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Staff: Tiffany S. Tauber
Staff Report: October 26, 2001
Hearing Date: November 14, 2001
Commission Action: Approved with Conditions

STAFF REPORT: REVISED FINDINGS

APPLICATION NO.:	**1-01-019**
APPLICANT:	**Simpson Paper Company**
AGENT:	Tetra Tech/ MFG
PROJECT LOCATION:	At the former Simpson Paper Company Humboldt Pulp Mill, 1920 Bendixsen Street, Fairhaven, Humboldt County (APN 401-311-05)
PROJECT DESCRIPTION:	Restore 6.8 acres of shoreline by (1) removing an existing bulkhead and associated fill soils, concrete rubble, pilings and utility poles; (2) placing up to 750 cubic yards of sand to restore the beach to natural grade; (3) removing approximately 190 piles and two pile-supported structures, and (4) removing and replacing a timber-pile mooring dolphin.
SUMMARY OF COMMISSION ACTION:	Approved with Conditions
COMMISSIONERS ON THE PREVAILING SIDE:	Dettloff, Estolano, Ruddock, Orr, Potter, Reilly, Wooley, Wan
GENERAL PLAN DESIGNATION:	Industrial/Coastal Dependent, Industrial General (MC/MG)

ZONING DESIGNATION:	Industrial/Coastal Dependent, Industrial General, Archaeological Resources combining zone (MC/A, MG)
LOCAL APPROVALS RECEIVED:	(1) Humboldt Bay Harbor, Recreation and Conservation District, (2) Regional Water Quality Control Board – Section 401 Certification
OTHER APPROVALS REQUIRED:	Army Corps of Engineers
SUBSTANTIVE FILE DOCUMENTS:	(1) Humboldt County Local Coastal Program; (2) Initial Study/Negative Declaration for the Proposed Simpson Paper Company Fairhaven Shoreline Restoration Project at Fairhaven, Humboldt County, California (May 2001, MFG Inc.)

STAFF NOTES:

1. Procedure

The Commission held a public hearing and approved the permit at the meeting of September 13, 2001. The adopted conditions and findings differ slightly from those contained in the written staff recommendation dated August 31, 2001. At the public hearing, the staff revised its written recommendation to make changes to Special Condition No. 10. Special Condition No. 10 was revised to incorporate further provisions for removing and monitoring exotic vegetation at the project site by incorporating a 75% cover success standard and the requirement to prepare a revised restoration program and obtain a permit amendment, should it be required, if the success standard is not met after the three year monitoring period.

The Commission adopted the staff recommendation as modified. As the Commission's action on the project differed from staff's written recommendation, staff has prepared the following set of revised findings for the Commission's consideration as the needed findings to support its action at the hearing. The Commission will hold a public hearing and vote on the revised findings at its November 14, 2001 meeting. The purpose of the hearing is to consider whether the revised findings accurately reflect the Commission's previous action rather than to reconsider the merits of the project or the appropriateness of the adopted conditions. Public testimony will be limited accordingly.

2. Standard of Review

The proposed project is located in Humboldt County. Humboldt County has a certified LCP, but the portion of the project that is the subject of Coastal Development Permit No. 1-01-019 is within the Commission's retained jurisdictional area onshore and offshore along Humboldt Bay. Therefore, the standard of review that the Commission must apply to the project is the Chapter 3 policies of the Coastal Act.

I. MOTIONS AND RESOLUTIONS

MOTION, STAFF RECOMMENDATION, AND RESOLUTION TO ADOPT REVISED FINDINGS

The staff recommends that the Commission adopt the revised findings in Section IV below in support of the Commission's action on September 13, 2001 approving the project with conditions. The proper motion is:

Motion:

I move that the Commission adopt the revised findings, in support of the Commission's action on September 13, 2001, approving Coastal Development Permit No. 1-01-019, with conditions.

Staff Recommendation of Approval

Staff recommends a **YES** vote on the motion. Passage of this motion will result in the adoption of revised findings as set forth in this staff report. The motion requires a majority vote of the members from the prevailing side present at the September 13, 2001 hearing, with at least three of the prevailing members voting. Only those Commissioners on the prevailing side of the Commission's action are eligible to vote on the revised findings. See the listing of eligible Commissioners on Page 1.

Resolution to Adopt Revised Findings:

The Commission hereby adopts the findings set forth below for the approval with conditions of Coastal Development Permit No. 1-01-019 on the ground that the findings support the Commission's decision made on September 13, 2001 and accurately reflect the reasons for it.

