriate sized and shaped trees.

The pine-dominated site supported little potential habitat for the tree vole and was assessed as marginal at best. Only 2 small diameter Douglas-fir trees were present; however, since bishop pines have been recently documented as supporting vole nests, we surveyed the canopies of all trees. A survey protocol for the Sonoma tree vole is being developed; therefore the survey was conducted in adherence to the red tree vole (*Arborimus longicaudus*) protocol guidelines.

The site does not contain "cave analogs" such as abandoned buildings, bridges, or large hollowed trees required by the Townsend's big-eared bat as roosting habitat. The gradual development in the area and day-to-day human use would further limit bat species like the Townsend's bat, which is sensitive to human proximity.

The botanical survey found a population of early blue violet (*Viola adunca*) in two areas (see the Plant Survey Results section for more detail). Early blue violet is the primary larval host plant for the federally endangered Behren's silverspot butterfly (*Speyeria zerene behrensii*). A limited amount and distribution of potential late season nectar sources were also identified in the botanical surveys: in the understory of the pine forest rough cat's-ear, two species of fireweed (*Erechtites minima* and *E. glomerata*), bull thistle, and two species of sow thistle (*Sonchus asper* and *S. oleraceus*) were present; and yarrow, coast goldenrod, California-aster, manycolored lupine, and rough cat's-ear were noted west of the duplex.

Although the historic occurrences of the Behren's silverspot butterfly in the local area are thought to be extinct, and the closest extant population is located 12 miles (occurrence #7) in Point Arena, the on-site resources may represent marginally suitable habitat for the Behren's silverspot butterfly, as well as for the over-wintering monarch butterfly.

Wildlife Survey Results

The survey effort did not identify any special-status species. Sign of tree vole nests was not detected in the canopies or on the ground, and the species is not expected to occur on-site. No butterfly species were observed during the field studies; however, the surveys were conducted early in the flight period of the Behren's silverspot butterfly and prior to the mid-October arrival of over-wintering monarchs to the northern California coast.

Behren's silverspot butterfly

As stated, Behren's silverspot butterflies were not observed during our field studies; the August 7th date overlapped the summer flight period. The flight period of the single-brood butterfly depends upon environmental conditions and ranges from July to August (USFWS, 2003).

Although the site was assessed as only marginally suitable habitat for the Behren's silverspot butterfly, the proposed development plans have the potential to impact the protected butterfly's habitat, and thus require confirmation as to the suitability of the site to support the Behren's silverspot. Through a brief phone consultation with John Hunter

of USFWS, it was determined that a site assessment and a one-time presence and absence survey conducted by Richard Arnold of Entomological Consulting Services, Ltd., will be sufficient for their use in determining habitat suitability. Mr. Arnold conducted his assessment and survey on August 19, 2006 and concluded that the endangered Silverspot was unlikely to occur on-site because the habitat conditions were unsuitable, despite the presence of the host plant. BioConsultant LLC will send his letter report with a request for technical assistance to Mr. John Hunter for the final determination.

BUFFER ZONE ANALYSIS

Section 20.308.040 of the Mendocino County Coastal Zoning Code defines an environmentally sensitive habitat area (ESHA) as:

> *...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 of rare or endangered plants, and habitats of rare and endangered plants and animals.*

The subject parcel contains an ESHA consisting of a population of a rare plant, coastal bluff morning-glory, and its habitat. There is currently no buffer separating the on-site ESHA from the existing residence and associated structures.

Projects that propose construction with a buffer less than 100ft. from an ESHA must provide information that demonstrates a lesser buffer distance will not have a significant adverse impact on the habitat. The buffer zone analysis utilizing Mendocino LCP Ordinance 20.496.020 (A) through 4 (j) and 20.532.095 (4) is presented in Table 4: Reduced Buffer Analysis.

Table 4. Reduced buffer Zone Analysis.

Section 20.496.020 Coastal Zoning Ordinance	
(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.	Buffer widths were analyzed based on current on-site habitat conditions, parcel size and configuration, and existing structures.

(1) 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.	The use of the standard 100ft. buffer for all of the EHSA's polygons would render the Project Site un-developable. Even the use of 50ft. buffers throughout would eliminate the placement of the barn and granny unit. As a result, the focus of this buffer matrix is the analysis of the least environmentally damaging proposal. Additionally, the applicant is not proposing to sub-divide the parcel and the proposed development is consistent with adjacent development within the approved subdivision. There is currently no buffer separating the on-site ESHA from the existing duplex and associated structures.
(a) Biological Significance of Adjacent Lands. The degree of significance depends upon the habitat requirements of the species in the habitat area.	The coastal scrub habitat west of the duplex is the preferred habitat type for the rare morning-glory; therefore, it is important to maintain the integrity of the natural habitat in this area. The bishop pine forest, with its highly modified understory, is not a preferred habitat for the rare species.
(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.	No buffer currently separates the on-site ESHA (a population of a rare morning-glory numbering between 258-300 individuals) from the existing duplex and associated structures. The rare plants are presently growing right up to the existing structures, but in lesser frequencies as compared to the intact coastal scrub that covers the bluff edge. The species is hardy and resilient and recovers following construction. It is anticipated that survivor plants and those outside the development zone will reoccupy the affected area and once again surround the completed structures. Mitigation measures have been developed to avoid and reduce potential negative impacts to the rare plant habitat ESHA and to improve and preserve the integrity of the rare plant habitat. These include exclusionary fencing during construction; industry best management practices for erosion control; adoption of conservation restrictions to preserve the habitat from future development or landscaping; removal of non-native invasive species; and seasonal high-weed mowing in

	the bishop pine forest to reduce weed competition in this area.
b(i) Nesting, feeding, breeding, resting, or other habitat requirements of both resident and migratory fish and wildlife species.	No special-status wildlife species were observed at the Project Site.
b(ii) An assessment of the short-term and long-term adaptability of various species to human disturbance.	Common wildlife species are often well adapted to low-level human noise and disturbance. Continued use by the local wildlife community is expected. As stated, the rare morning-glory is hardy and well adapted to grow in and around manmade structures as long as natural habitat is maintained.
b(iii) An assessment of the impact and activity levels of the proposed development on the resource.	Adoption of the recommended mitigation measures, i.e., exclusionary fencing and industry best management practices for erosion control combined with invasive plant removal and potential restrictions on further development within the rare plant ESHA, will buffer impacts to the ESHA during and post-development. The proposed remodel and additions represent a relatively small-scale construction project.
(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.	On the Windyhollow soils of the Project Site, surface runoff is very slow or slow, and the hazard of water erosion is slight if the surface is left bare. The proposed development will take place in a nearly level area, and construction is not expected to significantly change the potential for erosion. The contractor will use the industry's best management practices for erosion control.
(d) Use of Natural Topographic Features to Locate Development	The building envelope is located in an area of nearly level topography.
(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.	The development proposes to remodel and expand an existing duplex. The additional structures (barn and granny unit) will be sited based upon the rare plant constraints.

(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 (100) feet, additional mitigation measures (e.g., planting of native vegetation) shall be provided to ensure additional protection.	The proposed remodel and additions are within an established subdivision, and the project has proposed appropriate mitigation measures.
(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 shall be made on a case-by-case basis depending upon the resources involved, the degree to which adjacent lands are already developed, and the type of development already existing in the area.	The project proposes to remodel and expand an existing duplex into a single-family residence on a small parcel. A 640 sq. ft. granny unit and a 510 sq. ft. barn are also proposed. The proposal represents a fairly small-scale construction project within an established subdivision.
(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 riparian vegetation or the top of the bluff).	There is currently no buffer separating the on-site ESHA from the existing residence and associated structures. During construction, exclusionary fencing will protect all but 5 of the estimated 258-300 coastal bluff morning-glory plants occurring on-site. Buffer distances will vary depending on individual plant locations with respect to protective fencing and impact areas.
(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.	The applicant does not propose subdividing the property or adjusting the boundary lines.
4(a) Permitted Development. 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 functional capacity and sustainability of the rare plant habitat ESHA will be protected during development with the implementation of mitigation measures (exclusionary/protective fencing, erosion control measures). Seasonal high-weed mowing to keep weeds and brush from invading the rare plant habitat in the pine forest, invasive species removal, and provisions to keep the preferred coastal scrub habitat west of the existing duplex free from development, accessory structures, landscaping, and non-native invasive plants will help to maintain the functional capacity and natural species diversity of the ESHA.

(b) Structures will be allowed within the buffer area only if there is no other feasible site available on the parcel.	The remodel portion is minimal and the plans have been redesigned to place the additions in the only remaining areas outside of the delineated ESHA polygons with the largest buffers possible. The granny unit will be sited closer to the duplex in the area largely devoid of understory with a buffer of 25ft. from the closest part of Polygon 1. The barn will be reconfigured and sited in the area between Polygons 1- 2 and 3-4, with a buffer of at least 30ft. between the polygons. These are the most feasible and least environmentally damaging locations for the additions.
(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 natural stream channels.	All development is proposed for a nearly level area and sited to avoid the rare plant constraints. The hazard of water erosion is slight for the soils present at the site.
(d) Same as 4(a)	Same as 4(a)
(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.	As described in 4 (b), the proposed construction will occur in the most feasible and least environmentally damaging location. Mitigation measures are proposed.
(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.	The areas proposed for the additions are largely devoid of vegetation- no riparian or coastal scrub vegetation will be removed. No bare soil areas will result from the development. The Project as described will cause minimal noise, dust, artificial light and air pollution.
(g) Where riparian vegetation is lost due to development, such vegetation shall be replaced at a minimum ratio of one to one (1:1) to restore the protective values of the buffer area.	No riparian vegetation will be removed.
(h) Aboveground structures shall allow peak surface water flows from a one hundred (100) year flood to pass with no significant impediment.	The proposed development does not include structures that would significantly impede the flow of water during large storm events.

(i) Hydraulic capacity, subsurface flow patterns, biological diversity, and/or biological or hydrological processes, either terrestrial or aquatic, shall be protected.	Biological diversity in the rare plant habitat ESHA will be protected and enhanced by the proposed mitigation measures. Measures to eradicate non-native invasive species and to keep the rare plant habitat free from development and landscaping will also help to protect biological diversity.
(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 wherever 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. Piers may be allowed on a case by case basis.	Natural stream environment zones do not occur in the development area.
Sec. 20.532.095 Required Findings For all Coastal Development Permits.	
(4) The proposed development will not have any significant adverse impacts on the environment within the meaning of the California Environmental Quality Act.	The proposed development will not have a significant impact on the environment if the recommended mitigations are adopted.

IMPACT ANALYSIS AND MITIGATION MEASURES

Based upon the literature review, site assessment, and survey results it is our conclusion that the Project Site does not support special-status wildlife species. As stated above, Dr. Arnold concluded that the endangered Silverspot was unlikely to occur on-site because the habitat conditions were unsuitable, despite the presence of scattered host plants. The early blue violet does not meet the definition of an ESHA, and is not protected by USFWS if assessments/surveys have determined that the occurrence does not constitute suitable Silverspot habitat. Therefore, the project as proposed does not specifically protect all individual violets, but the recommended mitigation fencing will protect the majority of the population. See Table 3 and below.

The Project Site contains an ESHA consisting of coastal bluff morning-glory plants and their habitat. As described in this report, an estimated 258 morning-glory plants occur in 5 separate polygons in the bishop pine forest and coastal scrub habitats, occupying a total 0.1 acres. Based upon these findings, the initial building plan has been redesigned to avoid and protect the delineated rare plant occurrences. However, due to the widespread distribution of coastal bluff morning-glory throughout the parcel, the project proposes

reduced buffers and a permanent loss of at least 2 individuals and a probable temporary loss/impact of an additional 3 plants.

The redesigned plans now have sited the granny unit closer to the duplex in the cypress-dominated area largely devoid of understory (**Figure 7**), and the barn will be reconfigured and sited in the area between Polygons 1- 2 and 3-4 (see Figure 2). Protective construction and post-construction fencing will protect all of the individual rare plants east of the duplex in the bishop pine forest. West of the duplex, the room expansion will eliminate 2 plants located within 1.5 ft. of the existing structure (**Figure 8**), and the deck construction will most likely at least temporarily impact 3 plants located immediately adjacent to the existing deck (**Figure 9**). The remaining population will be protected from construction impacts with exclusionary fencing and a possible deed restriction. Additionally, to improve the overall habitat and protect native species diversity, the removal of invasive plants is recommended.

Potential Impact 1: Impacts to coastal bluff morning-glory and its habitat.

- **Mitigation Measure 1a:** Prior to construction activities, install exclusionary/construction fencing to protect the rare plant population and its habitat. All construction related activities must be contained by the fencing, which should remain undisturbed during all phases of construction. The contractor will follow industry best management practices for erosion control.

  As shown in Figure 2, an L-shaped permanent fence shall be installed at 55ft. out from the road. This fence will protect morning glory Polygons 3 and 4, and 13 of the 19 viola plants east of the duplex. A second permanent fence shall be installed at 100 ft. from the road and stretch across the parcel to the south boundary. This will create an L-shaped area for the barn and small pasture. A temporary construction fence will be installed across the width of the parcel at 200 ft. This fence, with the permanent L-shaped fence will enclose morning-glory Polygons 1 and 2, and protect them during construction activities. West of the duplex, a third temporary construction fence will be installed adjacent to the existing deck and extend across the parcel to protect morning glory Polygon #5 and Viola #10. A short section of fencing should be used to protect Viola #10 from general construction impacts.

- **Mitigation Measure 1b:** Conduct seasonal high-weed mowing to keep weeds and brush from invading the rare morning-glory habitat under the pine forest. Leave coastal scrub areas west of the existing duplex undisturbed.

- **Mitigation Measure 1c:** Improve the overall habitat and protect native species diversity by removing non-native invasive plants. *Highway ice plant*: Remove as much of the mat as can be done safely, exercising caution with regard to the dangerously sheer cliff and ignoring stems that extend past the bluff edge. Ice plant is easily removed by hand pulling. Note that stem segments can develop roots and continue to grow when separated from the parent plant. *English ivy*: Carefully cut ivy from tree trunks at waist height, loosen the vines, and remove

the plant by cutting out the roots. Remove the isolated forest understory plants and the vines east of the duplex by hand pulling. *Greater periwinkle*: Because the periwinkle occurrence is relatively small and localized, complete hand removal is the easiest and most effective eradication method. All ice plant stem segments, English ivy vines, and periwinkle runners should be taken off-site to a landfill to prevent reinfestation.

