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

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Staff:	Robert S. Merrill
Staff Report:	February 5, 2004
Hearing Date:	February 20, 2004
Commission Action:	

STAFF REPORT: REGULAR CALENDAR

APPLICATION NO.:	**1-03-067**
APPLICANTS:	(1) Edwin P. Fredrickson: (2) Richard J. Jioras and Nancy Hinds Jioras, Trustees of the Richard James Jioras and Nancy Hinds Jioras 1997 Revocable Trust
PROJECT LOCATION:	207 Fredrickson Lane, adjacent to Martin Slough, south of Eureka, Humboldt County (APN 301-181-02)
PROJECT DESCRIPTION:	Reconstruct a portion of an existing residential driveway to shift the driveway to the west to move the portion of driveway out of a wetland area and bring the driveway into its former alignment that existed prior to unpermitted driveway modifications that occurred in 1998.
GENERAL PLAN DESIGNATION:	Residential Low Density (RL)
ZONING DESIGNATION:	Residential Single Family with lot configuration, flood hazard, and wetlands combining zones (RS-S'/F,W)
LOCAL APPROVALS REQUIRED:	None

OTHER APPROVALS REQUIRED: None

SUBSTANTIVE FILE DOCUMENTS: (1) Humboldt County Local Coastal Program;
(2) CDP File Nos. 1-95-11; 1-99-046; 1-02-151

SUMMARY OF STAFF RECOMMENDATION:

Staff recommends approval with conditions of the coastal development permit application for the proposed project on the basis that, as conditioned by the Commission, the project is consistent with the Coastal Act.

The applicants propose to correct a violation of the Coastal Act involving the realignment of a portion of the existing driveway and associated grading and filling activities that occurred in wetland areas adjacent to Martin Slough in 1998 without benefit of a coastal development permit. The proposed corrective actions would include shifting the affected portion of the driveway back to its former alignment and reestablishing original grades. In addition, the wetland areas affected by the 1998 violation would be restored and enhanced. The proposed excavation and grading work proposed in connection with realigning the driveway is a form of dredging within a wetland. As the project purpose is to restore the wetland habitat existed prior to the unauthorized fill, the development is an allowable use for development within wetlands. To ensure that the project achieves the wetland enhancement objectives for which the project is intended, staff is recommending a special condition requiring that the applicants to submit a final revised wetland restoration and enhancement plan that includes certain provisions to maximize the chances for success of the plan. The excavation and grading work necessary to realign the driveway could create its own adverse impacts on the riparian wetland area adjacent to Martin Slough. To minimize sedimentation impacts from the proposed grading, staff recommending a special condition requiring the submittal of an erosion and runoff control plan. To minimize the chances that the ground disturbance from the grading would increase the opportunities for invasive exotics to invade the wetland habitat area, the special conditions require that the applicants replant the affected area with the proposed riparian vegetation by the first winter following completion of the grading work.

Staff recommends that the Commission find the project, as conditioned, is consistent with the Chapter 3 policies of the Coastal Act.

STAFF NOTES:

1. Standard of Review

The proposed project is located in the Commission's retained jurisdiction. Humboldt County has a certified LCP, but the site is within an area shown on State Lands Commission maps over

which the state retains a public trust interest. Therefore, the standard of review that the Commission must apply to the project is the Chapter 3 policies of the Coastal Act.

I. MOTION, STAFF RECOMMENDATION AND RESOLUTION:

The staff recommends that the Commission adopt the following resolution:

Motion:

I move that the Commission approve Coastal Development Permit No. 1-03-067 pursuant to the staff recommendation.

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 the 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 policies of Chapter 3 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. Erosion and Runoff Control Plan

A. **PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT,** the applicants shall submit an Erosion and Runoff Control Plan for review and approval of the Executive Director. The Erosion and Runoff Control Plan shall incorporate design elements and/or Best Management Practices (BMPs) which

will serve to reduce the exposure of graded materials to storm water runoff, minimize the velocity of storm water runoff leaving the areas of the project site to be graded, and to capture sediment and other pollutants contained in storm water runoff from the areas where grading will occur, by facilitating on-site infiltration and trapping of sediment generated from construction. The final drainage and runoff control plans shall at a minimum include the following provisions:

i. Grading activities shall be limited to the dry season, April 15 through October 15.

ii. A physical barrier consisting of bales of straw placed end to end shall be installed around the eastern edge of the proposed area to be graded prior to commencement of any grading operations. The bales shall be composed of weed-free rice straw, and shall be maintained in place throughout the construction period.

iii. The barrier of straw bales shall remain in place following conclusion of the authorized grading activities until the applicants have replanted the graded area pursuant to the requirements of Special Condition No. 2.

iv. No construction materials, fill materials, debris, or waste shall be placed or stored within wetland areas or where they may be subject to entering waters of Martin Slough and all on-site debris stockpiles shall be covered and contained at all times;

v. All on-site stockpiles of fill materials or debris shall be covered and contained at all times.

vi. Any and all excess excavated material resulting from construction activities that is not utilized for the approved driveway realignment, grading activities, or other development approved pursuant to this authorization 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.

vii. Upon completion of grading activities, the area between the realigned driveway and the existing riparian vegetation along Martin Slough shall be covered with weed-free rice straw that shall be maintained until the area is planted with riparian vegetation as provided in the final wetland revegetation and enhancement plan required by Special Condition No. 2.

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

2 **Final Revised Riparian Wetland Restoration Plan**

A. **PRIOR TO ISSUANCE OF THE COASTAL DEVELOMENT PERMIT**, the applicant shall submit, for review and written approval of the Executive Director, a final revised riparian wetland restoration plan that substantially conforms with the riparian wetland restoration and enhancement plan submitted with the application comprised of the recommendations that pertain to Assessors Parcel No. 301-181-02 as listed on page 9 of the biological assessment submitted to the Commission dated February 25, 1999, entitled "*Biological Assessment – Fredrickson Property, 207 Fredrickson Lane, Eureka, Humboldt county, California*," prepared by Natural Resources management Corporation and the site plan dated October 27, 2003, entitled "*Coastal Development Permit for Edwin P. Fredrickson*," prepared by Omsberg & Company except that the plan shall be revised to include the following provisions:

i. The riparian vegetation to be planted shall cover the entire area to be graded between the eastern edge of the approved realigned driveway and existing riparian vegetation along Martin Slough;

ii. The riparian plants shall be planted in a mix and density of ground cover, brushy, and tree species comparable to the mix and density of ground cover, brushy, and tree species in the strip of riparian vegetation bordering Martin Slough on the property. The particular plant species to be planted shall consist of native riparian species as detailed in the Biological Assessment. No invasive or exotic species shall be planted;

iii. Planting of riparian vegetation shall occur during the first rainy season between November and March following completion of the approved grading to optimize planting success and minimize the chances for opportunistic invasive exotic species to spread to the affected area;

iv. The recommendation to install a 12-inch culvert shall be deleted;

v. The trees and shrubs to be planted shall be maintained so as to ensure that at least 80% of the approved tree species and 80% of the approved shrub species to be initially planted are maintained in a healthy condition in the planting area throughout the life of the development. Planted trees and shrubs that die or are removed for any reason shall be replaced in-kind as necessary to ensure that at least 80% of the approved tree species and 80% of the approved shrub species 1,760 specimens of the approved tree species and 400 specimens of the approved shrub species to be initially planted are maintained on site at any given time.

vi. The final revised plan shall include a:

a cross-section through the restoration area and roadway easement showing the proposed finished grades;

b planting plan detailing the specific species to be planted;

c site plan showing the locations where individual trees and plants would be planted and all;

d description of establishment techniques (e.g., planting, fertilization, etc.);

e schedule for planting; and

f survey of the mix and density of ground cover, brushy, and tree species in a representative portion of the strip of riparian vegetation bordering Martin Slough on the property.

3. State Lands Commission Review

PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit to the Executive Director a written determination from the State Lands Commission that:

A. No State or public trust lands are involved in the development; or

B. State or public trust lands are involved in the development and all permits required by the State Lands Commission have been obtained; or

C. State or public trust lands may be involved in the development, but pending a final determination an agreement has been made with the State Lands Commission for the project to proceed without prejudice to that determination.

4. U.S. Army Corps of Engineers Approval

PRIOR TO COMMENCEMENT OF CONSTRUCTION, the permit tees shall provide to the Executive Director a copy of a permit issued by the U.S. Army Corps of Engineers, or letter of permission, or evidence that no permit or permission is required for the restoration work. The applicant shall inform the Executive Director of any changes to the project required by the U.S. Army Corps of Engineers. 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.

5. Condition Compliance

A. **WITHIN 180 DAYS OF COMMISSION ACTION ON THIS CDP APPLICATION**, or within such additional time as the Executive Director may grant for good cause, the applicant shall satisfy all requirements specified in the conditions hereto that the applicant is required to satisfy prior to issuance of this permit. Failure to comply with this requirement may result in the institution of enforcement action under the provisions of Chapter 9 of the Coastal Act.

IV. FINDINGS AND DECLARATIONS

The Commission hereby finds and declares:

1. Site Description

The project site is located at 207 Fredrickson Lane in an unincorporated but urbanized area south of Eureka (see Exhibits 1-2). The east side of the property borders Martin Slough, opposite the Eureka Municipal Golf Course, within a narrow valley. Martin Slough is a tributary of Swain Slough, which in turn in is a tributary of the Elk River, which eventually flows into Humboldt Bay. The project site is located approximately 1.3 miles east of the shoreline of Humboldt Bay.

The central portion of the property is part of a gently sloping alluvial plain, which begins at the base of relatively steep slopes that ascend to high ground west of the property. A single-family home and driveway were previously constructed on the flatter central and eastern portions of the property. The home was constructed in the early 1990's pursuant to a coastal development permit granted by Humboldt County. The driveway was apparently constructed originally as a logging road and ranch road many years prior to the Coastal Initiative. In 1998, an approximately 180-foot long portion of the driveway was reconstructed without benefit of a coastal development permit in an alignment as much as 20 feet closer to Martin Slough and the easterly boundary line of the parcel location.