ACTION ON COASTAL DEVELOPMENT PERMIT ON SEPTEMBER 13, 2001

Adopted 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 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. Protection of Eelgrass Habitat

The eelgrass beds in the project area shall be delineated with floating buoys prior to commencement of construction and equipment shall operate outside the delineated eelgrass beds at all times. Grounding and direct contact of the barge with eelgrass beds shall be avoided at all times. No propellers, anchors, construction equipment, or piles shall be dragged over the mudflats or eelgrass beds.

2. Sand Placement and Grading Plan

A. **PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall submit, for the review and approval of the Executive Director, a plan for placing sand onshore to restore the beach to adjacent contours following removal of the bulkhead and associated fill material.

1. The plan shall include at a minimum, the following components:

   a. Identification of the source, grain size, and composition of the sand to be used;

   b. Copies of any required permits needed to obtain the sand, or evidence that no permits are necessary;

   c. A grading plan diagram showing the volume and location of the sand to be placed and a cross-section showing the proposed gradient not to exceed that of the adjacent beach slope (20 horizontal feet : 1 vertical foot).

2. The plan shall demonstrate that the sand proposed to be placed at the site is free of contaminants and is of a grain size that is comparable to the grain size of the sand existing at the site. The plan shall further demonstrate that only the minimum volume of sand necessary shall be used to restore the bulkhead removal area to match existing adjacent beach gradients and shall not exceed a slope of 20 horizontal feet : 1 vertical foot.

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

3. Construction Responsibilities

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

(a) No construction debris or waste shall be placed or stored where it may be subject to entering coastal waters;

(b) Any and all debris resulting from construction activities shall be removed from the project site within 10 days of project completion and in accordance with the construction debris removed and disposal plan required by Special Condition 5;

(c) No machinery or construction materials not necessary for project construction shall be allowed at any time in Humboldt Bay;

(d) Non-buoyant debris discharged into coastal waters shall be recovered by divers as soon as possible after loss;

(e) Containment booms shall be installed around all piles and structures to be removed and floating debris within the containment boom shall be removed daily.

4. Pile Preservatives

No creosote treated piles shall be placed in the waters of Humboldt Bay. The piles used to replace the timber mooring dolphin shall be of concrete, steel, composite, or timber treated with Chemonite, a wood preservative approved by the Department of Fish and Game.

5. Construction Debris Removal and Disposal

A. PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the permittee shall submit for the review and approval of the Executive Director a plan for

the disposal of construction-related debris. The plan shall describe the manner by which the material will be removed from the construction site and identify all temporary stockpiling and permit disposal sites that will be utilized. The plan shall demonstrate that all stockpiling and disposal sites are in upland areas where construction-related debris from this project may be lawfully stockpiled and disposed.

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

6. Debris Stockpile

All stockpiled material including creosote-treated piles, excavated fill materials, and any other project debris not subject to immediate disposal shall be stockpiled at least 75 feet from the edge of the bay waterline and shall be covered and contained at all times during the rainy season between October 1 and April 30.

7. Fill Removal Plan

A. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit for review and approval of the Executive Director, a plan for the proposed removal of the fill material behind the bulkhead.

The fill removal plan shall demonstrate that:

(1) Run-off from the project site shall not result in sediment, debris, or other pollutants entering coastal waters;

(2) All fill material and debris behind the bulkhead shall be removed prior to removal of the timber bulkhead structure;

(3) Best Management Practices (BMPs) such as a berm or cofferdam shall be used to contain the fill removal area and prevent water from seeping behind the bulkhead and coming in contact with fill materials.

The plan shall include, at a minimum, the following:

(1) A schedule for installation, use and maintenance of appropriate best management practices (BMPs) to prevent the entry of fill materials and debris into coastal waters during the demolition, removal, storage, and transportation of the bulkhead and associated fill materials.

(2) A detailed site plan showing the location of all Best Management Practices (BMPs) as required by (A)(3) above.

(3) Provisions for noticing the Department of Fish and Game, the Department of Environmental Health, and the Regional Water Quality Control Board in the event that hazardous substances are encountered during the excavation of fill materials. In the event that following notification, it is determined that revisions to the method of fill removal, or any other changes to the project are required, the applicant shall inform the Executive Director. Such changes shall not be incorporated into the project until the applicant obtains an amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.

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

8. Equipment Fueling and Maintenance

No fuel storage shall occur below mean higher high water (MHHW) at the project site. Equipment fueling shall occur only during daylight hours in designated fueling areas at least 75 feet away from the edge of the bay. Oil absorbent booms and/or pads shall be on site at all times during project construction. All equipment used during construction shall be free of oil and fuel leaks at all times.