- **Mitigation Measure 1c:** To partially mitigate for the loss of biologically valuable coastal bluff morning-glory plants and habitat, investigate the development of a rare plant conservation area and/or deed restrictions to protect some of the remaining habitat, keeping it free from development, accessory structures, landscaping, and non-native invasive plants. The coastal scrub habitat west of the duplex is the preferred habitat type for the rare morning-glory, and we recommend that this area receive conservation protection.

Potential Impact 2: Impacts to early blue violet.

- **Mitigation Measure 2a:** Prior to construction activities, install protective fencing as described above (see Mitigation Measure 1a).

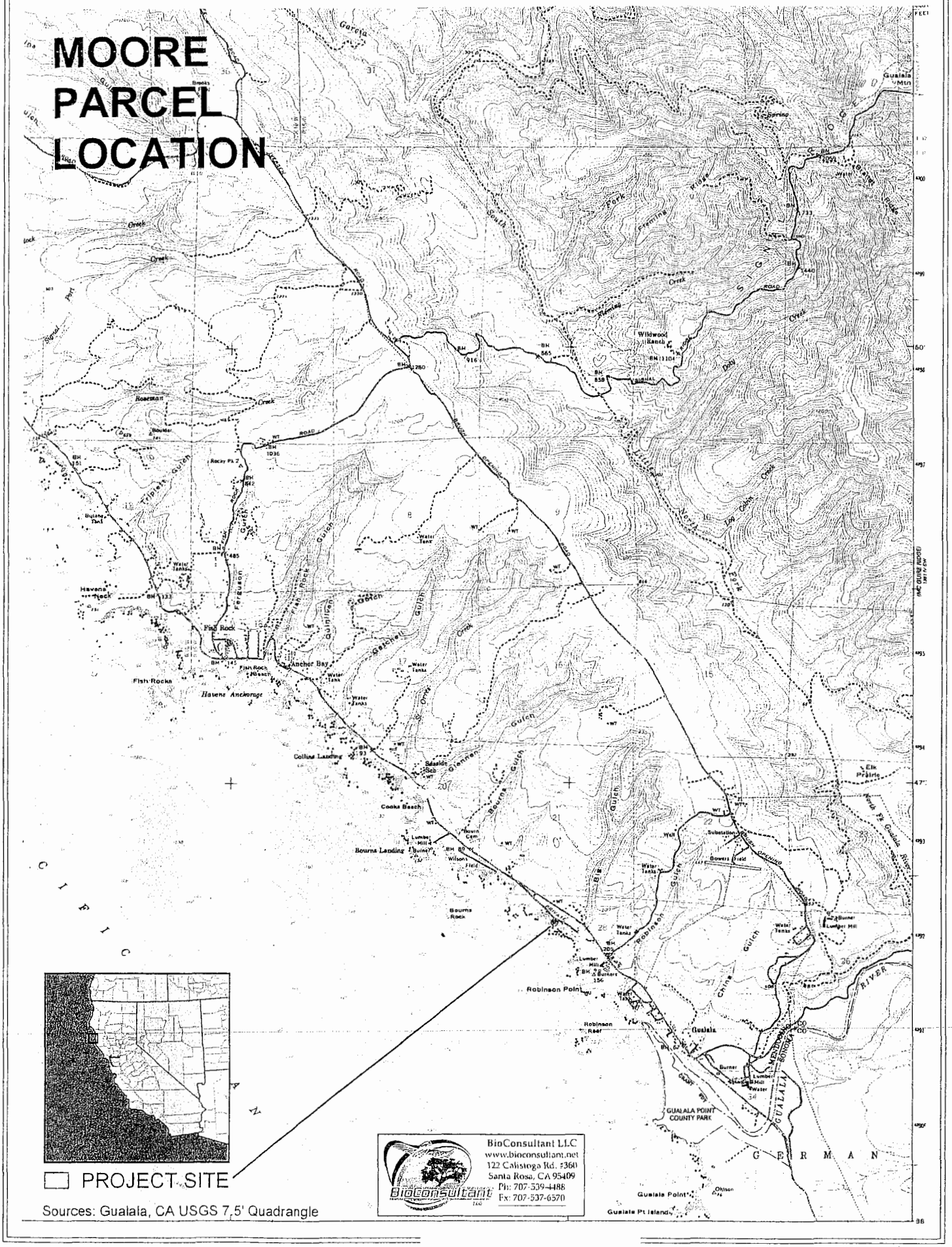
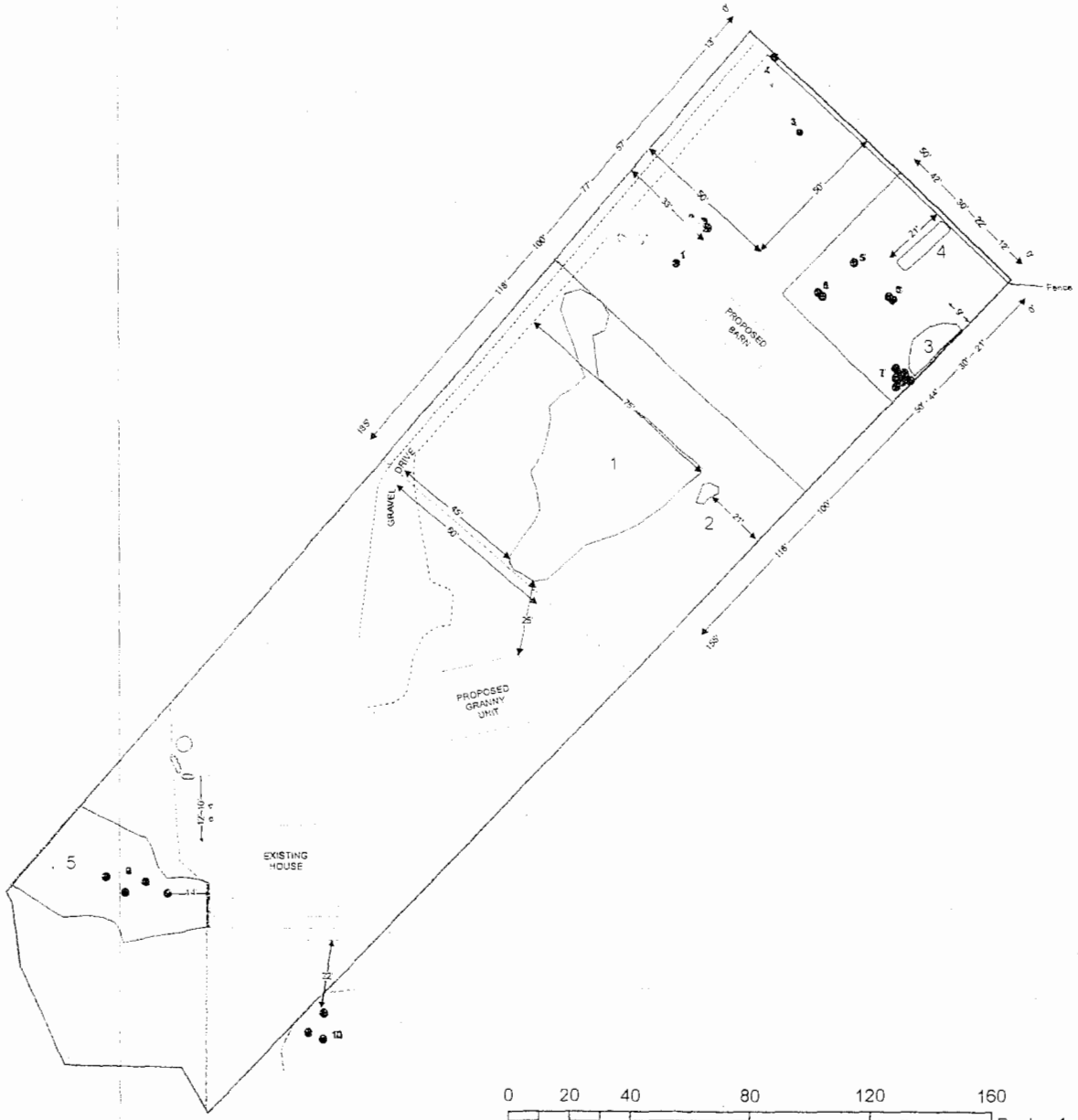


Figure 1. Moore Project parcel location map.



Sources:
Natural resources from BioConsultant LLC; Map produced by Derek Marshall. Hand digitized from maps and photos, not to be used for survey applications. Structures are an approximation.

MOORE BIOTIC PROJECT

May, 2006
APN145-121-003

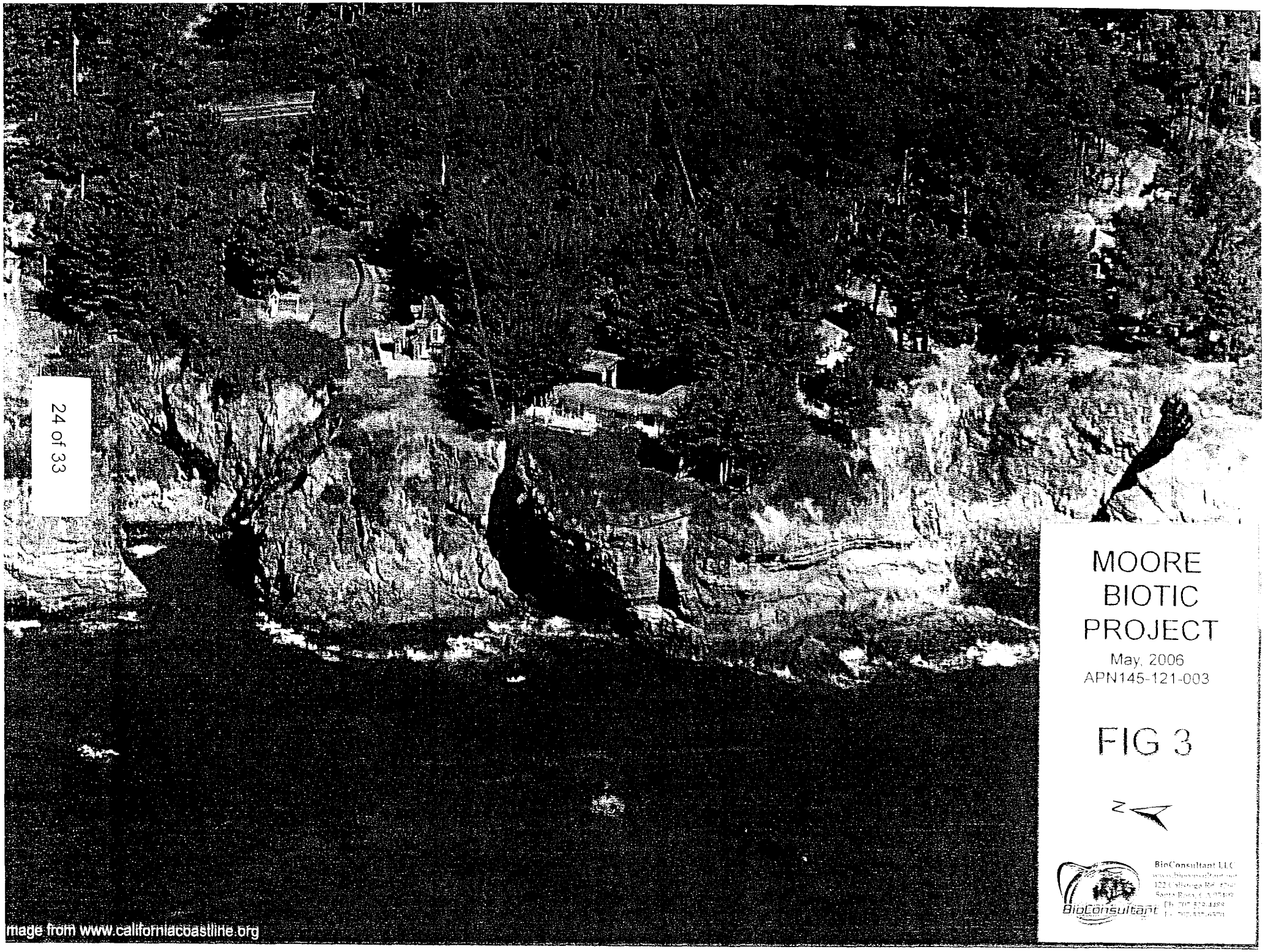
FIG 2

Legend

- Violet
- Morning-glory
- Construction Fence
- Permanent Fence

N

BioConsultant LLC
www.bioconsultant.net
122 Calistoga Rd. #360
Santa Rosa, CA 95409
Ph: 707-539-4488
Fx: 707-537-6570



MOORE BIOTIC PROJECT

May, 2006
APN145-121-003

FIG 3

N

BioConsultant LLC
BioConsultant

Image from www.californiacoastline.org

Figure 4. The rare morning-glory bishop pine habitat of Polygon 1 and 2. Blue flags mark the locations of individual plant clusters.

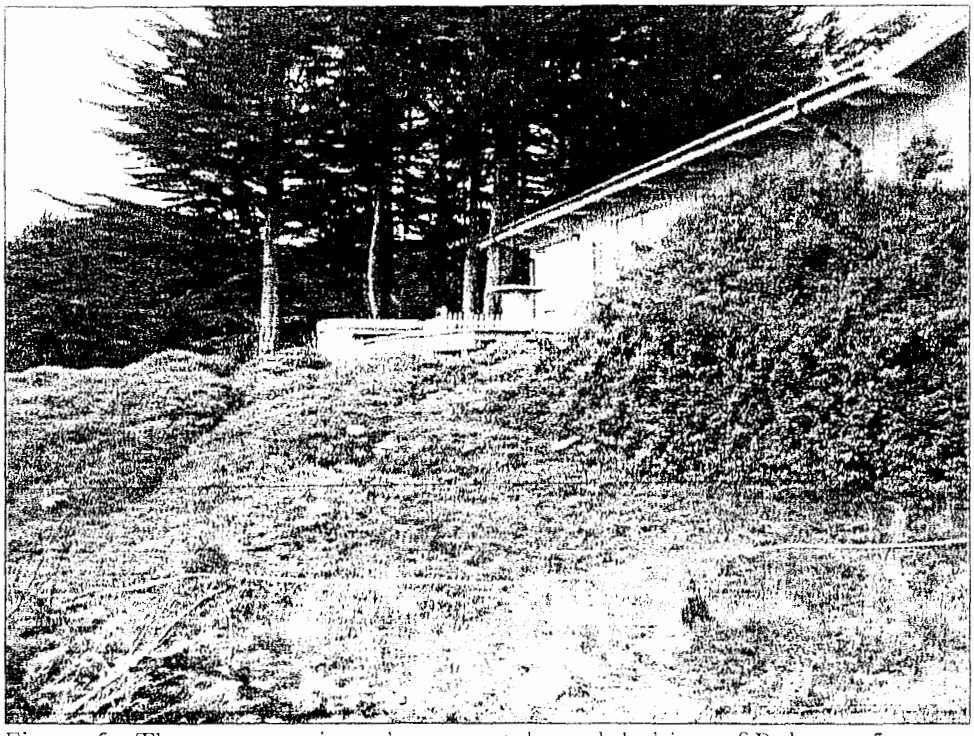


Figure 5. The rare morning-glory coastal scrub habitat of Polygon 5.