The 2-acre parcel was established in its current configuration pursuant to Coastal Development Permit No. 1-95-11, granted by the Commission in 1995. That permit approved the merger of four parcels created as part of an antiquated subdivision into two and adjusted the boundary line between the two resulting parcels, the subject parcel and a 2.6-acre parcel to the south. The owners of the southern parcel retain an access easement over a portion of the northern parcel. The easement area includes much of the existing driveway which will be shared by the owners of the two parcels. CDP No. 1-05-011 also

granted authorization for certain wetland restoration work on the parcel to the south to restore wetlands that had been filled without a permit.

In the vicinity of the project site, Martin Slough is approximately 20-30 feet wide. According to the Biological Assessment prepared for the project, the channel and its associated fish habitat appears to have been severely degraded due to a variety of impacts associated with upstream residential development and conversions of wetlands for the adjoining golf course and livestock pastures. Martin Slough contains mainly freshwater along this reach as downstream tidal control structures block tidal influence. The slough is known to contain coho salmon (Oncorhynchus kistutch), steelhead trout (Oncorhynchus mykiss), and coastal cutthroat trout (Oncorhynchus clarki clarki), but the project area reach of the slough contains no spawning habitat and relatively poor rearing habitat for these species because of the silty and muddy bottom. The likely dominant use for the project area reach of Martin Slough is as a migration corridor for both upstream adult spawners and juveniles heading to the estuary and ocean.

An approximately 25-foot-wide band of riparian wetland vegetation borders the slough on the subject property (the greens of the Eureka Municipal golf course extend all the way to the slough banks on the opposite [east] side of the slough. The riparian vegetation consists mainly of Pacific bramble (Rubus ursinus) and Himalayan blackberry (Rubus discolor) with creeping buttercup (Ranunculus repens), scattered cow parsnip (Heracleum lanantrum), norther willow-herb (Epilobium cilatum), common rush (Juncus effuses), and curly dock (Rumex crispus). A supplement to the biological assessment dated January 5, 2000 indicates that the riparian band used to be wider; the fill placed as part of the previously unpermitted reconstruction of the access driveway encroached into an approximately 550-square-foot crescent shaped-portion of the riparian corridor that is approximately 140 feet in length and 5 feet wide at its widest point. The affected area of the riparian corridor included scrub and herbaceous vegetation but woody riparian vegetation.

The area between the edge of the riparian corridor and the driveway is a wetland as defined under Section 30121 of the Coastal Act and Section 13577(b) of the Commission's Regulations as it contains hydric soils. The area is an herbaceous-dominated habitat with ruderal pasture and residential landscape vegetation components. The biological assessment indicates the vegetation consists mainly of various lawn grasses, and predominately non-native species such as common yarrow (Achillea millefolium0, sweet vernal grass (Anthozanthum oforatum), common velvet grass (Holcus lanatus), hariy cat's ear (Hypochaeris radicata) ox-eye daisy (Leucanthemum vulgare), bristly ox-tongue (Picris echioides), English plantain (Plantago lanceolata), wild radish (Raphanus sativus), sheep sorrel (Rumex acetosella), common sow thistle (Sonchus oleraceus), common chickweed (Stellaria media), and common dandelion (Taraxacum officianale). The wetland delineation prepared as part of the Biological assessment indicates that all of the area between the former edge of the roadway before it was reconstructed closer towards the slough in 1998 and the slough itself contains hydric soil and was part of this same herbaceous-dominated habitat.

The area between the former alignment of the driveway before it was reconstructed in 1998 and the base of the hillside that is not occupied by the house, driveway, and other residential improvements is generally landscaped with various residential landscape vegetation components. The hillside itself contains upland mesic scrub habitat and scattered components of north coast forest.

According to the Biological Assessment, portions of the site serve as habitat for a variety of wildlife species. Several bird species have been observed foraging and moving through the mature willows, lawn and other grassy areas of the site, including House Finches (Carpdacus mexicanus), Dark-eyed Juncos (Junco hyemalis), Anna's Hummingbird (Calypte anna), Black Phoebe (Sayornis nigricans), American Robin (Turdus migratorius), Song Sparrow (Melospize melodia), and Northern Flicker (Colaptes auratus). Other birds have been observed in the mature willow and condifers along the edge and outise of the parcel including Steller's Jay (Cyanocitta stelleri), Red-shoulderd Hawk (Buteo lineatus) and Common Raven (Corvus corax). Ducks and Great Blue Heron (Ardea herodieas) have been observed flying along Martin Slough. Because much of the site and its surroundings are developed with little natural cover, it is likely that use of the site by deer and other larger wildlife species is primarily restricted to dispersal and other movement. Howeer, the Biological Assessment indicates that the mature willows and conifers on the site may be used for nesting by some of the bird species noted above and several amphibians may breed in the site's wet depressions including rough-skinned news (Taricha granulose), Pacific chorus frogs (Pseudacris regilla), northern red-legged frogs (Rana aururora aurora) and fotthill yellow-legged frogs (Rana boylei)

The subject property is located at the base of a hill. As a result, drainage from a residential subdivision near the top of the hill drains downhill through the site, primarily across the driveway where it crosses the northern property line. During periods of heavy rain, runoff will create minor flooding along this section of the driveway. In addition, water from Martin Slough will occasionally overflow its banks in the wintertime inundating much of the wetland area on the subject property and portions of the driveway as well.

The subject parcel is bisected by the boundary line between the Commission's retained coastal development permit jurisdiction and that of Humboldt County. The majority of the property is within the Commission's coastal development permit jurisdiction, including the portions of the site in and around the Martin Slough wetlands, and the existing residence. The approximately western one-third of the parcel is within the County's coastal development permit jurisdiction.

2. Project Description

The applicants propose to correct a violation of the Coastal Act involving the realignment of a portion of the existing driveway and associated grading and filling activities that

occurred in wetland areas adjacent to Martin Slough in 1998. See Exhibits 3-5. The proposed corrective actions would include shifting the affected portion of the driveway back to its former alignment and reestablishing original grades. In addition, the wetland areas affected by the 1998 violation would be restored and enhanced by removing exotic vegetation and planting native wetland plants. The details of each of these project elements are described below.

Realignment of a Portion of the Driveway and Grading

An approximately 180-foot-long portion of the driveway would be shifted to the west to bring the driveway into its former alignment that existed prior to the unpermitted driveway modifications that occurred in 1998. This development would first involve removing a portion of the existing gravel roadbed and concrete curb, as well as approximately 80 cubic yards of additional gravel and earthen fill that was originally placed on the site in 1998 as part of the road prism. In addition, approximately 80 cubic yards of topsoil and lawn that had been placed over the original driveway location after it was realigned to the east without benefit of a permit in 1988 would be removed to make way for the relocated roadbed. The realignment of the relocated roadbed would be graded to leave a 20-foot-wide area with a 3% to 4% slope for the relocated driveway and curb. The eastern shoulder of the driveway would be graded at a 10% slope for use as part of the wetland plant landscape restoration area. Once the grades are established, much of the excavated gravel material would be utilized in the reconstruction of the roadbed and some of the excavated topsoil would be placed in a layer in the wetland plant restoration area to facilitate the growth of wetland pants. The remainder of the excavated material would be deposited at an unspecified location. Upon completion of the excavation and grading, an approximately 180-foot-long section of new concrete curb would be created along the western edge of the new driveway alignment.

Wetland Restoration and Enhancement

After the driveway is realigned and the area recontoured, the wetland area to the east of the realigned driveway would be restored and enhanced as riparian wetland by removing exotic invasive plants and planting new wetland plants throughout the restoration and enhancement area. Himalayan blackberry (Rubus discolor), an invasive non-native species, would be removed from a portion of the existing strip of riparian vegetation bordering Martin Slough. Removal of this plant would allow for the reestablishment of native riparian and wetland vegetation. The area between the existing riparian vegetation and the realigned driveway would be planted with native riparian and wetland plant species to widen and enhance the riparian structure along the slough. The native shrubs and trees to be planted would include, but not be limited to, western azalea (Rhododendron occidentale), red flowering currant (Ribes sanguineum var. glutinosum), wax myrtle (Myrica californica), cascara (Rhamnus purshiana), red alder (Alnus oregona), Pacific willow (Salix lucida ssp. Lasiandra) and Sitka willow (Salix sitchensis). The coastal development permit application describes the wetland restoration and enhancement measures in narrative form and such areas are identified on the site plan,

but no specific landscaping plan showing the exact locations of plants to be planted has been submitted.

3. Wetland Restoration

Section 30233 of the Coastal Act states that the diking, filling, or dredging of wetlands shall be permitted only when there is no feasible less environmentally damaging alternative, and only when feasible mitigation measures have been provided to minimize adverse environmental effects. Section 30233 also specifies that diking, filling, or dredging are allowed in wetlands only for limited uses.

The project involves excavation and removal of approximately 80 cubic yards of roadbed and associated material that had been placed over a portion of the wetland area in 1998 when the driveway was realigned without benefit of a coastal development permit. The entire area between the original driveway and Martin Slough is considered a wetland because of the presence of hydric soils. The excavation work can be considered a form of dredging of a wetland. The project also involves the removal of exotic riparian vegetation and the planting of riparian and wetland plants within wetlands to restore the area affected by the unauthorized filling and enhance riparian wetland habitat values both in the affected area and in adjoining wetland areas along Martin Slough.

Section 30233(a) provides as follows, in applicable part:

> (a) *The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:*
>
> *(1) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.*
>
> *(2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.*
>
> *(3) In wetland areas only, entrance channels for new or expanded boating facilities; and in a degraded wetland, identified by the Department of Fish and Game pursuant to subdivision (b) of Section 30411, for boating facilities if, in conjunction with such boating facilities, a substantial portion of the degraded wetland is restored and maintained as a biologically productive wetland. The size of the wetland area used for boating facilities, including berthing space, turning basins, necessary navigation channels, and any necessary support service facilities, shall not exceed 25 percent of the degraded wetland.*

(4) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.