9. Pile Removal

All piles shall be removed in their entirety and shall not be cut at the mudline.

10. Exotic Vegetation Removal and Monitoring

A. The beach area to be restored by removal of the bulkhead and associated fill shall be monitored at least twice annually for three years following removal of the fill for the recolonization of native indigenous plants, and for the presence of invasive exotic plant species. Areas of disturbed soil above the line of highest tidal action shall achieve no less than 75 percent coverage with native indigenous plants within 3 years. Invasive, exotic plant species shall be abated from this area during the three-year monitoring period. The preferred method of exotic plant abatement is hand removal.

B. On October 1 of each year of the monitoring period, the permittee shall submit for the review and approval of the Executive Director a monitoring report detailing the plant species and their abundance found within the affected area and the measures taken that year to remove invasive exotic plant species. Photographs of the affected area taken before and after that

year's semi-annual work to remove invasive plants shall be submitted with the report. The final report must be prepared by a qualified professional and evaluate whether the objective of 75% coverage of the disturbed area with native indigenous species within 3 years has been achieved. If the report indicates that recolonization with native plants has been unsuccessful, in part, or in whole, the applicant shall submit for the review and approval of the Executive Director a revised restoration program to achieve the 75% coverage performance standard. The revised restoration program shall require an amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

11. Army Corps of Engineers Approval

PRIOR TO COMMENCEMENT OF CONSTRUCTION, permittee shall provide to the Executive Director a copy of a permit issued by U.S. Army Corps of Engineers, or letter of permission, or evidence that no permit or permission is required. 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 required.

IV. FINDINGS AND DECLARATIONS:

The Commission hereby finds and declares:

1. Site & Project Description

The project site is located at the Simpson Paper Company's Humboldt Pulp Mill at the southern portion of the Samoa Peninsula, on the east side of Bendixsen Street adjacent to Humboldt Bay in the Fairhaven area of Humboldt County (see Exhibit Nos. 1-3). The project area consists of state-owned tidal lands granted to the Humboldt Bay Harbor, Recreation and Conservation District, which are leased by Simpson Paper Company. The lease area consists of upper intertidal, lower intertidal and subtidal lands totaling approximately 6.8 acres and includes 840 linear feet of shoreline. The shoreline structures at the site were originally part of an industrial plywood facility and were originally constructed around the 1940's. The uplands bordering the shoreline to the east are separated from the beach by a six-foot-high chain link fence. The facilities east of the fence are outside of the lease area and include a paved parking area and several industrial facilities that were part of a plywood mill that is no longer in operation.

Simpson no longer intends to use the 6.8 acre lease area for water dependent uses and is therefore terminating its lease with the Humboldt Bay Harbor, Recreation, and Conservation District. As part of the lease agreement, Simpson Paper Company is required to remove structures from the project site and restore the site "*as nearly as possible to the condition existing prior to the erection or placing of the structures...*" The proposed project involves removing 190 piles, two pile-supported structures, a timber bulkhead and associated fill materials and surrounding concrete rubble and asphalt paving (Exhibit Nos. 4 & 5). The proposed project also

involves placing sand where the bulkhead and associated fill is to be removed to restore the natural gradient of the beach. Another proposed project element unrelated to the terms required in the lease agreement involves removing and reconstructing a timber mooring dolphin at an adjacent docking facility to the north of the lease area (Exhibit No. 6).

The upper beach south of the bulkhead and the old fill area behind the bulkhead is a largely disturbed area comprised primarily of nonnative vegetation such as soft chess, rye grass, pampas grass, Himalayan blackberry, ice plant, European beach grass, and yellow bush lupine. The north end of the lease area contains a band of salt marsh vegetation including pickleweed and salt grass and some native vegetation including beach grass, Pacific wax myrtle, and coyote brush. A contiguous stretch of native dune and salt marsh vegetation to the north of the bulkhead would not be removed by the proposed project.

The tidal and submerged areas of the project site provide habitat for a variety of fish and invertebrate species. Pacific herring spawn in the eelgrass beds of Humboldt Bay and northern anchovy migrate into the bay to feed. Other fish species common to the bay that could inhabit the project site include longfin smelt, shiner perch, redtail surfperch, speckled sanddab, and starry flounder. Other finfish that could feed in the project area include brown smoothound, leopard shark, sevengill shark, and bat ray. Humboldt Bay provides seasonal habitat for several federally listed threatened and endangered salmonid species including Coho salmon, Chinook salmon, and steelhead trout. In addition, critical habitat has been designated for southern Oregon/northern California coast Coho salmon, California coastal Chinook salmon, and northern California steelhead and includes the project area.