Figure 6. Coastal bluff morning-glory (*Calystegia purpurata* ssp. *saxicola*) in the pine forest.

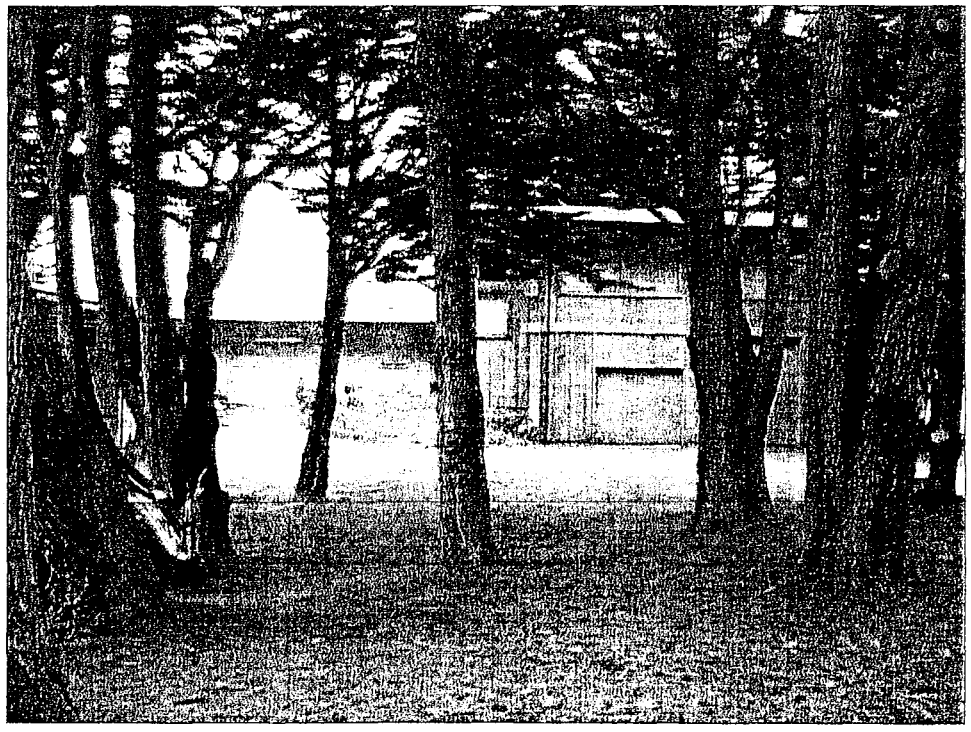


Figure 7. Cypress-dominated area where the granny unit will be sited.

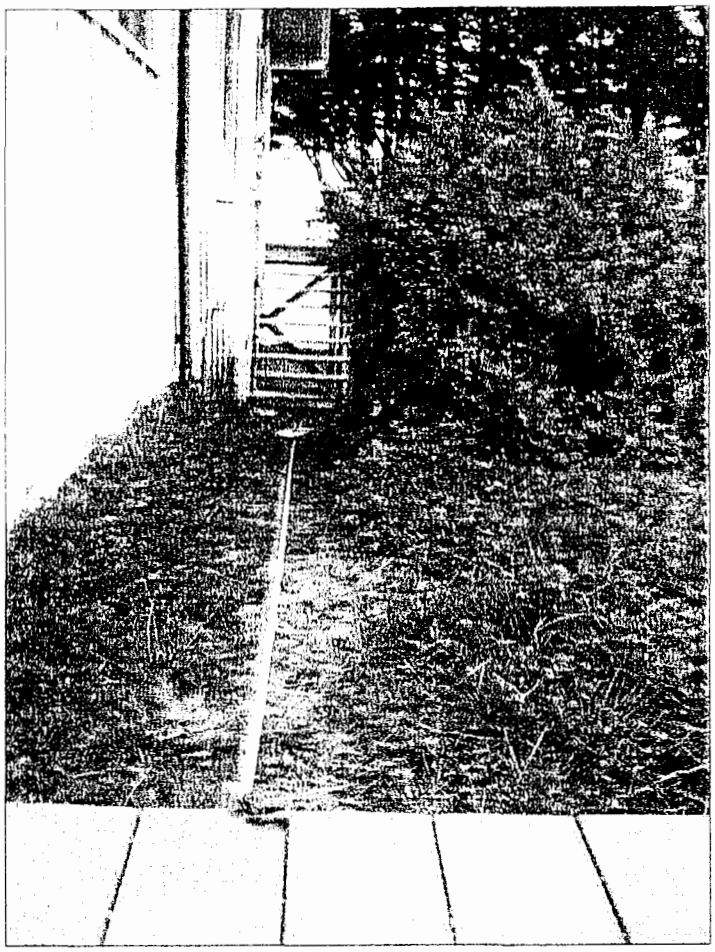


Figure 8. The area of the room expansion. Orange flags denote the locations of the 2 plants within the impact zone.

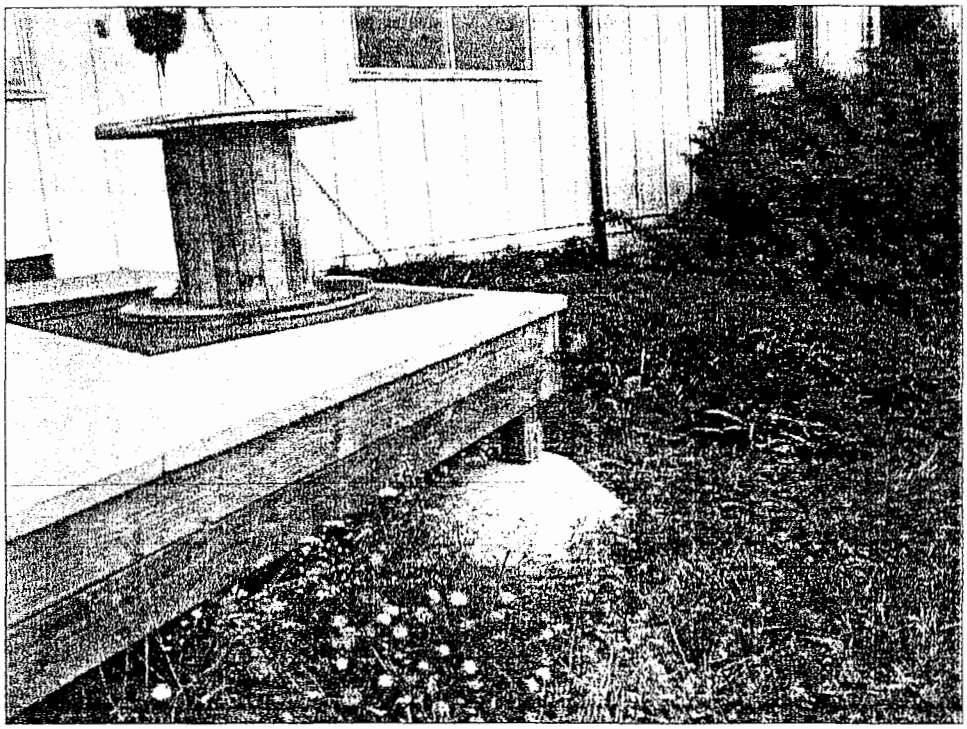


Figure 9. An overall view of the 5 plants located adjacent to the existing structures in the impact zone.

APPENDIX A: CNDDB list of Plants, Animals, & Communities in the four closest USGS 7.5' Quads.

	Scientific Name/Common Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS/R-E-D
1	***Abronia umbellata ssp. breviflora*** pink sand-verbena	PDNYC010N2			G4G5T2	S2.1	1B/2-3-2
2	***Agrostis blasdalei*** Blasdale's bent grass	PMPOA04060			G2	S2.2	1B/3-2-3
3	***Agrostis clivicola var. punta-reyesensis*** Point Reyes bent grass	PMPOA040A2			G3?T1Q	S1.2	
4	***Aplodontia rufa nigra*** Point Arena mountain beaver	AMAFA01011	Endangered		G5T1	S1	SC
5	***Arborimus pomo*** Sonoma tree vole	AMAFF10030			G3	S3	SC
6	***Astragalus agnicidus*** Humboldt milk-vetch	PDFAB0F080		Endangered	G2	S2.1	1B/2-3-3
7	***Calystegia purpurata ssp. saxicola*** coastal bluff morning-glory	PDCON040D2			G4T2	S2.2	1B/2-2-3
8	***Campanula californica*** swamp harebell	PDCAM02060			G3	S3.2	1B/1-2-3
9	***Carex californica*** California sedge	PMCYP032D0			G5	S2?	2/3-1-1
10	***Carex lyngbyei*** Lyngbye's sedge	PMCYP037Y0			G5	S2.2	2/2-2-1
11	***Carex saliniformis*** deceiving sedge	PMCYP03BY0			G2	S2.2	1B/2-2-3
12	***Castilleja ambigua ssp. humboldtiensis*** Humboldt Bay owl's-clover	PDSCR0D402			G4T2	S2.2	1B/2-2-3
13	***Castilleja mendocinensis*** Mendocino coast Indian paintbrush	PDSCR0D3N0			G2	S2.2	1B/2-2-2
14	***Cerorhinca monocerata*** rhinoceros auklet	ABNNN11010			G5	S3	SC
15	***Coastal Brackish Marsh***	CTT52200CA			G2	S2.1	
16	***Coastal Terrace Prairie***	CTT41100CA			G2	S2.1	
17	***Coastal and Valley Freshwater Marsh***	CTT52410CA			G3	S2.1	
18	***Corynorhinus townsendii*** Townsend's big-eared bat	AMACC08010			G4T3T4	S2S3	SC
19	***Cupressus goveniana ssp. pigmaea*** pygmy cypress	PGCUP04032			G2T2	S2.2	1B/2-2-3
20	***Danaus plexippus*** monarch butterfly	IILEPP2010			G5	S3	
21	***Emys (=Clemmys) marmorata marmorata*** northwestern pond turtle	ARAAD02031			G3G4T3	S3	SC
22	***Erigeron supplex*** supple daisy	PDAST3M3Z0			G1	S1.1	1B/3-2-3
23	***Eucyclogobius newberryi*** tidewater goby	AFCQN04010	Endangered		G3	S2S3	SC
24	***Fratercula cirrhata*** tufted puffin	ABNNN12010			G5	S2	SC

	Scientific Name/Common Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS/R-E-D
25	***Fritillaria roderickii*** Roderick's fritillary	PMLIL0V0M0		Endangered	G1Q	S1.1	1B/3-3-3
26	***Gilia capitata ssp. pacifica*** Pacific gilia	PDPLM040B6			G5T3T4	S2.2?	1B/2-2-2
27	***Gilia capitata ssp. tomentosa*** woolly-headed gilia	PDPLM040B9			G5T1	S1.1	1B/3-3-3
28	***Glyceria grandis*** American manna grass	PMPOA2Y080			G5	S1.3?	2/3-1-1
29	***Hesperevax sparsiflora var. brevifolia*** short-leaved evax	PDASTE5011			G4T3	S3.2	2/2-2-1
30	***Horkelia marinensis*** Point Reyes horkelia	PDROS0W0B0			G2	S2.2	1B/3-2-3
31	***Horkelia tenuiloba*** thin-lobed horkelia	PDROS0W0E0			G2	S2.2	1B/2-2-3
32	***Lasthenia conjugens*** Contra Costa goldfields	PDAST5L040	Endangered		G1	S1.1	1B/3-3-3
33	***Lasthenia macrantha ssp. bakeri*** Baker's goldfields	PDAST5L0C4			G3TH	SH	1B/2-2-3
34	***Lasthenia macrantha ssp. macrantha*** perennial goldfields	PDAST5L0C5			G3T2	S2.2	1B/2-2-3
35	***Lavinia symmetricus parvipinnis*** Gualala roach	AFCJB19025			G5T1T2	S1S2	SC
36	***Lilium maritimum*** coast lily	PMLIL1A0C0			G2	S2.1	1B/2-3-3
37	***Northern Coastal Bluff Scrub***	CTT31100CA			G2	S2.2	
38	***Northern Coastal Salt Marsh***	CTT52110CA			G3	S3.2	
39	***Oncorhynchus gorbuscha*** pink salmon	AFCHA02010			G5	S1	SC
40	***Rana boylii*** foothill yellow-legged frog	AAABH01050			G3	S2S3	SC
41	***Sidalcea calycosa ssp. rhizomata*** Point Reyes checkerbloom	PDMAL11012			G5T2	S2.2	1B/2-2-3
42	***Sidalcea malachroides*** maple-leaved checkerbloom	PDMAL110E0			G3G4	S3S4.2	1B/2-2-2
43	***Sidalcea malviflora ssp. purpurea*** purple-stemmed checkerbloom	PDMAL110FL			G5T2	S2.2	1B/2-2-3
44	***Speyeria zerene behrensii*** Behren's silverspot butterfly	IILEPJ6088	Endangered		G5T1	S1	

APPENDIX B: Special- status Plants with Potential to Occur in the Project Site.