(5) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.

(6) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.

(7) Restoration purposes.

(8) Nature study, aquaculture, or similar resource dependent activities.

(C) In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary…

The above policies set forth a number of different limitations on what types of projects may be allowed in coastal wetlands. For analysis purposes, the limitations applicable to the subject project can be grouped into four general categories or tests. These tests are:

1. The purpose of the filling, diking, or dredging is for one of the eight uses allowed under Section 30233;

2. that feasible mitigation measures have been provided to minimize adverse environmental effects;

3. that the project has no feasible less environmentally damaging alternative; and

4. that the biological productivity and functional capacity of the habitat shall be maintained and enhanced where feasible.

Allowable Use for Dredging and Filling of Coastal Waters

The first test set forth above is that any proposed filling, diking or dredging must be for an allowable purpose as specified under Section 30233 of the Coastal Act. One of the allowable purposes for diking, filling, or dredging, under Section 30233(a)(7) is "restoration purposes." As discussed in detail above, the proposed project is to reconstruct a portion of an existing residential driveway to shift the driveway to the west to move the portion of driveway out of a wetland area and bring the driveway into its former alignment that existed prior to unpermitted driveway modifications that occurred in 1998. The proposed project includes wetland

restoration and enhancement measures designed to re-establish riparian wetland habitat that had been destroyed when the unpermitted driveway modifications occurred in 1998.

This finding that the proposed diking, filling, and dredging constitutes "restoration purposes" is based, in part, on the assumption that the proposed project will be successful in restoring and enhancing wetland habitat values. Should the project be unsuccessful at increasing wetland habitat values, or worse, if the proposed filling impacts of the project actually result in long term degradation of the habitat, the proposed filling would not actually be for "restoration purposes." To ensure that the project achieves the wetland enhancement objectives for which the project is intended, the Commission attaches Special Condition No. 2. Special Condition No. 2 requires that the applicants to submit a final revised wetland restoration and enhancement plan that includes certain provisions to maximize the chances for success of the plan. Among other requirements, the special condition requires that the riparian wetland planting occur during the winter months when sufficient rainfall can be expected to ensure the plants will receive adequate water to grow. As the project does not include irrigation, planting during the summer months when water would be less available would lead to a low survival rate. Other requirements are imposed to ensure that the restoration proposal is clarified and carefully planned to ensure its success.

The Commission finds that as the project is intended to restore wetland riparian habitat that existed prior to unpermitted fill activities, the proposed project constitutes a "restoration purpose" pursuant to Section 30233(a)(7). Therefore, the Commission finds that as conditioned, the proposed dredging and filling in coastal wetlands for the proposed wetland enhancement project is fill for "restoration purposes," and therefore is an allowable use pursuant to Section 30233(a)(7) of the Coastal Act.

Feasible Mitigation Measures

The second test set forth by Section 30233 is that adequate mitigation must be provided for adverse environmental impacts. Overall, the project would enhance wetland habitat values and would produce generally only beneficial environmental effects. However, the excavation and grading work necessary to realign the driveway could create its own adverse impacts on the riparian wetland area adjacent to Martin Slough. Potential significant adverse impacts that could result from the proposed excavation and grading work include: (a) water pollution in the form of sedimentation or debris entering coastal waters; and (b) ground disturbance that would increase the opportunities for invasive exotics to invade the wetland habitat area. Therefore, the proposed project has been conditioned to ensure that habitat enhancement results and potentially significant adverse impacts are minimized.

a) Impacts to Water Quality

The proposed grading and excavation work would remove roadbed and vegetative cover and expose an approximately 8,000-square-foot area of soil to storm water runoff. Potential adverse

impacts to coastal waters could occur in the form of sedimentation or debris from project excavation and fill being allowed to enter coastal waters. To ensure that adverse impacts to water quality do not occur, the Commission attaches Special Condition No. 1. Special Condition No. 1 requires that the applicants submit for the review and approval of the Executive Director an Erosion and Runoff Control Plan that would provide that (1) straw bales be installed to contain runoff from construction areas, (2) no construction materials, fill materials, debris, or waste shall be placed or stored within wetland areas or where they may be subject to entering waters of Martin Slough, (3) all on-site stockpiles of fill materials or debris shall be covered and contained at all times, (4) any and all excess excavated material resulting from construction activities that is not utilized for the approved driveway realignment, grading activities, or other development approved pursuant to this authorization 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, (5) upon completion of grading activities, the area between the realigned driveway and the existing riparian vegetation along Martin Slough shall be covered with weed-free rice straw that shall be maintained until the area is planted with riparian vegetation pursuant to the approved final wetland revegetation and enhancement plan.

b) Introduction of Invasive Plants

The riparian wetland habitat at the site and in adjoining areas could be adversely affected by the spread of non-native, invasive plant species if such species were allowed to be introduced within the area to be graded. The applicants do not propose to plant any invasive exotic plant species as part of the project. However, the exposure of bare earth resulting from the proposed grading would create circumstances where opportunistic invasive species could further invade the area. The spread of invasive exotic plant species through the wetland riparian habitat would disrupt the values and functions of the habitat. Planting of native riparian wetland species within the affected area as proposed would reduce the chances that opportunistic invasive exotic species could take over the site. Therefore, the Commission attaches Special Condition No. 2 which requires that the applicants submit for the review and approval of the Executive Director a final revised wetland restoration plan that would provide that (1) the riparian vegetation to be planted shall cover the entire area to be graded between the eastern edge of the approved realigned driveway and existing riparian vegetation along Martin Slough, (2) no invasive or exotic species shall be planted, and (3) planting of riparian vegetation occur during the first rainy season between November and March following completion of the approved grading to optimize planting success and minimize the chances for opportunistic invasive exotic species to spread to the affected area.

The Commission finds that the proposed wetland enhancement project is a permitted use under Section 30233 of the Coastal Act, and that as conditioned, all potential adverse impacts have been minimized to the maximum extent feasible.

Alternatives Analysis

The third test set forth by Section 30233 is that the proposed dredge or fill project must have no feasible less environmentally damaging alternative. In this case, the Commission has considered the possible alternative of the "no project" alternative.

The "no project" alternative would leave the wetland habitat in the reach of Martin Slough along the site in its current condition with no restoration or enhancement actions being taken. The fill that was placed in wetland areas of the project site when a portion of the driveway was relocated in 1998 without benefit of a coastal development permit would remain in place. The approximately 4,000-square-foot area of wetland habitat that was filled would remain un-restored. Therefore, the no project alternative is not a less environmentally damaging feasible alternative, as it would not accomplish the project objectives of restoring and enhancing wetland habitat that was destroyed by unauthorized fill activities. Therefore, the Commission concludes that the proposed realignment of the affected portion of the driveway to its former alignment and restoration of the site by removing exotic vegetation and planting native wetland plants is the least environmentally damaging feasible alternative for protecting and enhancing wetland habitat values at the site and is consistent with Section 30233.

Maintenance and Enhancement of Biological Productivity and Functional Capacity

The fourth general limitation set forth by Section 30233 is that any proposed dredging or filling in coastal wetlands must maintain and enhance the biological productivity and functional capacity of the habitat, where feasible.

The proposed restoration and enhancement of the previously filled wetland habitat would maintain and enhance the biological productivity and functional capacity of the wetland as it existed prior to the unauthorized filling. The project would restore the approximately 4,000 square feet of wetland habitat that was lost due to the unauthorized fill. This area of restored wetland habitat and the adjoining undisturbed riparian habitat would also be enhanced by the proposed removal of exotic vegetation. Furthermore, as discussed above in the section of this finding on mitigation, the conditions of the permit would ensure that the project would not have significant adverse impacts on existing wetland habitats or on the water quality of Martin Slough. For all of the above reasons, the proposed project will maintain and enhance the biological productivity and functional capacity of the wetlands consistent with the requirements of Section 30233 of the Coastal Act.

Conclusion

The Commission thus finds that the proposed fill is for an allowable use, that there is no feasible less environmentally damaging alternative, that feasible mitigation is required for potential impacts associated with the dredging and filling of coastal wetlands, and that the

biological productivity and functional capacity of the wetland habitat affected by the dredging and filling will be maintained and enhanced. Therefore, the Commission finds that the proposed development, as conditioned, is consistent with Sections 30231 and 30233 of the Coastal Act.

4. State Waters.

The project site is located in an area subject to the public trust. Therefore, to ensure that the applicant has the necessary authority to undertake all aspects of the project on these public lands, the Commission attaches Special Condition No. 3, which requires that the project be reviewed and where necessary approved by the State Lands Commission prior to the issuance of a permit.

5. U.S. Army Corps of Engineers Approval.

The project may be located within the permit jurisdiction of the U.S. Army Corps of Engineers. Pursuant to the Federal Coastal Zone Management Act, any permit issued by a federal agency for activities that affect the coastal zone must be consistent with the coastal zone management program for that state. Under agreements between the Coastal Commission and the U.S. Army Corps of Engineers, the Corps will not issue a permit until the Coastal Commission approves a federal consistency certification for the project or approves a permit. To ensure that the project ultimately approved by the Corps is the same as the project authorized herein, the Commission attaches Special Condition No. 4 which requires the applicants to submit to the Executive Director evidence of the Corps' approval of the project or evidence that no such approval is required prior to the commencement of construction. The condition requires that any project changes resulting from the Corps' approval not be incorporated into the project until the applicant obtains any necessary amendments to this coastal development permit.

6. Alleged Violation.

As noted above, the applicants propose to correct a violation of the Coastal Act involving the realignment of a portion of the existing driveway and associated grading and filling activities that occurred in wetland areas adjacent to Martin Slough in 1998 without benefit of a coastal development permit. The proposed corrective actions would include shifting the affected portion of the driveway back to its former alignment and reestablishing original grades. In addition, the wetland areas affected by the 1998 violation would be restored and enhanced.