Invertebrates in the intertidal mudflats and muddy bottoms are important prey for many fish and birds in the Humboldt Bay area. Common invertebrates in the shallow areas in the project vicinity include ghost shrimp, polychaetes, bivalves, gastropods, and oysters. Species in deeper water areas include gaper clams, Washington clams, little neck clams, cockles, and various polychaetes.

The lower intertidal portion of the lease area contains a band of eelgrass extending along the length of the shoreline lease area approximately 840 linear feet and extending between 40 to 140 feet bayward beginning at two feet above mean lower low water (MLLW). Twenty piles are located within the eelgrass bed and the majority of the piles (170) are outside of the eelgrass beds. The eelgrass beds also provide substrate for many invertebrates, including hydrozoans, colonial ascidians, and the aplysid gastropod. Also associated with the eelgrass beds are rock crabs and Dungeness crab.

The project site provides limited terrestrial wildlife habitat value due to its disturbed nature and past use as an industrial timber facility. The Brown Pelican occurs seasonally within Humboldt Bay, typically from April through November. There are no known Pelican roosts within the project area. The Peregrine Falcon occurs within Humboldt Bay and could forage near the project vicinity. Due to the limited scope of this project these species would not be adversely affected.

The subject site is accessed by Navy Base Road, a paved road that runs north-south along the Samoa Peninsula. Paved roads within the timber processing complex provide access to the project site and the paved upland area proposed to be used for stockpiling construction debris. The project is expected to take 8 to 10 weeks to complete and would result in a net increase of approximately 14,712 square feet of intertidal and subtidal habitat. The proposed project elements are discussed in further detail below.

Detailed Project Description

1. Removal of Bulkhead, Fill Materials, Concrete and Asphalt Rubble Onshore

The applicants propose to remove an existing 150-foot-long timber bulkhead, associated fill material and asphalt behind the bulkhead totaling 1,200 cubic yards and covering 8,672 square feet, and remove 200 cubic yards of surrounding concrete rubble covering 1,264 square feet of shoreline (Exhibit No. 5). The bulkhead extends from the shoreline into the intertidal area and does not provide significant shoreline erosion control or protection of existing structures. Rather, the bulkhead was originally constructed during the 1940's to create a raised pad to facilitate transporting logs from the log ramp offshore to onshore processing facilities.

The applicants indicate that foreign materials such as sands, gravel, mud, and/or debris may have been placed below grade when the bulkhead was originally constructed. These materials would be excavated and removed prior to removal of the bulkhead, thereby creating a depression along the sandy shoreline. Thus, following removal of the bulkhead and fill materials, the applicants propose to place up to approximately 750 cubic yards of sand to fill in the depression and return the beach to its natural contour and restore the area to intertidal habitat. Beach grading is intended to match the beach gradient to the north and south and restore a beach face slope ratio of approximately 20:1 (20 horizontal feet : 1 vertical foot).

Required equipment would include a track-mounted excavator and dump truck for demolishing the structures, a bulldozer for placing and excavating sand, specialized concrete demolition equipment to remove and break up concrete foundations, and a crane with specialized equipment for pile extraction. All work in this area would be done when the tide is low and protective mats would be placed on the beach to reduce potential beach compaction. The applicants propose to utilize the existing paving and bulkhead as an equipment platform from which the heavy equipment would operate as much as possible. All material removed from behind the bulkhead would be stored on the paved upland portion of the site away from the bay in an upland location. The applicants propose that pilings, timbers, and utility poles would be recycled, reused, or remarketed by Simpson and concrete and metal would be disposed of at a licensed landfill.

2. Removal of Piles and Pile-Supported Structures Offshore

The applicants propose to remove 190 creosote-treated piles and 4,586 square feet of pile-supported structures including a log ramp and pump house within the lease area. The lower

intertidal portion of the lease area contains a band of eelgrass extending along the length of the shoreline lease area approximately 840 linear feet and extending between 40 to 140 feet bayward beginning at two feet above mean lower low water (MLLW). Twenty piles are located within the eelgrass bed and the majority of the piles (170) are outside of the eelgrass beds. The piles nearest the beach, the log ramp, and pump house would be removed using a land-based crane and boom. Most of the piles occur in deeper water outside of eelgrass beds and would be removed using a barge-mounted crane. The two pile-supported structures within the eelgrass beds can be reached by a crane positioned on top of the existing bulkhead, thus avoiding the need to position a barge on top of or near the eelgrass beds.