Special-status Plants with Potential to Occur in the Project Site Vicinity
Sources: CDFG Natural Diversity Database (2006) and CNPS Electronic Inventory of Rare and Endangered Plants of California (2006)

Scientific Name	Common Name	Federal Status	State Status	CNPS List	Blooms
Abronia umbellata ssp. breviflora	pink sand-verbena			List 1B.1	Jun-Oct
Agrostis blasdalei	Blasdale's bent grass			List 1B.2	May-Jul
Agrostis clivicola var. punta-reyensis	Point Reyes bent grass			None	May-Jul
Angelica lucida	sea-watch			List 4.2	May-Sep
Astragalus agnicidus	Humboldt milk-vetch		Endangered	List 1B.1	Apr-Aug
Calamagrostis bolanderi	Bolander's reed grass			List 4.2	May-Aug
Calamagrostis foliosa	leafy reed grass		Rare	List 4.2	May-Sep
Calandrinia breweri	Brewer's calandrinia			List 4.2	Mar-Jun
Calystegia purpurata ssp. saxicola	coastal bluff morning-glory			List 1B.2	May-Sep
Campanula californica	swamp harebell			List 1B.2	Jun-Oct
Carex californica	California sedge			List 2.3	May-Aug
Carex lyngbyei	Lyngbye's sedge			List 2.2	May-Aug
Carex saliniformis	deceiving sedge			List 1B.2	Jun
Castilleja ambigua ssp. humboldtiensis	Humboldt Bay owl's-clover			List 1B.2	Apr-Aug
Castilleja mendocinensis	Mendocino coast Indian paintbrush			List 1B.2	Apr-Aug
Ceanothus gloriosus var. gloriosus	Point Reyes ceanothus			List 4.3	Mar-May
Cupressus goveniana ssp. pigmaea	pygmy cypress			List 1B.2	NA
Erigeron biolettii	streamside daisy			List 3	Jun-Oct
Erigeron supplex	supple daisy			List 1B.2	May-Jul
Fritillaria roderickii	Roderick's fritillary		Endangered	List 1B.1	Mar-May
Gilia capitata ssp. pacifica	Pacific gilia			List 1B.2	Apr-Aug
Gilia capitata ssp. tomentosa	woolly-headed gilia			List 1B.1	May-Jul
Glyceria grandis	American manna grass			List 2.3	Jun-Aug
Hesperevax sparsiflora var. brevifolia	short-leaved evax			List 2.2	Mar-Jun
Horkelia marinensis	Point Reyes horkelia			List 1B.2	May-Sep
Horkelia tenuiloba	thin-lobed horkelia			List 1B.2	May-Jul
Lasthenia conjugens	Contra Costa goldfields	Endangered		List 1B.1	Mar-Jun
Lasthenia macrantha ssp. bakeri	Baker's goldfields			List 1B.2	Apr-Oct
Lasthenia macrantha ssp. macrantha	perennial goldfields			List 1B.2	Jan-Nov
Leptosiphon acicularis	bristly leptosiphon			List 4.2	Apr-Jul
Lilium maritimum	coast lily			List 1B.1	May-Aug
Lotus formosissimus	harlequin lotus			List 4.2	Mar-Jul
Lycopodium clavatum	running-pine			List 2.3	Jun-Aug
Perideridia gairdneri ssp. gairdneri	Gairdner's yampah			List 4.2	Jun-Oct
Pleuropogon refractus	nodding semaphore grass			List 4.2	Apr-Aug
Sidalcea calycosa ssp. rhizomata	Point Reyes checkerbloom			List 1B.2	Apr-Sep
Sidalcea malachroides	maple-leaved checkerbloom			List 1B.2	Apr-Jul
Sidalcea malviflora ssp. purpurea	purple-stemmed checkerbloom			List 1B.2	May
Stellaria littoralis	beach starwort			List 4.2	Mar-Jul
Veratrum fimbriatum	fringed false-hellebore			List 4.3	Jul-Sep
Zigadenus micranthus var. fontanus	marsh zigadenus			List 4.2	Apr-Jul

The California Native Plant Society's (CNPS) Lists

1A = Presumed extinct in California

1B = Rare or Endangered in California and elsewhere

2 = Rare or Endangered in California, more common elsewhere

3 = Plants for which we need more information – Review list

4 = Plants of limited distribution – Watch list

CNPS Threat Code Extension

.1 = Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)

.2 = Fairly endangered in California (20-80% of occurrences threatened)

.3 = Not very endangered in California (<20% of occurrences threatened or no current threats known)

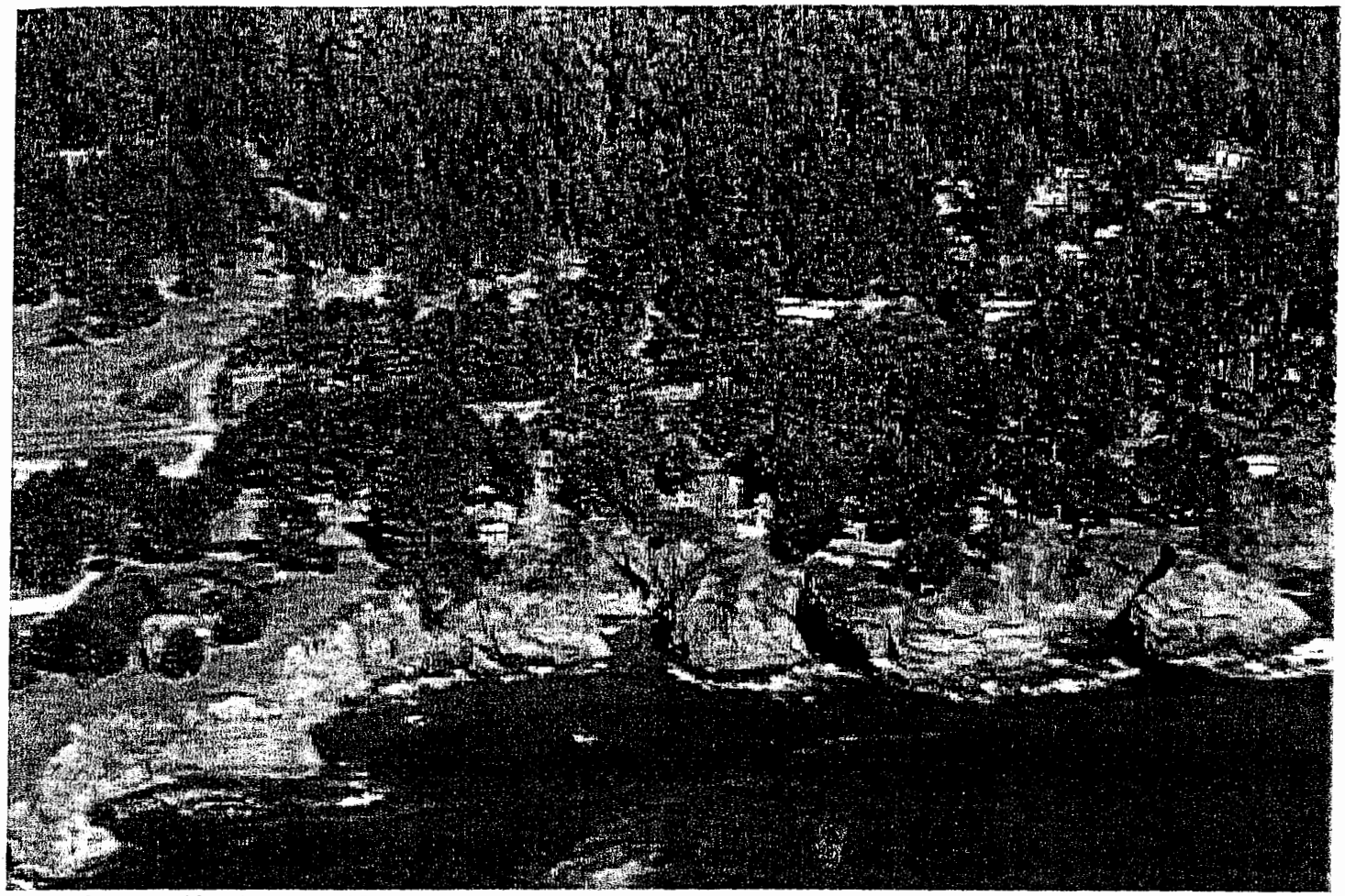


Photo from California Coastal Records Project
http://www.californiacoastline.org/cgi-bin/captionlist.cgi?searchstr=200504186

Richard A. Arnold, Ph.D.
President

Entomological Consulting Services, Ltd.

104 Mountain View Court, Pleasant Hill, CA 94523-2188 • (925) 825-3784 • FAX (925
bugdctr@comcast.net • www.ecsltd.com

24 August 2006

EXHIBIT NO. 11
APPLICATION NO.
A-1-MEN-07-021
MOORE
BEHRENS SILVERSPOT BUTTERFLY HABITAT ASSESSMENT (1 of 4)

Howard E. Curtis, AIA
P.O. Box 675
Gualala, CA 95445

Re: Greg & Sandra Moore's Property at 37900 Old Coast Highway in Gualala, CA
APN 145-121-03
Habitat Assessment for the Endangered Behrens Silverspot Butterfly

Dear Mr. Curtis:

This letter reports the findings of my habitat assessment survey at the aforementioned 0.95-acre residential property, located about one mile north of Gualala, for the federally protected, endangered butterfly species known as the Behrens Silverspot. I can summarize the findings of my survey by stating that this butterfly is not likely to occur at this property. The remainder of this report provides pertinent background information on the silverspot and describes my survey methods and findings in greater detail.

BACKGROUND INFORMATION

Behrens Silverspot, *Speyeria zerene behrensii*, is a member of the brush-footed family of butterflies (Lepidoptera: Nymphalidae). It is named after the gentleman, James Behrens, who probably captured the original specimens used to describe this subspecies. Silverspots are also sometimes commonly referred to as fritillaries. On the undersides of the wings are several prominent silver spots, hence the common name.

Behrens Silverspot is one of 18 subspecies of *Speyeria zerene*, a species that ranges throughout most of the cordilleran region of the western U.S. and southwestern Canada. Behrens Silverspot is associated with coastal prairie communities that grow on the terraces and headlands along the immediate Sonoma and Mendocino coasts. Small stands of Beach pines (*Pinus contorta*) interspersed throughout the coastal prairie provide shelter from prevailing coastal winds, which would otherwise limit activity of this cold-blooded butterfly. The larval food plant is most likely *Viola adunca* (Violaceae), although other violets, if present, might also be utilized. Adults are fond of composites for nectar and have been observed feeding on *Senecio vulgaris*, *Cirsium vulgare*, *Silybum marianum*, *Aster chilensis*, and *Erigeron glaucus*. Ironically, the first three of the aforementioned nectar plants are invasive weeds. Much of the former coastal terrace prairie habitat of Sonoma and Mendocino counties has been converted to other land uses, especially grazing, which

depending upon its timing and intensity often favors invasive, annual plants rather than the bunch grasses and other herbaceous plants that are characteristic of the prairie. Residential development and some farming have also converted or altered former prairie areas.

Historically the silverspot was known from eight locations between the Russian River and Mendocino. Historical locations include:

a) Mendocino, presumably the headlands, which is the type locality;
b) Point Arena;
c) Manchester area, which includes records as far as 6 mi. inland (east) of Manchester, primarily along Mountain View Road;
d) ca. 1 mi. south of Anchor Bay;
e) Sea Ranch;
f) Stewart's Point;
g) Salt Point; and
h) Vicinity of Fort Ross.

Of these historical locations, today the silverspot is still known to occur at Point Arena, Manchester, Stewart's Point, and Salt Point. Silverspots from the Russian River area exhibit phenotypes that are somewhat intermediate in appearance with the endangered Myrtle's Silverspot.

The adult flight season is usually about mid-June through August. Adults have a wingspan of approximately 2.25 inches. The upper surfaces are golden brown with numerous black spots and lines. The undersides are brown, orange-brown, and tan with black lines and distinctive silver and black spots. Basal portions of the wings and body are densely pubescent.

Behrens Silverspot was recognized as endangered by the U.S. Fish & Wildlife Service in 1997. To-date, critical habitat has not been proposed. The California Fish & Game Code specifically excludes insects as a type of organism that can be recognized by the state as endangered species. However, under the California Environmental Quality Act (CEQA), the Behrens Silverspot is treated as a rare species pursuant to section 15380. The California Coastal Act often recognizes places that support endangered species as Environmentally Sensitive Habitat Areas (ESHAs).

SURVEY METHODS AND RESULTS

Site Description.

I visited the Moore's property on August 19, 2006. It is located between the Old Coast Highway and the Pacific Ocean. This stretch of the Old Coast Highway is a residential neighborhood. An existing duplex is situated near the southwestern end of the site and overlooks the ocean. Access is via a gravel driveway from Old Coast Highway.

During my site visit I hiked throughout the property to observe the vegetation, soils, and land uses. I also drove throughout the surrounding neighborhoods to examine vegetation types and to determine current land uses to evaluate whether the silverspot might occur on nearby properties.

BioConsultant LLC (2006) prepared a biotic assessment report for the property and described the plant communities and species that occur there. Prominent vegetation consists of coastal bluff scrub, a wooded area, consisting of degraded Northern Bishop pine forest, a very small patch of coastal terrace prairie, and invasive weeds, which are dominant in a few locations but widely scattered throughout other portions of the property. The Bishop pine forest may not be natural because its lacks the usual shrub understory, many of the trees appear to be similar in age, and the forest is underlain by Windy Hollow soils, which generally support perennial grasses and forbs rather than forest vegetation.

Habitat Assessment Findings.

Of the four vegetation types observed at the Moore's property, only coastal terrace prairie normally provides breeding habitat for the endangered Behrens Silverspot. Unfortunately, the coastal terrace prairie habitat at the Moore property is very small in size and is isolated from other larger patches of prairie. BioConsultant LLC (2006) found about 26 *Viola adunca* plants growing primarily in the northeastern, forested portions of the site, adjacent to Old Coast Highway, where partial sunlight occurs at ground level. The coastal bluff scrub may support a couple of nectar plants of the silverspot, *Aster chilensis* and *Erigeron glaucus*, but none was observed during my visit.