Consideration of this application by the Commission has been based solely upon the policies of Chapter 3 of the Coastal Act. Review of this permit does not constitute a waiver of any legal action with regard to the cited alleged violation nor does it constitute an admission as to the legality of any development undertaken on the subject site without a coastal permit.

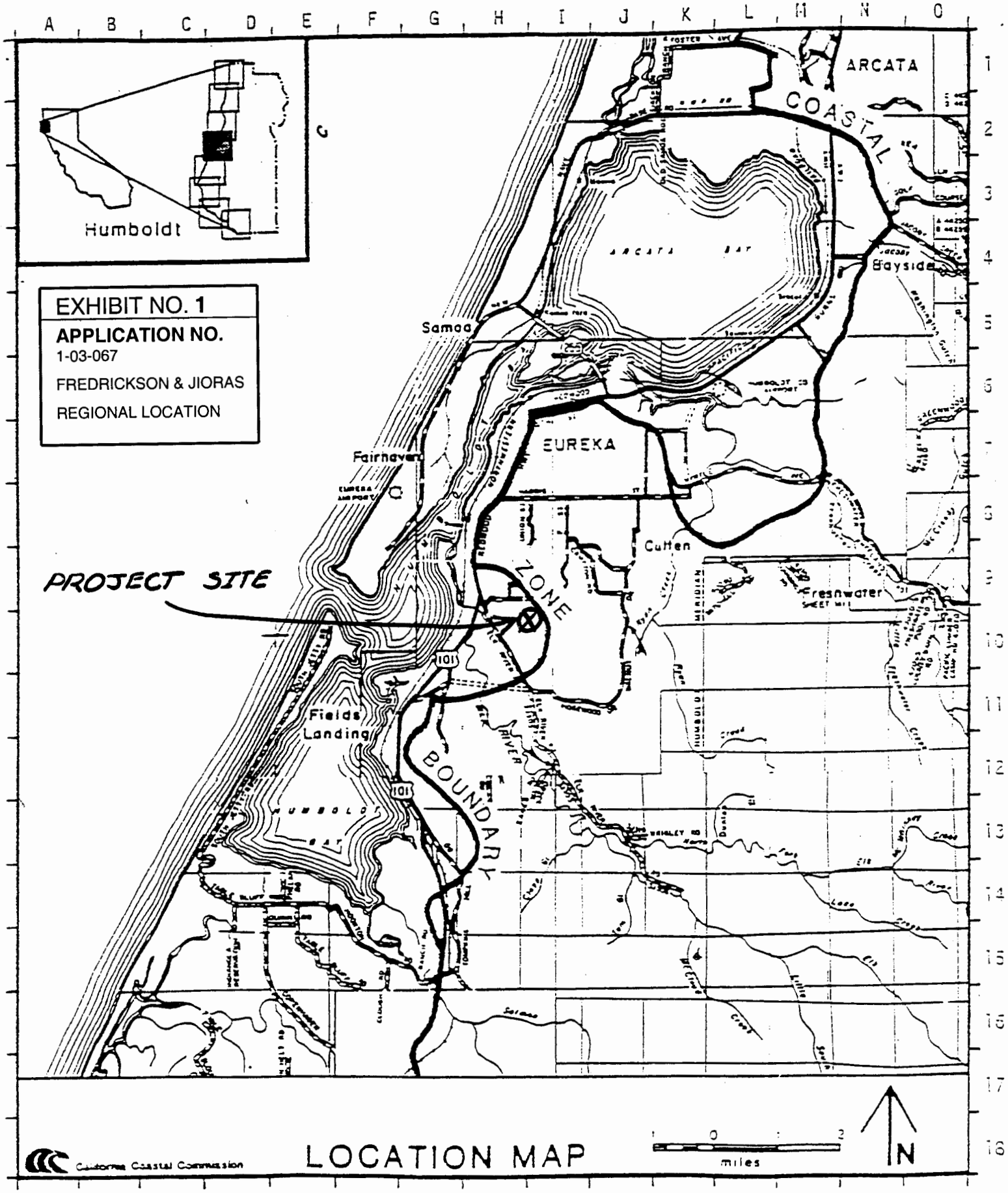
7. California Environmental Quality Act.

Section 13096 of the Commission's administrative regulations requires Commission approval of coastal development permit applications to be supported by a finding showing the application, as modified by any conditions of approval, to be consistent with any applicable requirement of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available, which would substantially lessen any significant adverse effect the proposed development may have on the environment.

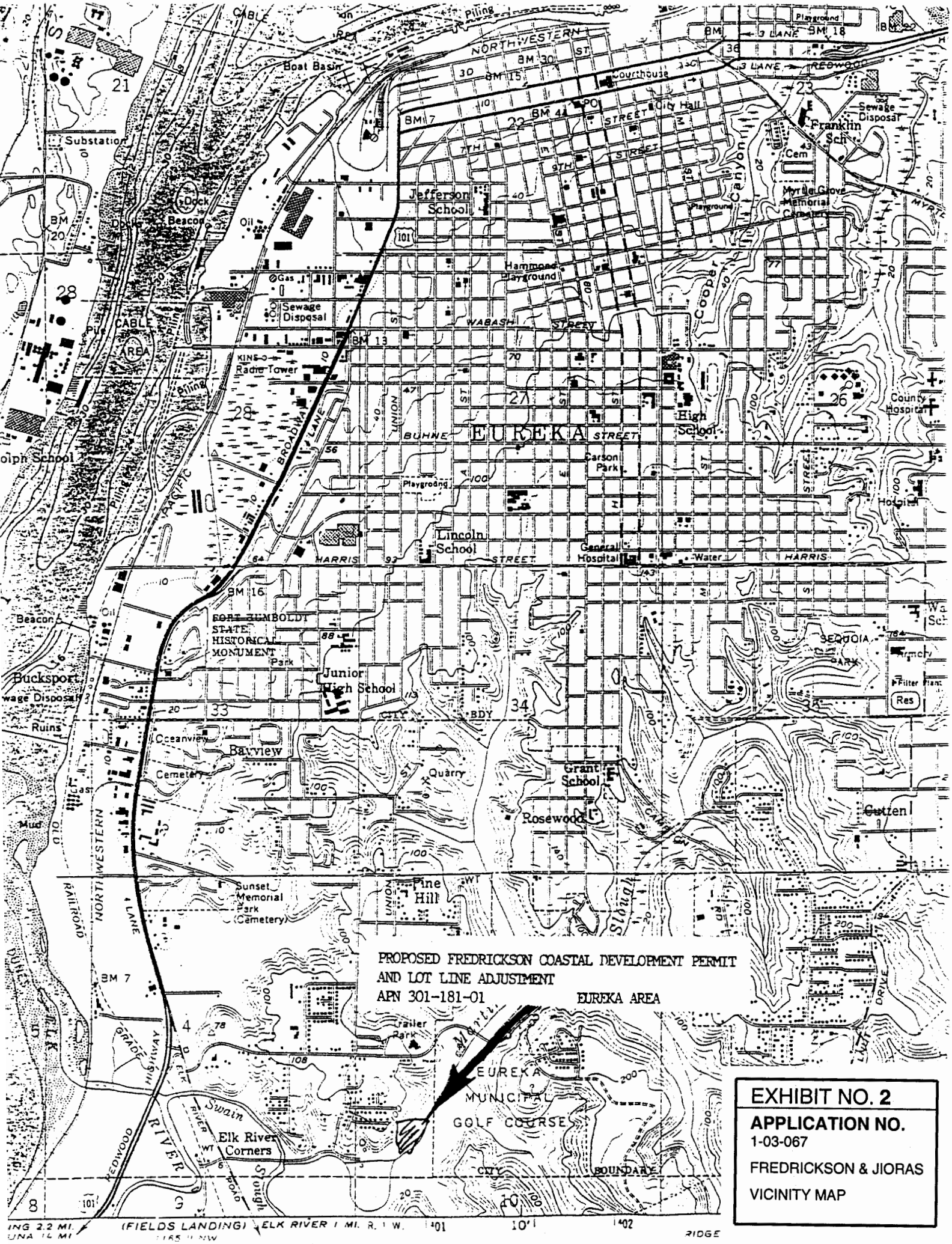
The Commission incorporates its findings on conformity with the Chapter 3 policies of the Coastal Act at this point as if set forth in full. These findings address and respond to all public comments regarding potential significant adverse environmental effects of the project that were received prior to preparation of the staff report. As discussed herein, in the findings addressing the consistency of the proposed project with the Chapter 3 policies of the Coastal Act, the proposed project has been conditioned to be found consistent with the Coastal Act. Mitigation measures, which will minimize all adverse environmental impacts have been required. As conditioned, there are no feasible alternatives or feasible mitigation measures available, beyond those required, which would substantially lessen any significant adverse impact that the activity may have on the environment. Therefore, the Commission finds that the proposed project can be found to be consistent with the requirements of the Coastal Act to conform to CEQA.