The applicants propose to delineate the seaward extent of eelgrass with buoys to ensure that the barge stays outside of this area at all times. A debris boom would be used in the bay to contain pieces of wood that break off during removal and the piles would be removed in their entirety. The barge would utilize existing piles to anchor in place, or may utilize a "spud" (steel piles mounted on the barge) to stabilize the barge to remove piles outside of the eelgrass area. Piles would be removed with a crane and loaded onto the barge for transfer to an adjacent dock, then trucked on existing paved roads to an adjacent paved upland area for future reuse, recycling or remarketing by Simpson.

3. Removal and Replacement of a Mooring Dolphin Offshore

A third proposed project element unrelated to the restoration of the lease area, involves the proposed removal and replacement of a mooring dolphin used to moor freighters at the Simpson-owned Fairhaven Terminal Dock located adjacent to the north end of the lease area (Exhibit No. 6). The mooring dolphin is in disrepair and the applicants indicate that for the Fairhaven terminal dock to remain a safe, productive shipping facility, this dolphin must be replaced. The dolphin is constructed of approximately 30 timber piles with a catwalk extending to the main dock. The existing piles would be removed and the dolphin would be reconstructed in the same location using composite, concrete, steel or acceptable treated timber piles. The existing catwalk would then be connected to the new mooring dolphin. The dolphin is located in water approximately 25 feet deep and therefore, there is no potential for impacts to eelgrass or intertidal habitats. Piles would be removed with a crane and loaded onto the barge for transfer to an adjacent dock, then trucked to an adjacent paved area for future reuse, recycling or remarketing by Simpson.

3. Protection of Environmentally Sensitive Habitat Areas (ESHA)

Section 30240 of the Coastal Act states:

> *(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.*

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

Several types of environmentally sensitive habitat occur at the project site including intertidal and submerged wetlands that are comprised of eelgrass beds and unvegetated mudflats. In addition, a stretch of native dune and salt marsh vegetation exists adjacent to the north end of the bulkhead.

Development Within Environmentally Sensitive Habitat Areas

Section 30240 requires that environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values and only uses dependent on the resource are allowed within an environmentally sensitive habitat area. The portion of the proposed project involving the removal of approximately 190 piles and two pile-supported structures within Humboldt Bay including a log ramp and pump house totaling approximately 4,586 square feet would occur within an environmentally sensitive habitat area. The structures and piles to be removed are located within a wetland (submerged areas of Humboldt Bay) and are partially located within an eelgrass bed adjacent to the shoreline beginning at two feet below mean lower low water (MLLW). The eelgrass bed extends the length of the shoreline lease area, approximately 840 linear feet, and extends approximately 40 to 140 feet bayward.

Eelgrass (*Zostera marina)* is a flowering plant that extends long rhizomes (roots) an average of 1.5 – 8 inches below the substrate from which the turions (stems) sprout with long, green blades (leaves) and it thrives under particular conditions in protected coastal waters with sandy or muddy bottoms. Eelgrass is considered to be an environmentally sensitive habitat area worthy of protection because it functions as important shelter and foraging habitat for a variety of fish and wildlife. For example, black brant, small migratory geese, feed almost exclusively on eelgrass. In addition, eelgrass provides cover for juvenile fish and in some locations serves as a spawning ground for herring.

Anadromous fish species that may occur in Humboldt Bay include federally listed threatened and endangered species including Coho salmon, Chinook salmon, and steelhead trout. Essential Fish Habitat (EFH) has been designated under the Magnuson-Stevens Fishery Conservation and Management Act and includes those waters and substrates necessary for fish to spawn, breed, feed, or grow to maturity. The piles and structures in the lower intertidal and subtidal area are within Essential Fish Habitat.

The proposed pile removal work would remove the last shoreline vestiges of an old timber processing facility use that is no longer in operation. Thus, the proposed removal of the piles and structures would remove remnants of an old use within an ESHA and does not constitute a new use. Therefore, the pile removal work within the intertidal and submerged wetlands is consistent with the use requirements of Section 30240(a) of the Coastal Act. To protect the

eelgrass beds from significant disruption from the pile removal work, the eelgrass beds would be delineated within the project area and the barge that would be used to perform the pile removal would stay outside of the eelgrass at all times. Removing structures and piles would enhance the productive potential for eelgrass by increasing solar exposure and would result in more available surface area for invertebrates and eelgrass to colonize. Thus, the project would enhance the quality of EFH. The National Marine Fisheries Service was consulted during the project and NMFS has indicated that the project would have negligible effects to Pacific salmonids and EFH.