Even sparsely forested areas, such as occurs at the Moore's property, are generally not considered good habitat for the silverspot due to shading. Silverspots, like all butterflies, are cold-blooded and can become active at about 58° F when the weather is sunny with little or no winds. If it is foggy and/or windy, the ambient air temperature needs to be a few degrees higher for the silverspots to become and remain active. Since summer high temperatures along the Mendocino coast are often only in the low to mid-60°s F, shaded areas, such as the forest, can cause the adult butterfly to cool down and become inactive. Even though a few *Viola adunca* plants grow in the forested portion of the property, this does not constitute good breeding habitat for the silverspot because of the shading. Also, larvae of the silverspot do not remain on the *Viola adunca* plants throughout their maturation; rather, they often crawl off the plants during the daytime and return to the plants at night to feed. Like the adult life stage, activity of the larvae is temperature dependent so food plants growing in shaded locations are less likely to be eaten by larvae.

Properties immediately surrounding the Moore's property support the same four vegetation types. The Bishop pine forest is more sparse on some properties and and more dense on others, but is more or less continuous between the coast and Highway 1 along this stretch of Old Coast Highway. Vegetation east of the Moore's

property and Highway 1 consists of dense forest and scrub. A more extensive area of coastal terrace prairie was observed about 0.25 mi. north of the Moore's property. However, because this area was posted "No Trespassing", I could not investigate it except from the Highway 1 right-of-way.

Silverspot Survey Findings.

My site visit occurred near the end of the silverspot's 2006 flight season. No adult silverspots were observed at the Moore's property. Since the *Viola adunca* foliage was still apparent and had been flagged by BioConsultant LLC, I searched all of the plants for signs of larval feeding damage, but none was found. At the coastal terrace prairie site ca. 0.25 mi. north of the Moore's property, I searched for adults using binoculars from several vantage points along the Highway 1 right of way, but no Behrens Silverspots were observed.

On the same day, I also briefly visited the Stornetta BLM property in Point Arena, which is a known location for the Behrens Silverspot. Seven males and two females were observed at the BLM property in about a 1.5 hr. period.

CONCLUSIONS

Due to the absence of suitable habitat conditions on-site and immediately nearby the Moore's property, I conclude that the endangered Behrens Silverspot is not likely to occur there because habitat conditions are not suitable despite the presence of a few individuals of the butterfly's larval food plant. The proposed remodeling and other improvements proposed by Greg and Sandra Moore at their property should not impact this butterfly or its habitats. As recommended by BioConsultant LLC, I agree that siting of new structures should be done in a manner to protect the resident *Viola adunca* plants. However, no additional mitigation for the endangered butterfly should be necessary since the proposed project should not cause any adverse impacts to the silverspot or its habitat.

REFERENCES

BioConsultant LLC. 2006. Biotic assessmen and rare plant survey for Greg and Sandra Moore (APN 145-121-03). 14 pp. & figures.

U.S. Fish & Wildlife Service. 1997. Endangered and threatened wildlife and plants: determination of endangered status for the Callippe Silverspot butterfly and Behrens Silverspot butterfly and threatened status for the Alameda Whipsnake: final rule. Federal Register 62:64306-64320.

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

Sincerely,

Signature on File

Richard A. Arnold, Ph.D., President

494

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Arcata Fish and Wildlife Office
1655 Heindon Road
Arcata, California, 95521
Phone: (707) 822-7201 FAX: (707) 822-8411

In Reply Refer To:
AFWO

Ms. Teresa Beddoe
County of Mendocino Department of Planning and Building Services
790 South Franklin Street
Fort Bragg, CA 95437

Subject: Proposed Construction at APN 145-121-003 (AFWO File Number 8-14-TA-2007-3060.1)

Dear Ms. Beddoe:

This responds to a request from BioConsultant LLC for U.S. Fish and Wildlife Service (Service) technical assistance that was received in our office October 20, 2006. Additional information was received on October 30, 2006. At issue in the request is the likelihood of incidental take of Behren's silverspot butterfly (*Speyeria zerene behrensii*) as a result of this project. The Behren's silverspot butterfly is listed as endangered under the Endangered Species Act of 1973, as amended (Act).

The Service has determined that this construction project with mitigation measures as described in the report entitled "Biotic Assessment & Rare Plant Survey: Moore Project" and dated September 2006 is unlikely to result in incidental take of Behren's silverspot butterfly. All material used in this technical assistance is on file at the Arcata Fish and Wildlife Office. If you have any questions regarding this correspondence, please contact Mr. John Hunter of my staff at the above letterhead address or at (707) 822-7201.

Sincerely,

Signature on File

Signature on File

Acting

Michael M. Long
Field Supervisor

cc: Kim Fitts, BioConsultant, Santa Rosa, CA

EXHIBIT NO. 12
APPLICATION NO.
A-1-MEN-07-021
MOORE
USFWS COMMENT ON BUTTERFLY HABITAT

GEOTECHNICAL INVESTIGATION

PROPOSED RESIDENCE
MOORE PROPERTY
37900 OLD COAST HIGHWAY
GUALALA, MENDOCINO COUNTY, CALIFORNIA

11918.1

prepared for

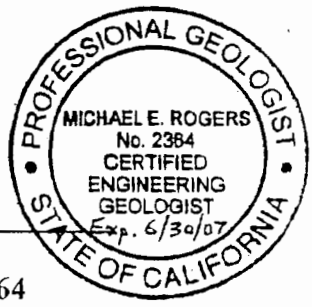
Greg Moore
P.O. Box 23036
Oakland, CA 94623

prepared by

BACE GEOTECHNICAL
A Division of Brunsing Associates, Inc.
5468 Skylane Blvd, Suite 201
Santa Rosa, CA 95403
(707) 528-6108

DRAFT

June 24, 2005



Signature on File

Michael E. Rogers
Engineering Geologist – 2364

Signature on File

Lawrence R. Houps
Geotechnical Engineer - 416

2/28/07

Signature on File

Erik E. Olsborg
Engineering Geologist - 1072

TABLE OF CONTENTS

LIST OF ILLUSTRATIONS

1.0 INTRODUCTION

This report presents the results of the Geotechnical Investigation performed by BACE Geotechnical (BACE), a division of Brunsing Associates Inc., for the planned new residence at the Moore property, 37900 Old Coast Highway, Gualala, Mendocino County, California. The ocean bluff property, A.P.N. 145-121-03, is located approximately one mile northwest of Gualala, as shown on the Vicinity Map, Plate 1.

An existing residence that currently occupies the property, reportedly constructed in the mid-1960's, will be replaced with a new residence. We understand from the project architect, Roberts & Associates, that the new single-family residence will be a one-story structure with raised floors; an attached garage will have a slab-on-grade floor. A schematic plan of the property, showing the existing and planned new residence locations, was provided to us by Roberts & Associates, and is the base for the Site Geologic Map, Plate 2. Cross Section A-A' on Plate 3 illustrates a sectional view of the existing and planned new residence and nearby ocean bluff.

The purpose of our investigation was to evaluate the site soil and rock conditions in order to provide conclusions and recommendations regarding site grading, support of concrete slabs-on-grade, structure foundation support; and also to evaluate the general geologic hazards at the site. Our approach to providing the geotechnical requirements for the project utilized our knowledge of soil/geologic conditions in the site vicinity and experience with similar projects. As outlined in our Service Agreement dated January 31, 2005, our scope of services for the geotechnical investigation consisted of field exploration, laboratory testing, verbal consultation, and geologic and engineering analyses in order to provide conclusions and recommendations regarding:

- Geologic suitability of the site, including a discussion of geologic hazards;
- Estimated bluff retreat rate and building setback recommendations from bluff edges;
- Potential effects of seismicity and fault rupture;
- Site preparation and grading;
- Suitable foundation type, and design criteria;
- Support of concrete slabs-on-grade;
- Lateral earth pressures and drainage requirements for retaining walls;
- Site drainage;
- The need for additional geotechnical engineering services, as appropriate.

2.0 INVESTIGATION

2.1 Research

As part of our investigation, we studied vertical aerial photographs of the site vicinity, dated July 6, 1964, June 23, 1981, and April 22, 2002. The photographs were enlarged from the original negatives to a scale of one-inch equals approximately 200 feet. The bluff lines in each of the photographs were compared with existing bluff conditions in

order to estimate the relative bluff retreat rate. We also reviewed oblique aerial photographs dated 1972 and November 14, 2002 as part of our study. The results of our aerial photograph study are discussed in Section 5.1 of this report. As part of our investigation, BACE reviewed the following published geologic references:

- Santa Rosa Sheet, Geologic Map of California, 1982, California Division of Mines and Geology (CDMG);
- Geologic Factors in Coastal Zone Planning, Schooner Gulch to Gualala River, Mendocino County, Open File Report 76-3, CDMG;
- Geology and Geomorphic Features Related to Landsliding, Gualala 7.5 Minute Quadrangle, Mendocino County, California, 1984, Open File Report (OFR) 84-48, CDMG;
- Alquist-Priolo Earthquake Fault Zone Map, dated 1974, Gualala Quadrangle, 7.5 Minute Series, CDMG.

2.2 Site Reconnaissance

Our Principal Engineering Geologist and Senior Engineering Geologist performed a reconnaissance of the site on March 30, 2005. The reconnaissance included observations of site topography, geomorphology, vegetation and drainage characteristics of the site, and geologic examination of the soil and rock materials exposed on the bluffs and building pad area. The bluff was accessed with ropes for our observations of bluff toe conditions.

2.3 Subsurface Exploration

Subsurface exploration was performed at the site on April 29, 2005. The exploration consisted of drilling, logging and sampling six exploratory test borings, Borings B-1 through B-6, to depths ranging from two to nine feet below the ground surface. The borings were drilled using a portable "Little Beaver" drill rig utilizing a four-inch diameter solid flight auger. The approximate boring locations are shown on the Site Geologic Map, Plate 2. Practical refusal for the light-duty drill rig was encountered in Borings B-1 and B-5 due to moderately hard to hard bedrock.

Our Project Engineer made a descriptive log of each test boring and obtained samples of the soil and rock materials encountered for visual classification and laboratory testing. Relatively undisturbed tube samples of the soil and rock materials encountered were obtained using a 3-inch outside diameter Sprague and Henwood split-barrel sampler driven by a 70-pound drop hammer falling 30 inches per blow. The inside of the sampler barrel contained 2.4-inch diameter brass liners for retaining the soil and rock materials. The blows required to drive the sampler were converted to equivalent "Standard Penetration" blow counts for correlation with empirical test data. Sampler penetration

resistance (blow counts) provides a relative measure of soil/rock consistency and strength.

Logs of the test borings, showing the various soil and rock types encountered, and the depths of the samples taken, are presented on Plates 4 through 6. The soils are classified in accordance with the Unified Soil Classification System outlined on Plate 7. The various physical properties used to describe the soils are listed on Plate 8, and the rock characteristics used to describe the rock materials are listed on Plate 9.

2.4 Laboratory Testing

Selected samples of the soil and rock obtained from the test borings were tested in our laboratory to determine their pertinent geotechnical engineering characteristics. Laboratory testing consisted of moisture content/dry density, triaxial shear strength and grain size distribution tests. The moisture content/dry density, shear strength and grain size distribution test results are summarized opposite the samples tested on the boring logs (see Key to Test Data, Plate 7, for an explanation of strength test data). In addition, triaxial shear and grain size distribution test results are presented on Plates 10 and 11, respectively.

3.0 SITE CONDITIONS

The property is situated on the southwest edge of a gently sloping, elevated marine terrace. The terrace was formed during the Pleistocene Epoch, when periods of glaciation caused sea level fluctuations that created a series of steps or terraces cut into the coastal bedrock by wave erosion. Shallow marine sediments were deposited on the wave-cut bedrock platforms while they were submerged beneath the ocean. Some of these marine deposits have been locally eroded away as the terrace began to emerge from the ocean approximately fourteen thousand years ago. Present sea levels were achieved about five to seven thousand years ago.

The terrace slopes gently toward the south-southwest at a gradient ranging from approximately ten horizontal to one vertical ratio (10H:1V) to 5H:1V. The terrace is bordered by approximately 40 to 50-foot high ocean bluffs that have formed a small local promontory occupied by the subject property and by neighboring properties on the northwest and northeast sides. The subject property is situated on the southwest point of the promontory, as shown on the Site Geologic Map, Plate 2, and is bordered by bluffs that face generally west, southwest and southeast, as shown in Oblique Aerial Photograph A, Plate 12.

There are two small inlets that border the property on the west and south-southeast. The westerly inlet has a gently-sloping cobble and boulder beach that bounds the toe of the west-facing bluff. The upper part of this bluff above the head of the inlet descends at a near-vertical gradient; closer to the inlet mouth, the upper portion of the bluff overhangs the lower portion by as much as a few feet. This bluff is shown in Field Photographs A and B, Plates 13 and 14, respectively. A rock fall occurred on this portion of the bluff

after November 2002, as evidenced by three very large boulders present on the beach, not observed in the November 2002 photo we studied. The approximate location of the rock fall area is shown on Plate 2. Cross Section A-A', Plate 3 illustrates the approximate topographic condition of this bluff face. The southwest-facing bluff on the south side of the residence descends at a gradient ranging from approximately ½ H:1V to near vertical, and then flattens to a gently sloping, hard rock shelf at the toe area that juts into the ocean. The south- southeast-facing bluff descends into a southwest-northeast trending ocean inlet at a gradient ranging from approximately 1H:1V to near vertical. A cobble and boulder-covered beach bounds the toe of this bluff, as shown in Field Photograph C, Plate 15. No sea caves were observed at the toe of the bluffs on the property.

Site vegetation consists of a cover of grasses and weeds, and clusters of cypress tress on the terrace around the existing residence. The bluff edge is covered with weeds and some brush, while the faces of the bluffs are mostly bare, except for some scattered brush and weeds.

No surface water, nor evidence of groundwater seepage in our borings, was observed during our site investigation. However, temporary perched groundwater may become present, typically during and shortly after periods of prolonged rainfall. Groundwater seepage was observed on the bluff face during our site exploration emanating from local fractures in the bedrock. We understand the existing septic tank and leach field are located on the east-northeast side of the existing residence.

4.0 SITE GEOLOGY AND SOILS

The site is underlain by Cretaceous Period sedimentary bedrock of the Anchor Bay member of the Gualala Formation. The bedrock exposed on the bluffs of the property consists of brown sandstone that is thinly to thickly-bedded, moderately to little fractured, hard, and moderately to little weathered. The upper few feet of the more weathered bedrock encountered in our borings consists of red-brown and orange-brown sandstone, siltstone and claystone that is crushed to intensely fractured, friable to moderately hard, and deeply to little weathered.