Exhibits

1. Regional Location Map
2. Vicinity Map
3. Site Plan
4. Road Relocation Cross-Sections
5. Biological Assessment



County of Humboldt


PROPOSED FREDRICKSON COASTAL DEVELOPMENT PERMIT
AND LOT LINE ADJUSTMENT
APN 301-181-01
EUREKA AREA
EUREKA
MUNICIPAL
GOLF COURSE
EXHIBIT NO. 2
APPLICATION NO.
1-03-067
FREDRICKSON & JIORAS
VICINITY MAP

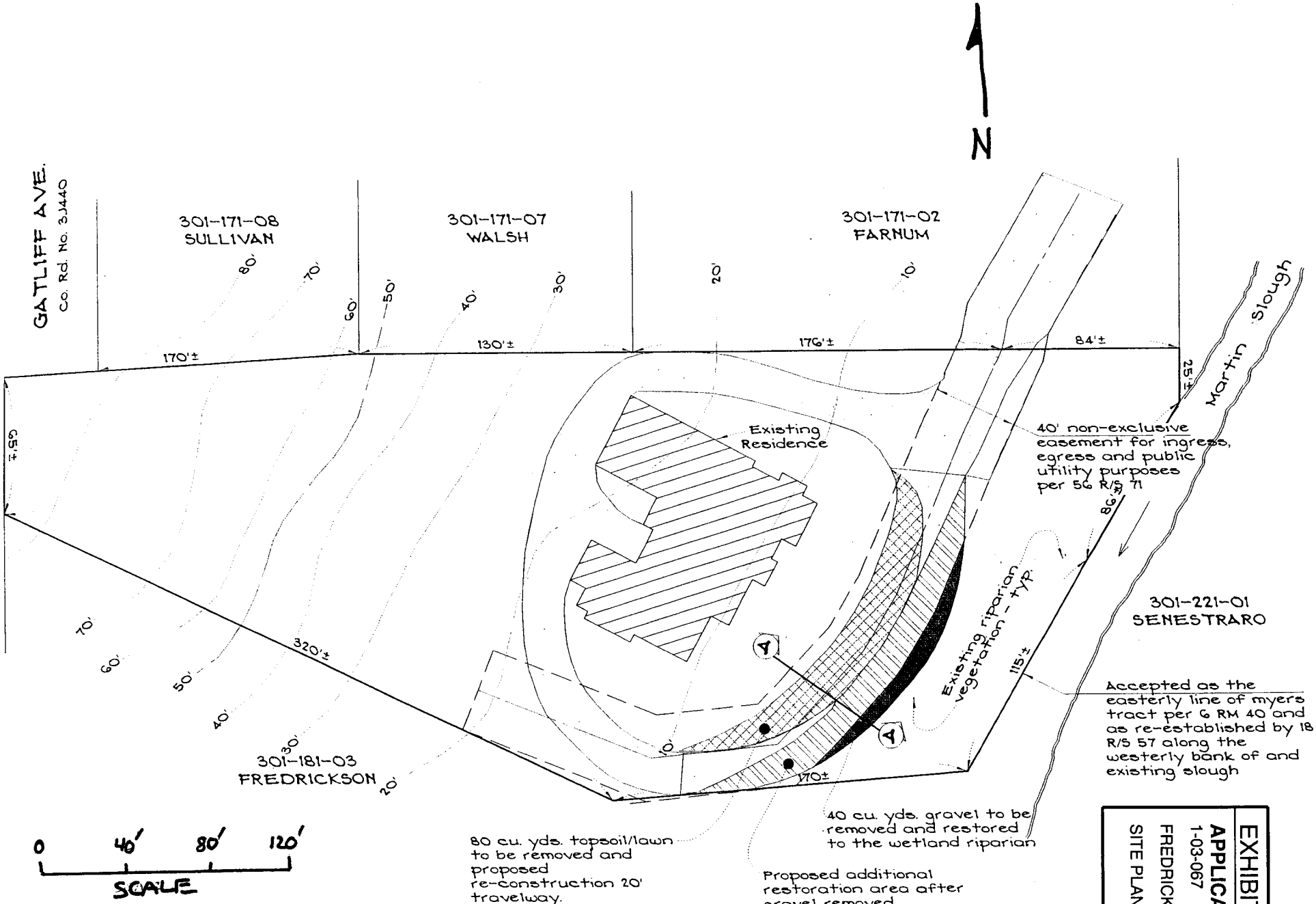
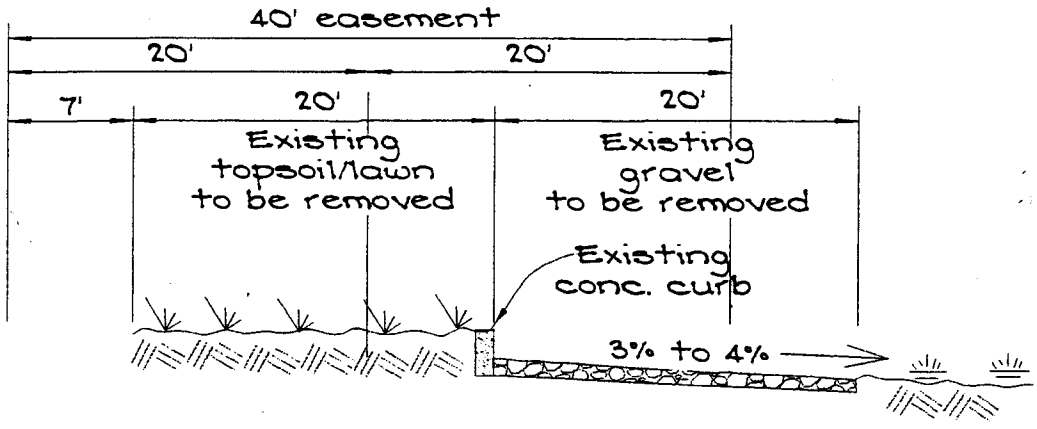


EXHIBIT NO. 3

APPLICATION NO.
1-03-067
FREDRICKSON & JIORAS
SITE PLAN



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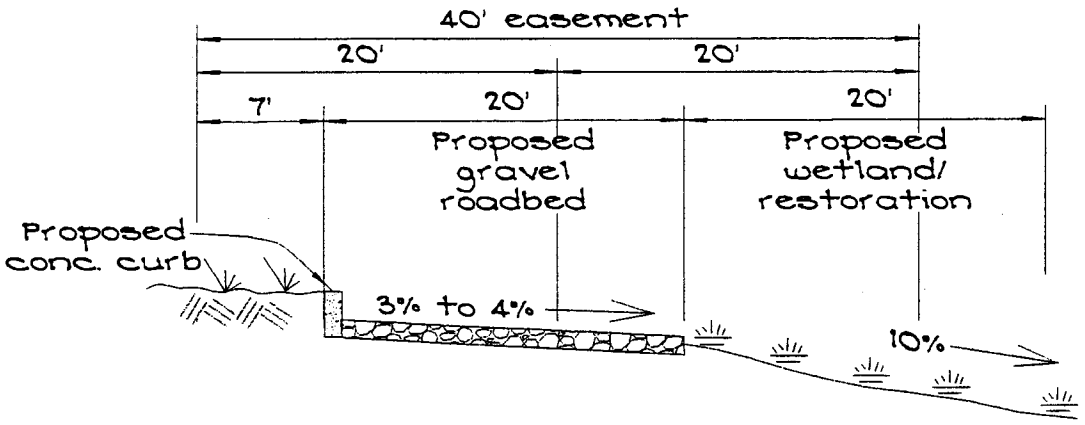


PROPOSED

SECTION A-A

Not to Scale

EXHIBIT NO. 4

APPLICATION NO.
1-03-067

FREDRICKSON & JIORAS

ROAD RELOCATION CROSS-SECTIONS

Biological Assessment – Fredrickson Property

207 Fredrickson Lane, Eureka, Humboldt County, California

Prepared by:

Clare T. Golec, Dennis P. Halligan, & Scott D. Osborn, Ph.D.

Natural Resources Management Corporation

1434 Third Street, Eureka, CA 95501

(707) 442-1735

February 25, 1999

Introduction

A biological assessment was conducted to determine the biological impacts associated with placement of fill on two adjacent residential parcels (APN 301-181-02 and APN 301-181-03) southwest of Eureka, California. The fill on the northern parcel (APN 301-181-02) is associated with road construction. The fill on the southern parcel (APN 301-181-03) is associated with a proposed building site.

The two parcels are located along the western portions of Martin Slough approximately 1.3 miles from Humboldt Bay and are within the Coastal Zone (see attached vicinity map). The two parcels total 4.6 acres (southern parcel 2.6 acres and the northern parcel 2 acres) and incorporate the western banks, low lands, and lower to middle slopes associated with Martin Slough. Martin Slough and its tributaries drain significant portions of south Eureka and Cutten and are tributary to Swain Slough, which in turn is a tributary to Elk River. The vegetation components of the parcels consist of riparian scrub and forest, wetland, ruderal (weedy) pasture, residential landscape, upland mesic scrub, and scattered components of north coast forest.

Methods

A field review of the fill sites associated with the two parcels was performed February 10, 1999, by Natural Resources Management Corporation's (NRM) Staff Botanist Clare Golec, and on February 23, 1999, by NRM's Staff Fisheries Biologist, Dennis Halligan, and Staff Ecologist Scott Osborn, Ph.D. The field review assessed the extent of fill and the discernible biological impacts at each of these sites. The field review utilized the surrounding vegetation, habitat characteristics, and topography where comparable pre-fill conditions of each of the sites could be assessed. The fish and wildlife assessment consisted of an examination of potential habitat and signs of wildlife and fisheries use on and adjacent to the site. The biologists examined recent and historical air photos of the site, and reviewed information for the site in the client's project file as well as in files at the California Department of Fish & Game. A check of the California Natural Diversity Data Base (CNDDB, February 1999) and CNPS Electronic Inventory (CNPS, January 1999) for the project vicinity was made.

Results

Northern Parcel Fill

The recent fill in the northern parcel is associated with a reconstructed access road near the eastern boundary (see attached parcel map). The total fill quantity is approximately thirty cubic yards of material at a depth of one foot and largely consists of crushed gravel. There is a small area of fill associated with the outside edge of the curve of the access road that has been placed within fifty feet of Martin Slough (34 feet from edge of road to edge of slough). The area involved is a crescent-shaped area approximately 70 feet in length by 8 feet at the widest, grading to less than one foot wide at both ends. The soils within the riparian corridor (two feet away from the outside edge of the curve) were examined for general characteristics. The first six inches of topsoil had a low chroma matrix based on Munsell soil color charts (7.5 YR 4/2) with many fine high chroma mottles (2.5 YR 4/8). These characteristics are indicative of inundation with water for a long enough period to begin to reduce the soil and are considered wetland soils.