Approximately 20 piles, the pump house, and portions of the log ramp to be removed are located within the eelgrass beds and the remainder (approximately 170 piles) are located outside of the eelgrass. The piles nearest the beach and the two pile-supported structures would be removed using a land-based crane and boom positioned on top of the existing bulkhead, thus avoiding the need to position a barge on top of or near the eelgrass beds. The applicants indicate that the boom can reach up to 100 feet and that only a 50-foot reach from the shore is required to remove the piles that are located within the eelgrass beds. The piles that occur in deeper water outside of the eelgrass beds would be removed using a barge-mounted crane positioned at the bayward edge of the eelgrass bed. The barge draws approximately three feet of water and the farthest seaward line of piles are in water that is 25-27 feet deep at high tide, the second row (seaward) of piles are in 20-22 feet of water, and the inner row of piles are in 8-15 feet of water. Based on these known site-specific water depths, there would be no potential for grounding the barge on top of the eelgrass bed. The barge would utilize existing piles to anchor in place, or may utilize a "spud" (steel piles mounted on the barge) to stabilize the barge to remove piles outside the eelgrass area. Piles would be removed with the crane and loaded onto the barge for transfer to an adjacent dock, then trucked on an existing paved access road to a nearby storage area.

The eelgrass beds have been delineated in the project area and the applicants propose that the barge would operate outside of eelgrass beds at all times to avoid adverse impacts to the ESHA. The applicants propose to delineate the seaward extent of eelgrass with small buoys during construction to ensure that the barge stays outside of this area. The proposed removal of 190 piles and the pile-supported structures would result in an increase in the amount of wetland surface area into which the eelgrass could naturally colonize at the project site and removal of the over-water structures eliminates shading, which can impede the growth of eelgrass.

To ensure that the barge and all other construction equipment does not operate from within the eelgrass beds as proposed, the Commission attaches Special Condition No. 1. Special Condition No. 1 requires the applicant to install floating buoys prior to commencement of construction to delineate the seaward extent of the eelgrass within the project area and requires that all equipment operate from outside the delineated area at all times. In addition, the Commission finds that adverse impacts to eelgrass could occur if the piles or other equipment were to be dragged over the bottom in areas of eelgrass beds. Therefore, to further protect the eelgrass from significant disruption of habitat values, Special Condition No. 1 prohibits propellers, anchors, construction equipment, or piles from being dragged over the mudflats or eelgrass beds.

Development Adjacent to Environmentally Sensitive Habitat Areas

Section 30240(b) requires that development in areas adjacent to environmentally sensitive habitat areas (ESHA) shall be sited and designed to prevent impacts which would significantly degrade the ESHA and that development shall be compatible with the continuance of the adjacent ESHA. The proposed removal of the concrete rubble, timber bulkhead, and associated fill material would occur adjacent to three types of environmentally sensitive habitat including intertidal habitat, eelgrass beds, and native dune and salt marsh vegetation. The proposed removal of the bulkhead and associated fill material and the proposed placement of sand could significantly degrade the adjacent ESHA if (1) the fill materials behind the bulkhead were subject to dispersal with the tide, (2) the sand to be placed is contaminated or of a different composition than that of the receiving beach, and (3) if invasive exotic vegetation were allowed to take hold and displace the native dune and salt marsh vegetation.

The applicant has indicated that there is some uncertainty as to whether any fill materials were placed below grade when the bulkhead was constructed in the 1940's that would need to be excavated with the proposed removal of the bulkhead and associated above-grade fill material. It is possible that sands, mud, or potentially deleterious materials and debris exist behind and below the bulkhead. The applicant is proposing to do the fill excavation and bulkhead removal during periods of low tide. However, it is assumed that it may take several tidal cycles to complete this portion of the project. If the bulkhead structure were removed prior to excavation of the fill materials, the fill and any associated debris contained by the bulkhead structure would become exposed to tidal action and subject to dispersal into the bay and adjacent environmentally sensitive habitat areas. Excavating the fill material prior to removing the timber bulkhead structure would provide some barrier and protection against the fill material becoming dispersed by tidal action. It is possible however, that at high tide water could extend behind the landward extent of the bulkhead and come in contact with fill materials, potentially washing them into the bay resulting in degradation of the adjacent eelgrass bed and intertidal habitat.