The rock bedding orientation observed on the lower bluffs of the property consists of a northwesterly trending strike, with a gentle to moderately steep dip, about 15 to 35 degrees from horizontal, to the southwest. The approximate location of the rock bedding orientation that was measured is shown on the Site Geologic Map, Plate 2. On the southwest point of the promontory, the bedding structure appears to be oriented close to the same direction as the bluff face. Since the bluff gradient is steeper than the bedding orientation, an "out-dipping" condition exists where the bedding planes are unsupported behind the face of the bluff.

Pleistocene Epoch terrace deposits overlie the bedrock at the site. These beach or shallow marine sediments are typically comprised of sands with some silt, gravel, and clay, along with incorporated rock fragments eroded from the underlying bedrock platform. The terrace materials were deposited in lenses that are generally flat, with local

undulations caused by the variable-energy nature of the depositional environment. The terrace deposit soils encountered in our borings in the building area vary in thickness from zero to six feet; the uneven thickness of terrace deposits may be due to variable weathering of the bedrock surface the soils were deposited upon. These deposits are comprised of topsoil and sub soil. The upper approximately 1.5 to 2 feet of the terrace deposits are dark brown silty sand topsoils that are loose, porous and contain roots. Below the topsoil, the terrace deposits consist of orange-brown, gray-brown, olive-brown and red-brown silty sands, gravelly silty sands and clayey silty sands that are loose to medium dense. The terrace deposits appear very low in expansion potential (tendency for volume change with changes in moisture content). Cross Section A-A', Plate 3 illustrates the interpreted positioning of the geologic units in the subsurface.

The recent (post-2002) rock fall that occurred on the bluff on the northwest part of the property appears to have involved several large blocks of rock, approximately 6 to 8 feet across, now resting on the beach. This rock fall likely occurred along existing fracture surfaces in the bedrock. Other large blocks of rock adjacent to the fall area also exhibit similar fracturing.

An arc-shaped, incipient landslide headscarp is located on the south southeast-facing bluff approximately 20 feet southeast of the property line, as shown on the Site Geologic Map, and Field Photograph D, Plates 2 and 16 respectively. The scarp area is well vegetated with grasses and weeds, and no evidence of recent, "fresh" ground fracturing was observed. No landslides are shown at the property on the published geologic maps we reviewed for this investigation.

A minor, inactive (ancient) fault was observed on the lower southeast-facing bluff along the southwest edge of the landslide headscarp. The fault orientation consists of a north-northwesterly trending strike, with a steep dip, about 65 degrees from horizontal, to the southwest. Several minor, inactive faults located on the west-facing bluff are apparent from offset sandstone beds, as can be observed on Plate 14. No evidence of active faulting was observed at the site, and none of the published references that we reviewed show faults on, or directed towards, the property.

The subject property is within the Coast Ranges geomorphic province, a zone of high seismic activity associated with the active San Andreas Fault system, located within the canyon of the South Fork of the Gualala River, approximately 2.3 miles (3.7 kilometers) northeast of the site. Future earthquakes could occur on this active fault during the lifetime of the proposed residence.

5.0 DISCUSSION AND CONCLUSIONS

Based upon the results of our investigation and review of available geologic data, we conclude that the site is suitable for the planned new residence. The main geotechnical considerations affecting the design and construction of the project are bluff retreat, bluff stability, weak soil zones, site drainage, impact of construction, and the potential for

strong seismic shaking from future nearby earthquakes. Bluff stability and seismic shaking are the primary potential geologic hazards at the site.

5.1 Bluff Stability/Setback Criteria

No evidence of gross instability was observed on or near the bluff at the property; however, as with most ocean bluff sites, some risk of instability exists and must be accepted by the property owner. The current standard of practice in engineering geology makes it possible to identify most areas of existing instability, and/or to make recommendations which lower the risk of instability to levels that are generally acceptable, but cannot make total assurances of mitigating all possible future instability.

Based upon the results of our reconnaissance, including comparisons of the bluff today with the 1964, 1981 and 2002 aerial photograph enlargements, the rate of retreat of the bluff edge on the property appears to average approximately two inches per year. The photographs show that the bluff-line at the property has not substantially changed in the last 41 years except for the recent rockfall. The lower bluff is comprised of generally hard rocks that are resistant to wave erosion, except for erosion within weaker fracture zones. The relatively minor bluff retreat that is occurring is doing so at varying, non-uniform rates due to periodic rock falls or infrequent, shallow sloughing on the upper bluffs. The recent (post-2002) rock fall that occurred on the west-facing bluff of the property was a result of an unstable over-hang due to the erosion of the bluff toe. Other portions of this west-facing bluff are also in an overhanging condition. A more catastrophic collapse of the upper bluff, similar to the post-2002 rock fall, may occur within the lifetime of the planned new residence, and several feet of the bluff edge may be lost in a single event.

Based on an estimated average bluff retreat rate of 2 inches per year for 75 years (the economic lifespan of a house, per California Coastal Commission guidelines), the resulting bluff loss would be on the order of 12.5 feet. Applying a factor of safety of two, the recommended building setback from the bluff edge is 25 feet for the proposed residence and associated structures. A setback of 25 feet from the headscarp of the incipient landslide southeast of the property is also recommended. The approximate building setback line from the bluff edge is shown on the Site Geologic Map, Plate 2. Leach fields should maintain a 50-foot setback from the edges of the bluff, as discussed in the Site Drainage section of this report. Bluff edge location and corresponding setback should be verified in the field by BACE prior to, or at the time of construction.

5.2 Seismic Hazards

5.2.1 Ground Shaking

As discussed in Section 4.0 of this report, the project site will be subject to strong ground shaking due to future, nearby earthquakes on the San Andreas Fault system during the lifetime of the proposed structure. In general, the intensity of ground shaking at the site will depend on the distance to the causative earthquake epicenter, the magnitude of the

shock, and the response characteristics of the underlying earth materials. Generally, wood-frame structures founded in firm materials, and designed in accordance with current building codes are well suited to resist the effects of ground shaking.

5.2.2 Liquefaction

Soil liquefaction is a condition where saturated, granular soils undergo a substantial loss of strength and can potentially undergo deformations due to pore pressure increases resulting from cyclic stresses generated during strong earthquakes. In the process, the soil can acquire a mobility sufficient to allow both horizontal and vertical ground movements if the soil mass is not confined. Generally, loose clean sands, silty sands and low-cohesion silts under the groundwater table could be subject to liquefaction, or densification (seismically induced settlement) above the water table, during a moderate or severe earthquake.

No groundwater was observed in the terrace deposit soils during our investigation. A static groundwater table is not expected to be present in the future because the terrace deposit layer is surficial and relatively thin, and infiltrated water drains quickly into fissures in the underlying bedrock. Based on these conditions, we conclude that the site has a low potential for liquefaction during seismically induced strong ground shaking.

5.2.3 Fault Rupture

Since the active San Andreas Fault is about 3.7 kilometers from the site, and no active faults were observed by us, nor shown on published maps in the site vicinity, we conclude that the potential for surface fault rupture at this site is very low.

5.3 Weak Soil Zones

The surficial terrace deposit soils encountered in our borings are loose and porous as deep as four feet below the ground surface; the terrace deposit soils below four feet are loose to medium dense. These weak, porous soils will not be suitable for foundation and/or slab and/or pavement support. The loads from the proposed new foundations placed upon these loose to medium dense terrace deposits could result in settlement of the soil; damaging differential settlement could occur if foundations are placed partially on shallow bedrock and partially on the terrace deposit soils. Therefore, Section 6.2 of this report provides recommendations for two alternative foundation types for the planned new residence, both of which would derive support in bedrock below the terrace deposit soils. Within slab-on-grade and pavement areas, the near-surface porous soil will need to be removed and replaced as compacted fill, as described in Section 6.1 of this report.

5.4 Settlement

Assuming building and other structural pads are properly prepared, and footings are designed and constructed in accordance with our recommendations, we estimate the maximum post-construction settlement due to foundation loads will be less than 1/2 inch.

We estimate that post-construction differential settlement will be less than 1/4 inch between adjacent footings, along a 30-foot span of individual wall footing, or between a footing and adjacent exterior slab.

5.5 Construction Impact

In general, the proposed residence, constructed in accordance with our recommendations, should have very little adverse effect upon bluff stability. The necessary surface (including roofs) drainage facilities, emptying away from the bluff, where practical, or uniformly dispersed away from the structure and bluff edges, should adequately mitigate increased erosion concerns. Drainage recommendations are discussed further in Section 6.7 of this report.

5.6 Excavation Characteristics

Practical drilling refusal for the light-duty drill rig was encountered in moderately hard to hard rock in Borings B-1 and B-5 at about two feet below the existing ground surface. Additionally, shallow hard rock masses may be present in local areas between our borings. In general, pad or trench excavations about 4 feet or less in depth can likely be accomplished using standard, heavy-duty excavation equipment, such as a "standard"-size excavator. Trenches may become wider than anticipated in order to excavate around hard rock masses. Deeper cuts or trenches may require an excavator with a hoe-ram attachment or jackhammering of local rock masses.

6.0 RECOMMENDATIONS

6.1 Site Grading

6.1.1 Clearing and Stripping

Areas to be graded for the garage and exterior slabs-on-grade, and paved areas should be cleared of existing vegetation and debris. After clearing, surface soils that contain organic matter should be stripped. In general, the depth of required stripping will be about 2 to 4 inches; deeper stripping and grubbing may be required to remove isolated concentrations of organic matter. The cleared materials should be removed from the site; however, strippings can be stockpiled for later use in future landscape areas.

If trees are to be removed within the planned new building vicinity, they should be properly grubbed to remove the root balls and roots larger than two inches in diameter. In addition, underground structures that are to be removed (such as the existing septic system) should be shown on the grading plans so that proper removal may be carried out. Backfilling of excavations from these removals should be performed according to the recommendations in this section (Section 6.1) of this report. It is essential that BACE periodically observe the removal of subsurface structures that are near planned improvements, observe the removal of tree root balls and roots, and that we be notified in ample time to observe and test the backfilling of resulting excavations.

6.1.2 Fill Area Preparation

After clearing and stripping of areas to be graded, weak topsoils (approximately two to four feet in depth at our boring locations) should be removed to expose firm, underlying terrace deposit soils. Within the planned garage and potting shed slab-on-grade areas, weak topsoil should be removed within the zones extending a distance of at least five feet beyond their edges. Within exterior slab-on-grade and pavement areas, weak topsoil should be removed within the zones extending a distance of at least three feet beyond their edges.

A BACE representative should observe soils exposed by the recommended excavations. These exposed soils should then be scarified to about six inches deep, moisture conditioned, if necessary, to at least optimum moisture content (OMC) and compacted to at least 90 percent relative compaction (RC) as determined by the ASTM D 1557 test procedure, latest edition. These moisture conditioning and compaction procedures should be observed by BACE.

Fill should be placed in thin lifts (six to eight inches depending on compaction equipment), conditioned to near OMC, and compacted to at least 90 percent RC as determined by the ASTM D 1557 test procedure, latest edition, to achieve planned grades.

6.1.3 Fill Quality

Fill material, either imported or on-site, should be free of perishable matter and rocks greater than six inches in largest dimension, and have an Expansion Index of less than 40, and should be approved by BACE before being used on site as structural fill. We anticipate most of the on-site soils cleaned of organic matter, should be suitable for use as fill.

6.1.4 Finish Grading

Finished pad surfaces should be graded to drain away from foundations. A minimum surface drainage gradient of two percent is recommended. The surface runoff from the building pad should be intercepted and diverted away from erodible surfaces and bluff edges.

Soil subgrades should be finished true to line and grade to present a smooth, firm, and unyielding surface. Finished surfaces should be maintained moist and free of shrinkage cracks until covered by permanent construction. Pad surfaces allowed to dry out and crack should be re-moisture conditioned to at least OMC and recompacted prior to foundation and concrete slab-on-grade installation. Where the compacted subgrade soils have been disturbed by traffic or foundation excavations, the subgrade should be scarified; moisture conditioned, and recompacted to at least 90 percent RC.

6.2 Foundation Support

6.2.1 Alternate A – Deepened Footings

Support for the planned new residence can be obtained on reinforced concrete spread footings founded at least six inches into supporting bedrock. Footings can be assigned a soil bearing pressure of 4,000 pounds per square foot (psf) for dead plus live loads. A one-third increase in bearing pressure is allowable when considering wind or seismic loads. Footing elements should be founded at least 12 inches below lowest adjacent soil subgrade for one-story construction and 18 inches for two-story construction. Due to the variable thickness of soil overlying the bedrock at the site, footing excavations are anticipated to range from 2 to 6.5 feet, to obtain uniform bearing within supporting bedrock, as determined by BACE. Footings deepened below the minimum required depths can be backfilled with lean concrete to within 18 inches of soil subgrade. A "standard" footing with reinforcing can then be constructed on top of the lean concrete. Where footing depths cannot be excavated due to the presence of hard rock, footings may be dowelled into the rock per the structural engineer's requirements. Regardless of load, wall footings should be no less than 12 and 15 inches wide for one and two-story construction, respectively, and isolated footings should be at least 18 inches wide.

Resistance to lateral loads can be obtained using a combination of passive earth pressure against the face of foundations, and frictional resistance along the base of foundations. An allowable passive pressure of 350 psf plus 200 psf per foot of depth below soil subgrade (trapezoidal distribution), and frictional resistance of 0.35 times the net vertical dead load, are appropriate for footing elements poured neat against approved supporting soils. Passive pressure should be neglected within the upper six inches of soil subgrade, unless confined by slabs or pavement.

6.2.2 Alternate B – Drilled Piers

Support for the planned new residence can be obtained using a cast-in-drilled-hole reinforced-concrete pier and grade beam foundation system. Drilled piers should be at least 18 inches in diameter. Piers should be a minimum of four feet into supporting bedrock or drilled to refusal, as determined by BACE, with a suitably powered drill rig. Minimum pier depths are anticipated to range from four to ten feet below existing ground surface.