Southern Parcel Fill

The recent fill in the southern parcel is associated with the toe slope of the hillside that has been cut and filled to create a residential lot (see attached parcel map). The area of the fill is a triangular-shaped area approximately thirty-nine feet wide by one hundred and fifty feet long, with a maximum depth of eight feet. The length of the area is situated northeast to southwest in orientation with the southwest end tapering to a point and the northeast end grading into a previous cut and fill area. On the second site visit, which followed an overnight rain, gullies up to 12 inches deep in the fill were observed. The soils along the cut bank were briefly examined for general characteristics. The first twelve inches of topsoil have a low chroma matrix based on Munsell soil color charts (7.5 YR 4/2) without mottling and with an apparent organic component and has a sandy clay loam texture. The underlying layers have a high chroma matrix (7.5 YR 5/6) without an apparent organic component and have a sandy clay texture. These characteristics indicated an upland soil. The fill largely consisted of these high chroma and sandy clay soils.

Watershed and Fisheries

Martin Slough is known to contain coho salmon (*Oncorhynchus kisutch*), steelhead trout (*Oncorhynchus mykiss*), and coastal cutthroat trout (*Oncorhynchus clarki clarki*). The project area contains no spawning habitat and relatively poor rearing habitat for these species. The slough substrate in the project area is composed entirely of silt and mud, which renders this area unusable for spawning salmon and trout. In addition, the mud bottom severely limits the production of aquatic insects that could be utilized as a food source for juvenile salmonids. There is very little woody riparian vegetation, which could be used for rearing cover habitat by young salmon and trout. The channel and its associated fisheries habitat also appears to have been severely degraded due to a variety of impacts associated with upstream residential development and conversions of wetlands for a golf course and livestock pastures. It is very likely that the dominant salmonid use for the project area reach of Martin Slough is as a migration corridor for both upstream adult spawners and juveniles heading to the estuary and ocean.

Drainage from the northern and southern portions of the property is directed toward the wetland areas. Vegetation in the wetland acts to trap any suspended sediment in the runoff. No concentrated runoff was observed entering Martin Slough from the property despite the recent heavy rains and flood conditions on

the adjoining properties. The slough waters were significantly more turbid (visibility <3 inches) than any standing or flowing water on the Fredrickson property. A 12-inch culvert on the access road leading to the property has a crushed inlet, which substantially reduces its carrying capacity and is therefore considered to be in need of replacement or repair.

Wildlife

Portions of the site serve as habitat for a variety of wildlife species. Several bird species, including House Finches (*Carpodacus mexicanus*), Dark-eyed Juncos (*Junco hyemalis*), Anna's Hummingbird (*Calypte anna*), Black Phoebe (*Sayornis nigricans*), American Robin (*Turdus migratorius*), Song Sparrow (*Melospiza melodia*), and Northern Flicker (*Colaptes auratus*), were observed foraging and moving through the mature willows, lawn and other grassy areas, and in the low wetland vegetation on the south parcel. Other birds, including Steller's Jay (*Cyanocitta stelleri*), Red-shouldered Hawk (*Buteo lineatus*), and Common Raven (*Corvus corax*), were observed in the mature willow and conifers along the edge and outside the parcel. A Great Blue Heron (*Ardea herodias*) and several ducks were seen flying along Martin Slough. Sign of deer (*Odocoileus hemionus*) was abundant along the edge of and in the wetlands on the site. Valley pocket gopher (*Thomomys bottae*) mounds were observed in the grassy portion of the southern parcel (downslope from the fill area), but this area was saturated with water from the recent rains, and was unsuitable for occupancy at the time of the field visit. Several Pacific chorus frogs (*Pseudacris regilla*) were heard calling from the wetland portions of the site, and were concentrated along the southern boundary of the property.

The edges of the property are probably commonly used by a variety of small wildlife species, including those listed above, for cover and foraging. Nesting by birds may occur in the mature willows and the conifers on the site. Pacific chorus frogs probably breed in the site's wet depressions. Rough-skinned newts (*Taricha granulosa*), northern red-legged frogs (*Rana aurora aurora*), and foothill yellow-legged frogs (*Rana boylei*) may also use the site, although it is not optimal for breeding. Because much of the site and its surroundings are developed, with little natural cover, it is likely that use of the site by larger wildlife species is primarily restricted to dispersal and other movement.

Review of the Rarefind II, the California Natural Diversity Data Base (CNDDB) revealed the presence of fourteen terrestrial and aquatic wildlife species within the Eureka or adjacent 7.5 minute USGS Quads. Suitable habitat for most of these species is lacking on the project site, nor was it available prior to the grading and fill operations. These species and descriptions of suitable habitat are listed in the Table 1. Several other species have suitable habitat or marginal habitat available on or near the site, but would not likely be impacted by the activities that occurred on the site. These species are also listed in Table 1, and include: western pond turtle (*Clemmys marmorata*), northern red-legged frog, and foothill yellow-legged frog.

Table 1. Terrestrial and aquatic wildlife sensitive species occurrence in the vicinity of the Fredrickson site, as recorded in Rarefind II (CNDDB, February 1999).

Species	Status	Habitat
Southern Torrent Salamander *Rhyacotriton variegatus*	FSC, SSC	General: coastal redwood, Douglas-fir, mixed conifer, montane riparian, and montane hardwood-conifer habitats. Old growth forest. Micro: cold, well-shaded, permanent streams and seepages, or within splash zone or on moss-covered rock within trickling water.
Tailed Frog *Ascaphus truei*	FSC, SSC	General: occurs in montane hardwood-conifer, redwood, Douglas-fir & ponderosa pine habitats. Micro: restricted to perennial montane streams. Tadpoles require water below 15 degrees C.
Northern Red-legged Frog *Rana aurora aurora*	FSC, SSC	General: found in humid forests, woodlands, grasslands, and streamsides in northwestern California. Micro: generally near permanent water, but can be found far from water, in damp woods and meadows, during non-breeding season.
Foothill Yellow-legged Frog *Rana boylei*	FSC, SSC	General: a variety of habitats in partly-shaded, shallow streams & riffles with a rocky substrate that is at least cobble-sized. Micro: adults bask on exposed rock surfaces near streams. When disturbed, dive into water, take refuge under rocks, sediment.
Western Pond Turtle *Clemmys marmorata*	FSC, SSC	General: associated with permanent or nearly permanent water in a wide variety of habitats. Micro: requires basking sites. Nests sites may be found up to 0.5 km from water.
Double-crested Cormorant *Phalacrocorax auritus*	SSC	General: Lake margins in the interior of the state. Micro: nest along coast on sequestered islets, usually on ground with sloping surface, or in tall trees along lake margins.
Black-crowned Night Heron *Nycticorax nycticorax*	none	General: colonial nester, usually in trees, occasionally in tule patches. Micro: rookery sites located adjacent to foraging areas: lake margins, mud-bordered bays, marshy spots
Snowy Egret *Egretta thula*	none	General: colonial nester, with nest sites situated in protected beds of dense tules. Micro: rookery sites situated close to foraging areas: marshes, tidal-flats, streams, wet meadows, and borders of lakes
Great Egret *Ardea alba*	BFS	General: colonial nester in large trees. Micro: rookery sites located near marshes, tide-flats, irrigated pastures, and margins of rivers and lakes.
Great Blue Heron *Ardea herodia*	SSC, BFS	General: colonial nester in tall trees, cliff sides, and sequestered spots on marshes. Micro: rookery sites in close proximity to foraging areas: marshes, lake margins, tide-flats, rivers and streams, wet meadows.

Species	Status	Habitat
Northern Spotted Owl *Strix occidentalis caurina*	FT, BFS	General: old-growth forests or mixed stands of old-growth & mature trees. Occasionally in younger forests w/patches of big trees. Micro: high, multistory canopy dominated by big trees, many trees w/cavities or broken tops, woody debris & space under canopy.
Osprey *Pandion haliaetus*	SSC, BFS	General: ocean shore, bays, fresh-water lakes, and larger streams. Micro: large nests built in tree tops within 15 miles of good fish-producing body of water.
California Clapper Rail *Rallus longirostris obsoletus*	SE, FE	General: salt-water marshes traversed by tidal sloughs in the vicinity of San Francisco Bay. Micro: associated with abundant growths of pickleweed, but feeds out from cover on mollusks obtained from mud-bottomed sloughs
Western Snowy Plover *Charadrius alexandrinus nivosus*	FT	General: sandy beaches on marine and estuarine shores, also salt pond levees and the shores of large alkali lakes. Micro: requires sandy, gravelly or friable soil substrate for nesting.
Tricolored Blackbird *Agelaius tricolor*	FSC	General: highly colonial species, most numerous in the central valley and vicinity. Largely endemic to California. Micro: requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.
Red Tree Vole *Arborimus pomo*	FSC	General: north coast fog belt from Oregon border to Sonoma Co. In Douglas-fir, redwood and montane hardwood-conifer forests. Micro: feeds almost exclusively on Douglas-fir needles. Will occasionally take needles of grand fir, hemlock or spruce.

Status Codes:

FE, federal endangered species
FT, federal threatened species
FSC, federal species of concern
SE, state endangered species
SSC, state species of concern
BFS, Board of Forestry sensitive species

Botanical

The majority of the area impacted by the fill in the **northern parcel** was a herbaceous-dominated habitat with ruderal pasture and residential landscape vegetation components. These vegetation components are characterized by various lawn grasses, and predominately non-native species such as common yarrow (*Achillea millefolium*), sweet vernal grass (*Anthoxanthum odoratum*), common velvet grass (*Holcus lanatus*), hairy cat's-ear (*Hypochaeris radicata*) ox-eye daisy (*Leucanthemum vulgare*), bristly ox-tongue (*Picris echioides*), English plantain (*Plantago lanceolata*), wild radish (*Raphanus sativus*), sheep sorrel (*Rumex acetosella*), common sow thistle (*Sonchus oleraceus*), common chickweed (*Stellaria media*), and common dandelion (*Taraxacum officianale*). Along the outside edge of the road curve riparian vegetation was partially cleared and consisted of a thicket of Pacific bramble (*Rubus ursinus*) and Himalayan

blackberry (*Rubus discolor*) with creeping buttercup (*Ranunculus repens*) and scattered cow parsnip (*Heracleum lanatum*), northern willow-herb (*Epilobium ciliatum*), common rush (*Juncus effusus*), and curly dock (*Rumex crispus*). No woody vegetation was removed and Martin Slough at this locale did not support any saline tolerant plants, which indicated a lack of tidal influence.