To ensure that the fill materials are removed prior to removal of the bulkhead structure and that the excavation area be protected from contact with bay waters at high tide, the Commission attaches Special Condition No. 7. This condition requires that prior to issuance of the permit, the applicant submit for review and approval by the Executive Director, a plan for removing the fill and containing the excavation site in a manner that would prevent water from coming in contact with the fill materials behind the bulkhead such as the installation of a berm or cofferdam around the bulkhead. In the event that any contaminated materials are discovered during excavation, the applicant is required by Special Condition No. 7 to notify the Department of Fish and Game, the Department of Environmental Health, and the Regional Water Quality Control Board. If revisions to the methods of fill removal, or any other changes to the project are required, the permittee is required to inform the Executive Director and such changes shall not be incorporated into the project until the applicant obtains an amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.

Following removal of the fill material behind the bulkhead, the applicant proposes to place sand in the excavated area to establish a beach gradient similar to that adjacent to the north and south (20' H : 1' V). Grain size composition is an important factor in determining the suitability of the sand proposed to be placed in the intertidal area from both a physical and chemical perspective. The fractional make-up of sand to be placed on the beach should approximate that found in the receiving area. If the sand is finer in composition from that found at the proposed placement site, it may be more readily mobilized in littoral transport resulting in sedimentation and burial of the adjacent eelgrass bed and intertidal habitat. Similarly, if an excessive amount of sand were placed in the area, it could be subject to increased erosion and could also result in sedimentation and burial of the adjacent ESHA. Furthermore, if the imported sand were contaminated, the contaminants could become entrained in water washing over the area with the tide and be potentially toxic to marine organisms inhabiting the adjacent ESHA.

Therefore, to ensure that the proposed placement of sand is done in a manner that would utilize only the minimum necessary amount of clean sand needed to restore the area and not result in smothering of the adjacent eelgrass beds, the Commission attaches Special Condition No. 2. Special Condition No. 2 requires the applicant to submit, prior to issuance of the coastal development permit for the review and approval of the Executive Director, a plan for placing the sand and shall demonstrate in part, that only the minimum amount of sand required to bring the bulkhead area up to existing adjacent grade be placed within the tidal wetland area and not to exceed a 20'H : 1'V slope ratio. Furthermore, the proposed source of the sand has not yet been clearly identified by the applicant. Therefore, Special Condition No. 2 also requires that the plan (1) identify the source of the sand to be placed at the project site, (2) verify that any required permits to obtain the sand have been secured, or that no permits are required, and (3) demonstrate that the sand proposed to be placed at the site is free of contaminants and is of a grain size that is comparable to the grain size of the sand existing at the site.

Currently, vegetation on top of the bulkhead and adjacent to the bulkhead on the south is largely comprised of invasive, exotic species such as pampas grass, Himalayan blackberry, iceplant, European beach grass, and yellow bush lupine. Directly adjacent to the bulkhead on the north however, is an extensive stretch of native dune and salt marsh vegetation comprised largely of native beach grass. The bulkhead currently acts as a barrier to the invasion of exotic species into the area of native vegetation because of the dramatic change in gradient from the top of the bulkhead to the shallow beach gradient that supports the native vegetation below. Once the bulkhead is removed and sand is placed to match the adjacent beach gradient, there is a greater likelihood that the opportunistic invasive exotic plant species present to the south would colonize the area where the bulkhead would be removed. If the invasive exotic species are allowed to establish in the new sandy area, it is likely that these species would eventually encroach upon the native dune grass and salt marsh habitat to the north and outcompete the native species, greatly compromising habitat values within the ESHA. Controlling the establishment of invasive exotic species through manual removal for a period of time following removal of the bulkhead would increase the likelihood that the native vegetation would colonize the area and provide for the continuance of the environmentally sensitive habitat consistent with Section 30240(b). Therefore, to ensure that the development adjacent to the ESHA is compatible with the

continuance of the native dune grass habitat, the Commission attaches Special Condition No. 10 which requires the applicant to monitor and remove exotics twice annually for three years to allow for the native vegetation to colonize the area where the bulkhead would be removed.

In case native plants do not recolonize to the degree expected in the area where the bulkhead would be removed, Special Condition No. 10 provides a mechanism for restoration of the site with native plants. Special Condition No. 10 requires the applicant to submit monitoring reports and photographs of the affected area taken before and after that year's semi-annual work to remove invasive plants. If the final monitoring report indicates that native plants have not recolonized the site to cover at least 75% of the area, the permittee must apply for a permit amendment to successfully implement the restoration program to achieve the 75% performance standard. As conditioned, the Commission finds that the bulkhead removal will be undertaken in a manner that will not provide an opportunity for invasive non-native plants to invade the environmentally sensitive beach grass habitat.