Pier spacing should be no closer than three pier diameters, center to center. The drilled piers should be designed to gain support from skin friction and end-bearing. A skin friction value of 1,000 pounds per square foot (psf) of shaft area may be used for dead plus live loads, for the portion of the pier that is embedded in bedrock. For end-bearing, the recommended allowable bearing pressure is 5,000 psf, which assumes that the bottoms of the pier holes are properly cleaned and free of standing water. For total downward loads, including wind or seismic forces, the pier capacity can be increased by one-third. Uplift frictional capacity for the piers should be limited to 2/3 of the allowable

downward capacity, or derived from skin friction (not including the portion of the capacity derived from end-bearing.)

Resistance to lateral loads can be provided by passive soil pressure against the faces of the piers and against the embedded portions of the grade beams. For design, an average allowable lateral passive equivalent fluid unit weight of 300 pounds per cubic foot may be assumed to act against the upper 8 feet of the piers (that is, a maximum passive pressure of 2,400 psf at a depth of 8 feet), and against the faces of the grade beams. The passive resistance of the piers may be assumed in design to extend for a lateral width of two and one-half (2 ½) times the diameter of the pier. Passive pressure should not be used below about 7 pier diameters from top of piers. For grade beams the passive resistance of the upper one (1) foot of the embedded portion of the beams should be ignored; however, the weight of this upper one-foot may be considered in calculating the passive resistance at depths below the upper foot.

These recommendations for drilled piers are based on geotechnical soil and rock parameters only, and the final drilled pier designs will need to be developed in consultation with the project structural engineer. Total settlement of drilled piers constructed in accordance with these recommendations is estimated to be less than one-half inch, at least half of which would occur during construction of the residence.

During bidding, we recommend that proposed drillers be given a copy of this report to review. Caving was not encountered in our borings, however, the driller should be prepared to case pier holes where caving occurs. If used, the casing would have to be withdrawn from the pier holes as the pier concrete is poured.

Where final pier depths have been achieved, as determined by BACE, the bottoms of the pier holes should be cleaned of loose materials. Final clean out of the pier holes should be observed by BACE. Concrete should not be placed freefall or in such a manner as to hit the sidewalls of the pier hole.

As mentioned above, groundwater was not encountered in our borings. However, if necessary, pier holes should be dewatered prior to placement of reinforcing steel and concrete. If pumping is not practical, concrete should be tremied into place with an adequate head to displace water or slurry, if groundwater has entered the pier hole.

6.3 Seismic Design Criteria

The proposed structures should be designed and constructed to resist the effects of strong ground shaking (on the order of Modified Mercali Intensity IX) in accordance with current building codes. The Uniform Building Code (UBC), 1997 edition, indicates that the following seismic design criteria, based upon the proximity of the Type A San Andreas Fault, are appropriate for the site:

Seismic Zone Factor, Z = 0.40
Soil Profile Type = S_C

Seismic Coefficients, $C_a = 0.40\ N_a$
$C_v = 0.56\ N_v$
Near Source Factors, $N_a = 1.33$
$N_v = 1.78$
Seismic Source Type = A (San Andreas Fault)
Distance to Fault = Approximately 3.7 km

6.4 Concrete Slabs-On-Grade

The garage and potting shed slabs-on-grade and exterior concrete flatwork (non-traffic areas) can be placed directly on a minimum of two feet of suitably prepared, low expansive fill, compacted as described in the previous sections of this report. Clean on-site terrace deposit soil that meets the requirements for the fill quality given in Section 6.1.3 will be suitable for use as compacted fill. Where the compacted subgrade soils have been disturbed by traffic or foundation excavations, the subgrade should be scarified, moisture conditioned as necessary, and rerolled to provide a firm, smooth, unyielding surface compacted to at least 90 percent RC.

Slab-on-grade floors should be underlain by at least 4 inches of clean, free-draining gravel or crushed rock, graded in size from 1-1/2 or 3/4 maximum to 1/4 inches minimum, to act as a capillary moisture break. Within traffic or vibratory loaded areas, crushed material should be used to provide a tight interior lock for the aggregates. In areas where movement of moisture vapor through the slab would be detrimental to its intended use, installation of a vapor retarder (e.g., visqueen) should be considered. In addition, an underslab drainage system should be installed, as described in Section 6.7 of this report.

6.5 Retaining Walls

Retaining and subsurface walls should be provided with permanent back drainage to prevent buildup of hydrostatic pressure. Drainage and backfill details for retaining and subsurface walls are presented on Plates 17 and 18, respectively. Quality, placement and compaction requirements for backfill behind subsurface walls are the same as previously presented for select fill. Light compacting equipment should be used near the wall to avoid overstressing the walls.

Retaining wall footings should be deepened to gain support within firm bedrock, and should not be founded in the loose to medium dense terrace deposit soils. Retaining walls should be designed to resist the lateral earth pressures presented on Plate 19. These pressures do not consider additional loads resulting from adjacent foundations, vehicles, or other downward surcharge loads. The lateral influences on retaining walls due to heavy vehicle loads, such as a moving van, are illustrated on Plate 20. These pressures assume a fully drained condition. BACE can provide consultation regarding additional surcharge loads, if needed.

6.6 Utility Trenches and Miscellaneous Excavations

Utility trench excavations and miscellaneous excavations (e.g. septic system) about four feet or less in depth can likely be excavated with "standard" excavating equipment. Deeper excavations in shallow, hard bedrock areas may require an excavator with a hoe-ram attachment or jackhammering of local rock masses. Excavations greater than five feet in depth, or less than five feet in depth in areas of weak soils, should be sloped or shored in accordance with State of California Safety Regulations. For utility trench excavations below about two feet from soil subgrade, the contractor may elect to use imported granular materials; if so, the granular soils should have an expansion index less than 40 and have 100 percent passing the 4-inch screen, 30 to 100 percent passing the 3/8-inch sieve, 0 to 40 percent passing the No. 40 sieve, and 0 to 15 percent passing the No. 200 sieve.

Utility trench soil backfill should be placed in layers 6 to 8 inches or less in loose-thickness, moisture conditioned as required, and compacted as previously recommended for compacted fill. Jetting or flooding is not a suitable method of compaction. Granular backfill, if used, should be placed in layers 8 inches or less in loose-thickness, and compacted with vibrating, or other, approved equipment to the specified degrees of relative compaction or to equivalent relative density, as recommended by BACE. For purposes of this report, 90 percent RC is the equivalent of 75 percent relative density.

6.7 Site Drainage

Because uncontrolled surface and/or subsurface water is often the cause of bluff instability and foundation problems, care should be taken to intercept and divert concentrated surface flows and subsurface seepage away from structural improvements, building foundations, and the edges of the ocean bluffs. Concentrated flows such as from roof downspouts, driveways, area drains and the like should, where practical, be collected in a closed pipe and discharged into a road drainage system. A less desirable alternative would be to have runoff uniformly dispersed away from the structure and the edges of the bluffs (Mendocino County Coastal Zone Ordinances prohibit drain pipes over bluff edges).

Groundwater was not encountered in our borings at the site; however, the groundwater level may rise temporarily following periods of high rainfall. If final grades allow for "daylighting" of drain pipes away from the bluff edge, then subsurface drainage measures should be implemented to intercept flow of groundwater beneath the building site, to aid in reducing moisture intrusion into the proposed new residence.

Subfloor areas should be sloped to drain to central drop inlets or to footing drains that outlet through the footings or stem walls (sleeves should be placed in the foundation excavations prior to concrete pour). If practical, under-slab gravels should have 6 to 12 inch deep trench drains, approximately 10 feet apart (20 feet maximum on center). The trench drains should have a 4-inch diameter perforated pipe that outlets through the footings. On the exterior sides of the footings, trench backfill for the pipe should consist

of lean concrete or compacted clay for a minimum distance of two feet, to prevent seepage of water back through the foundations. The drain lines should be carried in a solid pipe at a 1% minimum fall, and be uniformly discharged away from the structure and the edges of the bluffs. Underslab drainage details are presented on Plate 21.

Since leach field effluent can exacerbate bluff erosion, leach lines should be located no closer than 50 feet from the edges of the bluff.

6.8 Additional Services

Before construction, BACE should review the final grading, drainage, and foundation plans and geotechnical-related specifications for conformance with our recommendations.

During construction, BACE should be retained to provide periodic observations, together with the appropriate field and laboratory testing, during site preparation, placement and compaction of fills and backfills, subdrain installations and foundation construction. Foundation excavations should be reviewed by BACE while the excavation operations are being performed. Our reviews and tests would allow us to check that the work is being performed in accordance with project guidelines, confirm that the soil and rock conditions are as anticipated, and to modify our recommendations, if necessary.

Furthermore, BACE can provide material testing and observation during construction, including observations and test during concrete placement, compressive strength determination, reinforcing steel placement, and masonry inspection and testing, where required.

7.0 LIMITATIONS

This geotechnical investigation and review of the proposed development were performed in accordance with the usual and current standards of the profession, as they relate to this and similar localities. No other warranty, expressed or implied, is provided as to the conclusions and professional advice presented in this report. Our conclusions are based upon reasonable geologic and engineering interpretation of available data. A soil corrosively study was not included in our scope of services for this project.

The samples taken and tested, and the observations made, are considered to be representative of the site; however, soil and geologic conditions may vary significantly between test pits. As in most projects, conditions revealed during construction excavation may be at variance with preliminary findings. If this occurs, the changed conditions must be evaluated by BACE Geotechnical (BACE), and revised recommendations be provided as required.

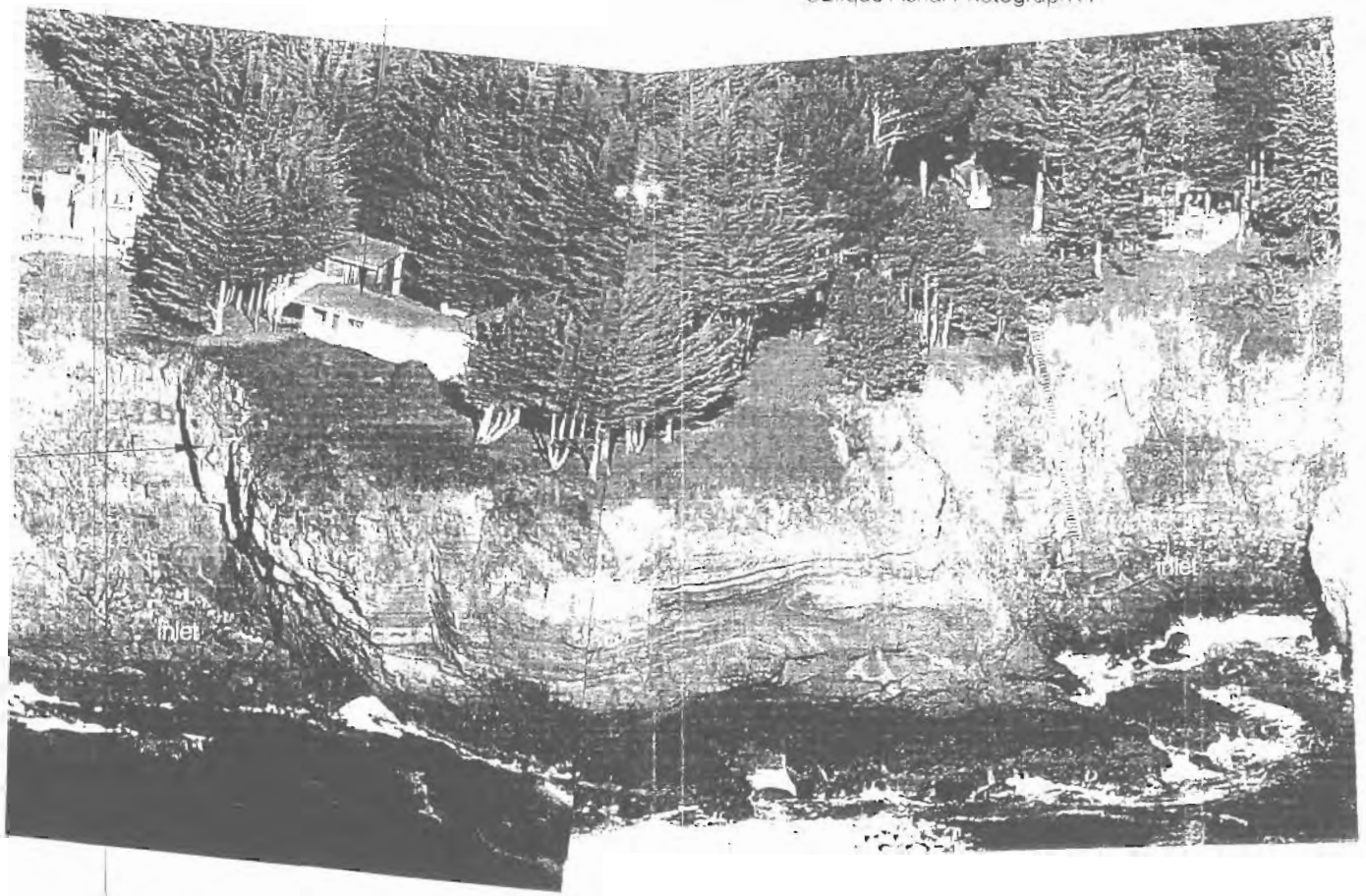
This report is issued with the understanding that the Owner, or his/her representative, has the responsibility to provide the information and recommendations contained herein to other design professionals for the project, and incorporated into the plans, and that the

Contractor and Subcontractor implement such recommendations in the field. The safety of others is the responsibility of the Contractor. The Contractor should notify the Owner and BACE if he/she considers any of the recommended actions presented herein to be unsafe or otherwise impractical.