The majority of the **southern parcel** impacted by the fill was a herbaceous-dominated habitat with ruderal pasture vegetation components (similar to the vegetation of the northern parcel fill area). The upper edges of the fill area and cut bank the ruderal pasture grades into a shrub-dominated habitat with some scattered trees. The scrub habitat has mesic native and non-native vegetation components such as, red alder (*Alnus oregona*), coyote brush (*Baccharis pilularis*), Sitka spruce (*Picea sitchensis*), Douglas-fir (*Pseudotsuga menziesii* var. *menziesii*), sword fern (*Polystichum munitum*), cascara (*Rhamnus purshiana*), wood rose (*Rosa gymnocarpa*), Himalayan blackberry (*Rubus discolor*), and Pacific bramble (*Rubus ursinus*).

The California Native Plant Society's (CNPS) Electronic Inventory (January 1999) was queried for known occurrence of rare plants in the vicinity of the Fredrickson property. The query included the property's USGS 7.5' quadrangle and the adjacent quadrangles, these being Eureka, Arcata South, Fields Landing, and Fortuna. Sixteen rare plants were recorded as occurring on these quadrangles (see Table 2 below). These species were assessed for potential occurrence and possible impact from the placement of fill during the field review.

Five species did not have any potential for occurrence, as they are associated with immediate coastal habitats (such as sand dunes and salt marshes).

The wetland associated with the southern parcel had marginal habitat for seven species, these being flaccid sedge (*Carex leptalea*), meadow sedge (*Carex praticola*), marsh pea (*Lathyrus palustris*), western lily (*Lilium occidentale*), Howell's montia (*Montia howellii*), coast checkerbloom (*Sidalcea oregana* ssp. *eximia*), and marsh violet (*Viola palustris*). The habitat was marginal due to past disturbance (livestock pasture) eliminating most of the native species components. The dominant native herbaceous component noted during field review was the resilient slough sedge (*C. obnupta*). This wetland has not been impacted with placement of fill. In addition, the wetland is presently under an open space deed restriction and is not likely to be disturbed in the future.

Two species, running-pine (*Lycopodium clavatum*), and Indian-pipe (*Monotropa uniflora*), are associated with well-developed forest habitats which are not available on either parcels.

Two species, maple-leaved checkerbloom (*Sidalcea malachroides*), Siskiyou checkerbloom (*Sidalcea malvaeflora* ssp. *patula*), have marginal habitat available on the parcels. Given the ruderal and residential nature of the parcels and adjacent vegetation to the fill areas, it is highly unlikely that these species were impacted with the placement of fill.

Table 2. Rare plants with occurrence in the vicinity of the Fredrickson site, as recorded in CNPS Electronic Inventory, January 1999.

Species	Status	Habitat
Abronia umbellata ssp. *breviflora* pink sand-verbena	SOC, 1B	Coastal Dunes.
Carex leptalea flaccid sedge	2	Bogs and Fens, Meadows, Seeps, and Marshes and Swamps.
Carex praticola meadow sedge	2	Meadows.
Castilleja ambigua ssp. *humboldtiensis* Humboldt Bay owl's-clover	SOC, 1B	Coastal salt Marshes and Swamps.
Cordylanthus maritimus ssp. *palustris* Pt. Reyes bird's-beak	SOC, 1B	Coastal saltwater Marshes and Swamps.
Erysimum menziesii ssp. *eurekense* Humboldt Bay wallflower	FE, CE, 1B	Coastal Dune.
Lathyrus palustris marsh pea	SOC, 1B	Bogs and Fens, Marshes and Swamps, Coastal Prairie, Coastal Scrub, and mesic sites in the North Coast Coniferous Forest.
Layia carnosa beach layia	FE, CE, 1B	Coastal Dune.
Lilium occidentale western lily	FE, CE, 1B	Bogs and Fens, Coastal Bluff Scrub, Coastal Prairie, freshwater Marshes and Swamps, and openings in the North Coast Coniferous Forest.
Lycopodium clavatum running-pine	2	Marshes and Swamps, and mesic sites in the North Coast Coniferous Forest.
Monotropa uniflora Indian-pipe	2	Broadleaved Upland Forest, and North Coast Coniferous Forest.
Montia howellii Howell's montia	SOC, 1A	Wet disturbed sites around Meadows, Vernal Pools, and North Coast Coniferous Forest.
Sidalcea malachroides maple-leaved checkerbloom	SOC, 1B	Broadleaved Upland Forest, Coastal Prairie, and North Coast Coniferous Forest often on disturbed sites.
Sidalcea malvaeflora ssp. *patula* Siskiyou checkerbloom	1B	North Coast Coniferous Forest, Coastal Prairie, and Coastal Bluff Scrub (possibly).
Sidalcea oregana ssp. *eximia* coast checkerbloom	1B	Meadows, North Coast Coniferous Forest, and Lower Montane Coniferous Forest.
Viola palustris marsh violet	2	Mesic sites of the Coastal Scrub and coastal Bogs and Fens.

Status Codes:

FE, federal endangered species
CE, state endangered species
SOC, federal species of concern
1A, CNPS list 1A species (plants presumed extinct in California)
1B, CNPS list 1B species (plants rare, threatened or endangered in California and elsewhere)

Discussion

Northern Parcel Fill Impacts

Fisheries impacts associated with the project were likely insignificant. Based on a review of 1983 and 1996 aerial photographs, 1993 handheld camera images, and a field review during a heavy runoff period,

there appeared to be no encroachment into the wetted channel or removal of streamside vegetation by the landowner, other than the mowing of grassy species. There was no concentrated runoff reaching Martin Slough despite the recent heavy rains and flooding conditions. All runoff from the project area was dispersed through pasture and wetland vegetation, which trapped the small amount of suspended sediment present. The runoff from the project area was observed to be significantly less turbid than the adjacent slough flow. The partial reduction of riparian vegetation and buffer (no loss of woody riparian vegetation/structure) would likely have little effect on fish species.

The impacts to **terrestrial and aquatic wildlife** resources associated with the fill along the driveway are minimal. It appears that no vegetation cover was removed before placement of the fill. The total area of natural soil surface filled by the incursion into the wetland buffer is small (approximately 280 square feet). The surrounding land uses, including residential development and the presence of the municipal golf course, further lessens the value of the site to terrestrial wildlife. Although the fill represents an incremental loss of natural area, and is in close proximity to a wetland area, there should be no significant impacts to wildlife from the fill.

The **botanical** resources impacted with the placement of fill were predominately of low quality (ruderal) due to past impacts by residential development. The overall botanical impacts associated with the placement of fill are minimal with the notable impact being a small decrease of brushy riparian vegetation within the riparian corridor.

Southern Parcel Fill Impacts

There do not appear to be any **fisheries** impacts from activities associated with the southern fill area. The fill is well outside the riparian buffer. Any runoff capable of carrying sediment is carried to the grass and sedge wetland vegetation downslope. Filtering of fine sediment is accomplished by the dispersal of runoff through the wetland vegetation. No sediment discharge into Martin Slough was observed during field review in spite of the recent heavy rainfall and flooding conditions.

The grading operation that occurred on the southern parcel had minimal impacts to terrestrial **wildlife** resources. There was some loss of foraging and burrowing habitat for small wildlife species, although the small area (approximately 2,900 square feet) of the fill and predominately herbaceous vegetation in this portion of the site diminishes the degree of impact. The current non-vegetated condition of the graded area is allowing surface erosion (gullying) to occur. Sediment mobilized from this area is delivered into the wetland area immediately downslope, and the standing water there during the second field visit was quite turbid (visibility was approximately 8 inches). It appears that the wetland area on the parcel is currently filtering the sediment before runoff enters the slough. Ultimately, landscaping on the southern development site should correct the current surface erosion problem there. In summary, no significant impacts to terrestrial wildlife resulted from the grading on the southern parcel. Impacts to aquatic wildlife are expected to be short-term and also not significant.

The **botanical** resources impacted with the placement of fill were predominately of low quality (ruderal) due to past impacts by livestock usage. The overall botanical impacts associated with the placement of fill are minimal. The most conspicuous impacts are the further fragmentation of open space and the partial loss of hillside scrub vegetation.

Mitigation Recommendations

Several mitigations are recommended for the two parcels and associated fill areas. These measures will further reduce the level of impact associated with the grading on the property.

- Repair or replace 12-inch culvert with the crushed inlet on the access road.
- Remove non-native blackberry thickets in the riparian corridor and wetland to allow for the reestablishment of native riparian and wetland vegetation.
- Enhance riparian structure with native shrubs and trees, such as, western azalea (*Rhododendron occidentale*), red flowering currant (*Ribes sanguineum* var. *glutinosum*), wax myrtle (*Myrica* californica), cascara (*Rhamnus purshiana*), red alder (*Alnus oregona*), Pacific willow (*Salix lucida* ssp. *lasiandra*), and Sitka willow (*Salix sitchensis*).
- Native plant enhancement along the edge of the fill and wetland buffer with the development of the southern parcel
- Utilize erosion control measures (placement of straw or other mulch) to reduce sediment mobilization on the recent fill of the southern parcel.

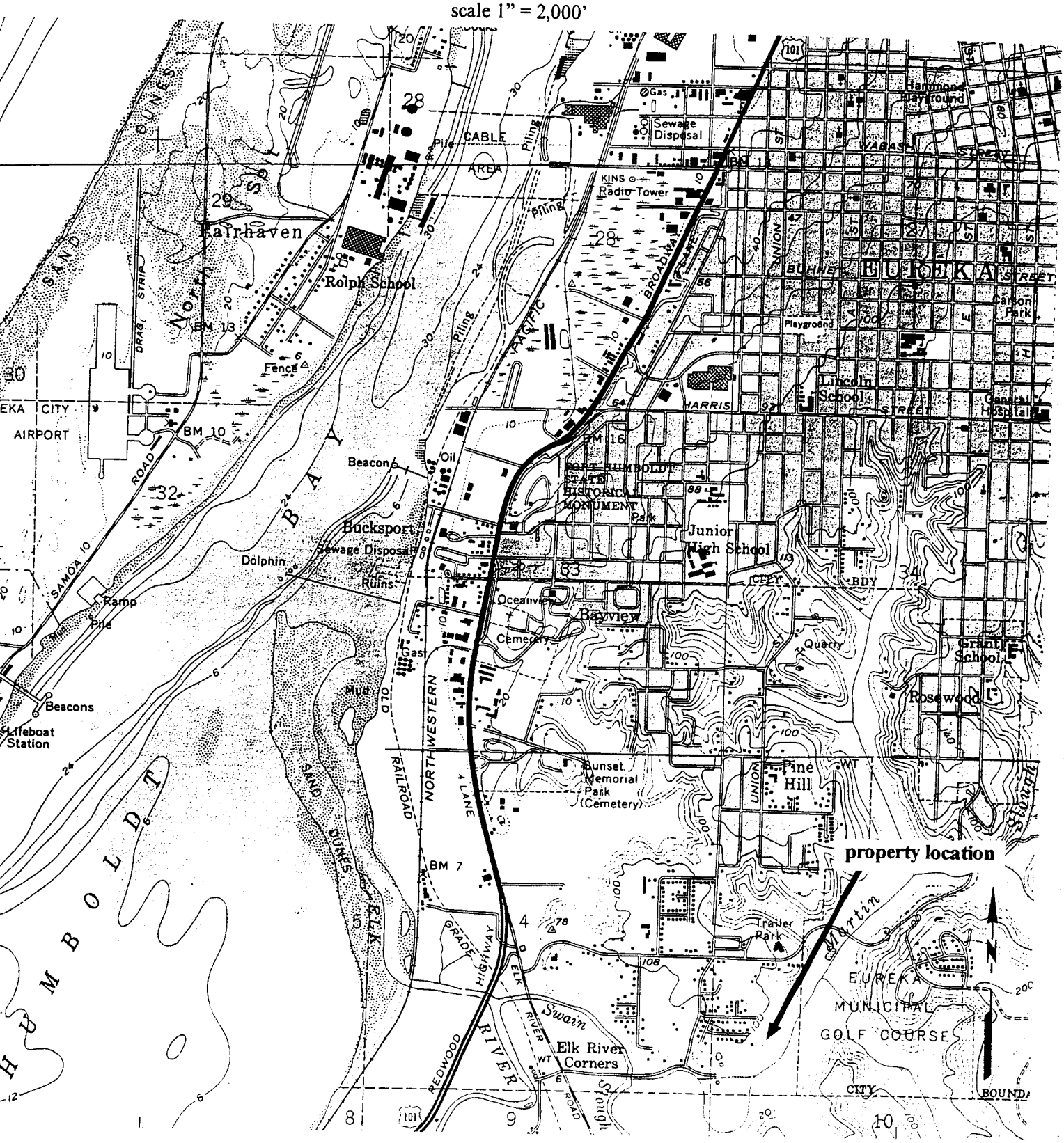
Summary

The placement of fill in the **northern parcel** largely affects only the existing residential landscape with a minor portion affecting the riparian corridor through a loss of vegetation and width. The placement of fill **southern parcel** has resulted in a loss of predominately ruderal vegetation, but has not impacted the higher quality wetland habitat present on the parcel. Non-significant impacts to biological resources are associated with the grading activities. Implementation of the recommended mitigation measures should further reduce any adverse impacts to wetland and biological resources.

Vicinity Map of the Fredrickson Property

Eureka USGS 7.5' minute quadrangle

scale 1" = 2,000'



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NRM
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October 21, 2003

Bob Merrill
California Coastal Commission
North Coast District Office
P.O. Box 4908
Eureka, CA 95502

Re: Addendum to Biological Assessment of APN 301-181-02

Dear Mr. Merrill,

This addendum addresses potential impacts to wetland and botanical resources as a result of a road (driveway) realignment on the Fredrickson property ("Parcel A"), 207 Fredrickson Lane, Eureka, CA (APN 301-181-02). The property owner is seeking an "after the fact" permit from the California Coastal Commission for the road realignment work, which resulted in the removal of riparian vegetation and the deposition of fill within 50 feet of Martin Slough, specifically on top of an area determined to be a wetland within the County Coastal Zone. This letter serves as an addendum to the Biological Assessment that was conducted for the property by NRM Corp. dated February 25, 1999 (herein "BA"), and it expresses my biological opinion on the potential impacts of the fill placement on wetland and botanical resources. The information on which my biological opinion is based includes a review of the BA combined with a site visit to the property on September 22, 2003.

There are two filled areas that this letter addresses: one is the inner fill area (on the western side of the realigned driveway), which is where the old gravel driveway was situated and which was filled with topsoil and now is covered with lawn grass; and the other is the outer fill area (on the eastern side of the road), which was cleared of vegetation (primarily the introduced Himalayan blackberry as well as various native and non-native herbaceous species), filled with mostly gravel material, and now is comprised primarily of lawn grass and encroaching Himalayan blackberry (*Rubus discolor*). According to the BA and a follow-up letter to Tiffany Tauber of the Coastal Commission from NRM Staff Botanist Clare Golec dated January 5, 2000, this outer fill area is approximately 140 feet in length, 1 to 5 feet in width, 34 feet from Martin Slough, and comprised of hydric (wetland) soils.

Based on my site visit and review of informational resources, I agree with the BA's conclusion that there were minimal impacts to biological resources at this site due to the removal of vegetation and the placement of fill. As the BA describes, existing conditions on the property prior to the unpermitted work were characterized by a severely degraded channel in a residential landscape with a dominance of ruderal pastureland vegetation components of mostly non-native grasses and forbs. The channel is degraded due to a variety of impacts associated with upstream residential development and conversions of wetlands for a golf course and

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livestock pastures. The vegetation along the riparian corridor consisted largely of the weedy Himalayan blackberry and the native Pacific bramble (*Rubus ursinus*), and no woody riparian vegetation was removed in the road realignment work. The slough exhibits no tidal influence at this locale (as indicated by the absence of saline-tolerant plants), and the BA concludes that no sensitive species were impacted by the unpermitted activities. As the BA further concludes, the primary biological impact associated with the removal of vegetation and placement of the outer fill is a "small decrease of brushy riparian vegetation within the riparian corridor." As mentioned above, the "brushy riparian vegetation" that existed on the site prior to removal was largely the weedy Himalayan blackberry and the native Pacific bramble. On my site visit of September 22, 2003, it was noted that an abundance of Himalayan blackberry dominated the riparian corridor, and its cover has apparently increased in the years since the BA was written. The BA recommended removal of non-native blackberry in the riparian corridor and enhancement of the riparian corridor with native shrubs and trees. Based on my site visit and the information I have reviewed, these mitigation measures do not appear to have been implemented.

Regarding pre-fill conditions at the inner fill area (which is further away from the riparian corridor and on top of the old gravel road), again, the BA concludes that the landscape was residential and ruderal in nature, and it is highly unlikely that any sensitive species were impacted by the fill placement. On my recent site visit I observed that the inner fill area consisted of a manicured lawn that was higher in elevation (by at least a few feet) than the outer fill area and apparently upland in nature (although a formal wetland analysis was not conducted, and it is possible that hydric soils are present beneath the fill). I do not believe there would be any biological benefit to removing the fill at this site to restore it to its pre-fill condition for two reasons: 1) the fill was placed on top of an existing gravel road, so the area that was potentially impacted by the inner fill placement was already disturbed in nature with altered vegetative, hydrologic, and soils conditions; and 2) as the BA describes, the conditions at the site prior to fill placement were likely characterized by a ruderal and residential landscape distinctly lacking in natural habitat and native vegetation.

Although the new road alignment is within 50 feet of Martin Slough, I believe that this wetland habitat would benefit more from restorative and enhancement mitigation measures within the existing riparian corridor than from removing the outer fill and the existing driveway and reconstructing the driveway further to the west (outside of the former wetland area). My reasons for this opinion include the following:

1. As described in the BA and previously in this letter, the former wetland at the outer fill site was of relatively low quality due to a history of various biologically-degrading land use practices on and surrounding the property. The riparian corridor was and still is characterized by abundant Himalayan blackberry cover and a lack of woody native vegetation. As the BA states, this area likely did not harbor any sensitive species nor provide high quality habitat for any potentially occurring sensitive species.
2. Reconstruction of the driveway outside of the former wetland area would not improve habitat quality to this wetland site unless it was conducted in conjunction with extensive restoration activities in the riparian corridor – beyond just the outer fill area. These

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activities would need to include ongoing nonnative plant removal and native species planting to enhance vegetative structure and diversity.

Allowing the driveway placement to remain as is while implementing active restoration and enhancement in the riparian corridor in my opinion would provide greater benefit to biological and wetland resources than simply reconstructing the driveway and removing the fill. I agree with the BA's recommended mitigation measures for the northern parcel, which promote riparian restoration and enhancement. These include the following:

- Repair or replace the 12-inch culvert with the crushed inlet on the access road;
- Remove non-native blackberry thickets in the riparian corridor and wetland to allow for the reestablishment of native riparian and wetland vegetation; and
- Enhance riparian structure with native shrubs and trees such as western azalea (*Rhododendron occidentale*), red flowering currant (*Ribes sanguineum* var. *glutinosum*), wax myrtle (*Myrica californica*), cascara (*Rhamnus purshiana*), red alder (*Alnus rubra*), Pacific willow (*Salix lucida* ssp. *lasiandra*), and Sitka willow (*Salix sitchensis*).

If there is any other information that I can provide you with, please do not hesitate to contact me at 707/269-1382.

Sincerely,

Melissa Brooks, NRM Staff Botanist

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