The recommendations contained in this report are based on certain specific project information regarding type of construction and building location, which has been made available to us. If conceptual changes are undertaken during final project design, we should be allowed to review them in lift of this report to determine if our recommendations are still applicable.

existing residence

Oblique Aerial Photograph A



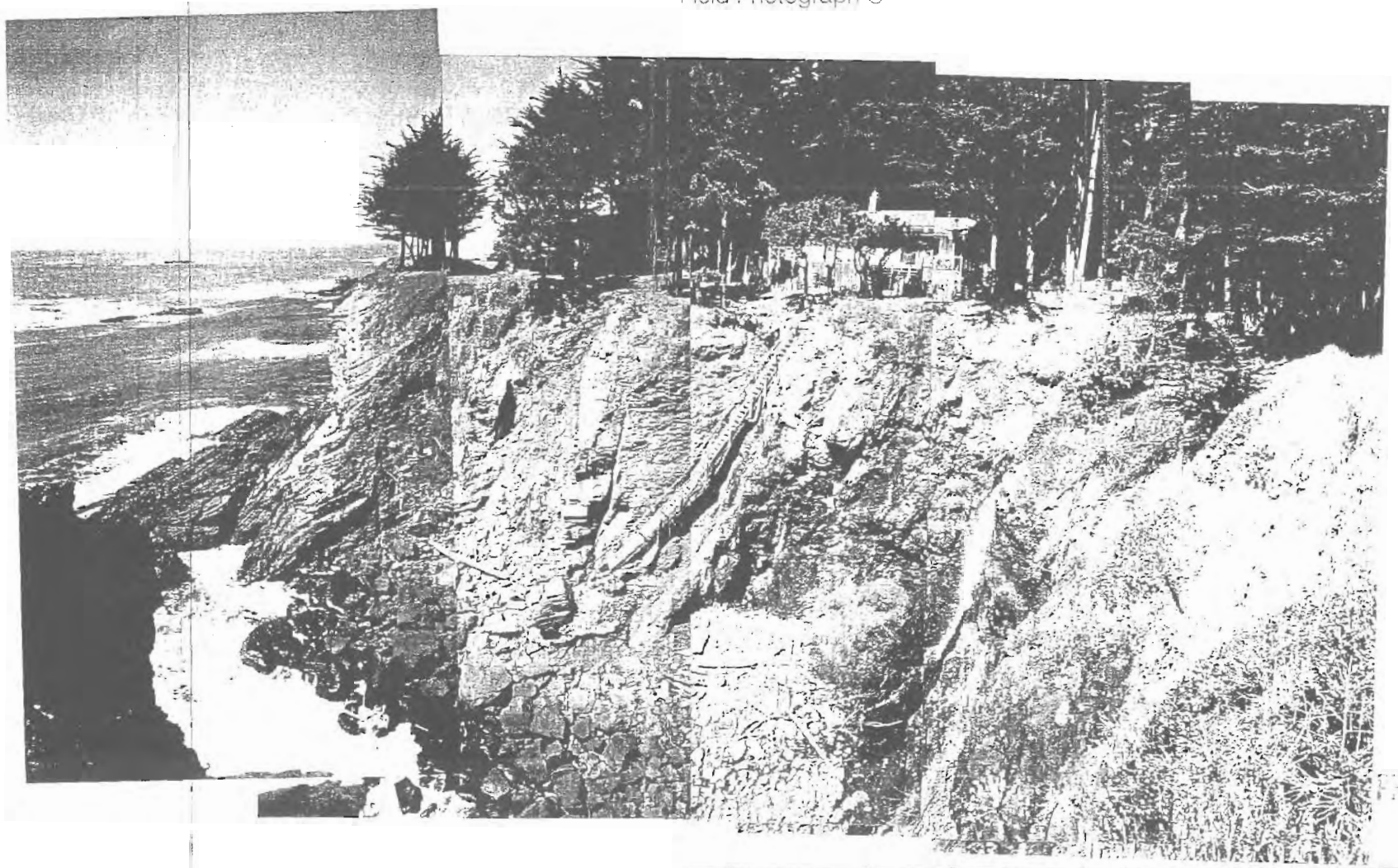
pre-rock fall area

BACE Geotechnical

EED

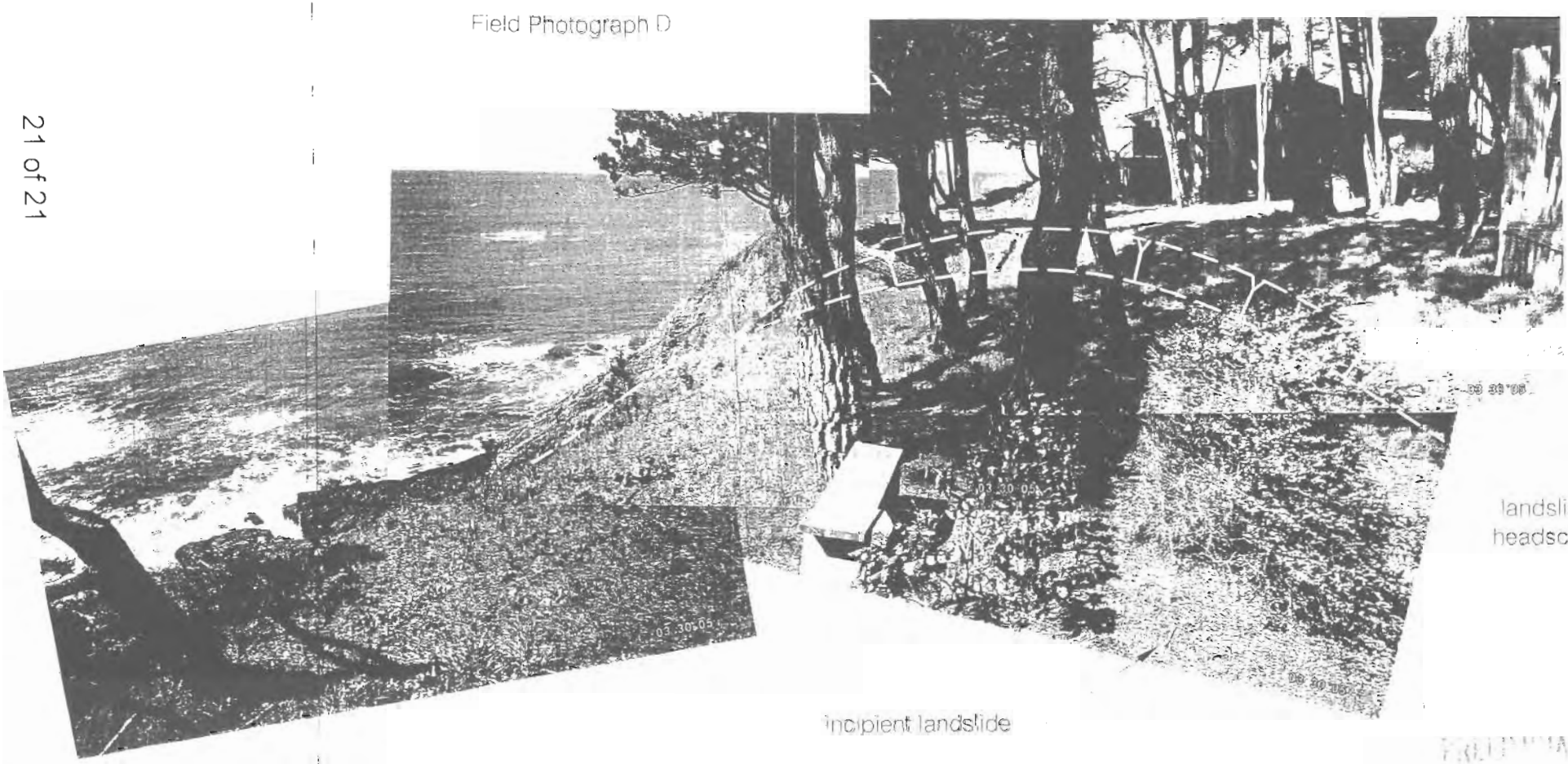
OBLIQUE AERIAL PHOTOGRAPH A

Field Photograph C



BACE Geotechnical		FIELD PHOTOGRAPH C	15

Field Photograph D



BACE Geotechnical	GEO	FIELD PHOTOGRAPH D	16

COUNTY OF MENDOCINO
DEPARTMENT OF PLANNING AND BUILDING SERVICES
790 SOUTH FRANKLIN · FORT BRAGG · CALIFORNIA · 95437

RAYMOND HALL, DIRECTOR
Telephone 707-964-5379
FAX 707-961-2427
pbs@co.mendocino.ca.us

EXHIBIT NO. 14
APPEAL NO.
A-1-MEN-07-021
MOORE
MENDOCINO COUNTY CORRESPONDENCE (1 of 3)

RECEIVED
JUN 11 2007
CALIFORNIA COASTAL COMMISSION

June 7, 2007

Tiffany S. Tauber, Coastal Planner
California Coastal Commission, North Coast District Office
710 E Street, Suite 200
Eureka, CA 95501

RE: Commission Appeal No. A-1-MEN-07-021

Ms. Tauber,

Mendocino County coastal planning staff is writing in response to the Commission Notification of Appeal for Coastal Development Use Permit application number CDU 9-2006 (Moore). Staff contends that the project is in fact consistent with the County LCP policies to protect natural resources. Our argument against the reasons listed for appeal is as follows:

In Attachment 2, on the unnumbered seventh page, fourth paragraph under the heading of Discussion, the Commission writes that the County's approval is inconsistent because policies do not allow a buffer under any circumstances to be less than 50 feet. The Commission is correct in their assertion that policies require the buffer area to be no less than 50 feet. The Commission is incorrect in their assertion that the County has approved a buffer of less than 50 feet. The misunderstanding may stem from the miswording of a sentence on page CPA-14 of the staff report. County staff wrote (emphasis added): "With proposed mitigations, as outlined in the survey report and included in Special Condition Number 3, the project provides a buffer of a minimum of 20 feet to present rare plants..." County staff should have written: "With proposed mitigations, as outlined in the survey report and included in Special Condition Number 3, the project provides a setback of a minimum of 20 feet to present rare plants..." The buffer area is in fact set at 50 feet. While the reduced buffer analysis performed by the botanist to establish the buffer width (per Section 20.496.020(A)(1)(a-g), located in the botanical report) suggests that a buffer of less than 50 feet is appropriate, the buffer area defaults to 50 feet, as required by the code. The 50 foot buffer is assumed, as is clarified in several areas in the staff report, and most clearly stated on CPA-10[1]:

> As the proposed development would be located less than 50 feet from ESHAs, the minimum buffer size allowed per Section 20.496.020(A)(1) of the MCCZC as outlined above, a reduced buffer analysis as outlined in Section 20.496.020 is required, and has been provided by the botanist.

The barn and driveway developments were approved to be **within** the 50 foot buffer, consistent with LCP policies outlined in 20.496.020(A)(4)(a-k) of the Mendocino County Coastal Zoning Code (MCCZC), outlined starting on Page CPA-10 of the Staff Report. **This section (20.496.020(A)(4)(a-k) of the MCCZC) sets the standards by which development may be allowed within the buffer area.**

[1] The minimum 50 foot buffer is also discussed in detail on page CPA-7 of the staff report, however a misworded reference to a 50-foot "butter" area found on page CPA-7 appears to further confuse the argument.

In Attachment 2, on the unnumbered page eight, in the first paragraph, the Commission states that "the County's approval relied on the erroneous application of Coastal Zoning Code Section 20.496.050 regarding "Other Resource Areas" to allow the approved development within the rare plant ESHA buffer. As outlined in the paragraph above. **the County did not in fact rely on Section 20.496.050 of the MCCZC**: the development within the buffer was in fact supported by Section 20.496.020(A)(4)(a-k), the section which outlines the standards by which development is allowed in a buffer area. The discussion regarding Section 20.496.050 was included to ensure a thorough analysis, should section 20.496.050 apply. We also disagree with your assertion that the application of Section 20.496.050 was erroneous.

Policy 3.1-24 of the County of Mendocino Coastal Element states:

Any development within designated resource areas, if not specifically addressed by other policies, shall be carefully reviewed and established in accord with conditions which could allow some development under mitigating conditions but would assure the continued protection of the resource.

Section 20.496.050(A) states:

(A) General. *Other designated resource areas as identified on Pages 39, 40 and 41 of the Coastal Element dated November 5, 1985 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.*

As plants and plant habitats are not otherwise covered (the Commission agrees on unnumbered page eight of Attachment 2 that "The County's findings correctly point out that, unlike other ESHAs such as wetlands and riparian areas, the certified LCP is silent with regard to allowable uses in rare plant habitat"), and as the definition does not appear to specifically limit designated resource areas to those listed, but merely includes them, the discussion of Section 20.496.050 was included in case the intent of the writers was in fact to include all natural resource areas of concern designated as ESHAs but not otherwise specifically addressed by other policies. Again, the matter is moot in that the discussion of Section 20.496.050 was included only to ensure compliance with Section 20.496.050; the discussion of Section 20.496.020(A)(4)(a-k) was included to ensure the allowance of development within the buffer area.

Commission staff state that the County failed to consider alternatives that would avoid locating new development within the rare plant ESHA buffer, such as eliminating the barn/shed structure from the project, and utilizing the existing driveway and parking areas to serve the second residence. Section 20.496.020(A)(4)(a-k) outlines the standards by which development may be permitted within a buffer, and the project complies with those set standards, as discussed in the staff report starting on page CPA-10. Eliminating the barn was not considered because that would be a partial denial of the proposed project, and there is no reason to deny if the project complies with the required policies for development within an ESHA buffer (see Special

Conditions 3 & 4). Similarly, the proposed gravel driveway extension, necessary for access to the proposed garage addition, was not denied because the development is in compliance with the required standards listed in Section 20.496.020 of the MCCZC.

We are talking about a plant that has spread from its natural habitat area to a lawn which experiences regular disturbance on a residentially developed parcel. The proposed mitigation measures would not only protect the plants on the lawn (which are growing out of their natural habitat type), but would ensure that the natural habitat area is protected in perpetuity through deed restriction. The applicants totally redesigned the project to ensure adequate protection of natural resources during our review of the project, and the project is in compliance with the County LCP policies. Please carefully look over the discussion of Section 20.496.020(A)(4)(a-k) located in the staff report before considering whether a "substantial issue" is raised by the County approval.

Thank you for your consideration.

Sincerely,

Teresa Beddoe

Teresa Beddoe
Planner I

---

c/c: Raymond Hall, Director
Greg & Sandra Moore, P.O. Box 23036, Oakland, CA 94623
Howard Curtis Architect, P.O. Box 675, Gualala, CA 95445
Kim Fitts, Biologist, 122 Calistoga Road #360, Santa Rosa, CA 95409
Commissioner Sara J. Wan, 45 Fremont Street, Suite 200, San Francisco, CA 94105
Supervisor Mike Reilly, County of Sonoma, 575 Administration Drive, Room 100, Santa Rosa, CA 95403-2887

3 of 3