Therefore, as conditioned, the Commission finds that the proposed development adjacent to the ESHA is compatible with the continuance of the ESHA and would not significantly degrade the ESHA consistent with Section 30240.

4. Fill in Coastal Waters and Protection of the Marine Environment

The Coastal Act defines fill as including "*earth or any other substance or material... placed in a submerged area.*" There are two proposed project elements that involve placing fill materials in coastal waters. First, the applicant proposes to reconstruct an existing mooring dolphin by removing and replacing 30 piles in the same location. The mooring dolphin piles to be installed are considered a form of fill, as they would be installed within a submerged area of Humboldt Bay. Second, the applicant proposes to remove an existing timber bulkhead, excavate fill materials behind the bulkhead, and place up to 750 cubic yards of sand to restore the beach to natural grade following removal of the bulkhead and fill materials. The excavation and placement of sand would occur partially below mean high tide, and thus constitutes a form of dredging and filling in coastal waters.

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. Additionally, Section 30231 provides that the quality of coastal waters be maintained.

Section 30231 of the Coastal Act states, in applicable part:

> *The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and the protection of human health shall be maintained and, where*

feasible, restored through, among other means, minimizing adverse effects of wastewater discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantially interference with the surface water flow, encouraging, wastewater reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams. (emphasis added)

Section 30233(a) of the Coastal Act provides as states, 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.

...

(5) Restoration purposes

...

(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 development projects may be allowed in coastal waters. For analysis purposes, the limitations can be grouped into four general categories or tests. These tests are:

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

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

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

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

(a) Allowable Use for Dredging and Filling of Coastal Waters

The first test set forth above is that any proposed fill, diking or dredging must be for an allowable purpose as specified under Section 30233 of the Coastal Act. The proposed project involves two elements that constitute filling and dredging in coastal waters including (1) removing and reconstructing an existing mooring dolphin and (2) excavating fill material behind the existing bulkhead and placing sand to restore the natural grade and intertidal habitat.

Replacement of Mooring Dolphin

Section 30233(a)(1) allows fill for port, energy, and coastal-dependent industrial facilities, provided there are no less environmentally damaging alternatives and that feasible mitigation measures have been provided to minimize adverse environmental effects. The proposed removal and reconstruction of the mooring dolphin is considered fill for an improvement to the Simpson-owned Fairhaven Terminal Dock, an existing port facility, that is used to moor freighters. As discussed in section 4(c) below, the proposed replacement of the mooring dolphin is the least environmentally damaging alternative and required mitigation measures will minimize adverse environmental effects. Therefore, the fill associated with reconstructing the mooring dolphin is consistent with the use limitations under Section 30233(a)(1).

Removal of Bulkhead Fill and Placement of Sand

The proposed excavation of fill material behind the bulkhead and subsequent placement of sand, portions of which would occur below mean high tide, constitutes dredging and filling within coastal waters. The proposed dredge and fill associated with the removal of the fill materials behind the bulkhead and placement of sand is intended to restore the natural gradient and intertidal habitat that existed prior to placement of the bulkhead. As such, the work is for restoration purposes. As discussed in section 4(c) below, the proposed removal of bulkhead fill and placement of sand is the least environmentally damaging alternative and required mitigation measures will minimize adverse environmental effects. Therefore, the dredge and fill associated with excavation of fill materials and placement of sand associated with the proposed bulkhead removal is considered a restoration purpose consistent with the use limitations under Section 30233(a)(5). The mitigation measures and alternatives for these project elements are discussed below.

(b) Feasible Mitigation Measures

The second test set forth by Section 30233 is whether feasible mitigation measures have been provided to minimize adverse environmental impacts. Depending on the manner in which the proposed improvements are conducted, the proposed filling and dredging work could have three potential adverse effects on the marine environment of Humboldt Bay. The project could have potential impacts to: (1) mudflat and intertidal habitat; (2) eelgrass; and (3) water quality. The potential impacts and their mitigations are discussed in the following three sections:

(1) Mudflat and Intertidal Habitat

Invertebrates in the intertidal mudflats and muddy bottoms are important prey for many fish and birds in the Humboldt Bay area. Common invertebrates in the shallow areas in the project vicinity include ghost shrimp, polychaetes, bivalves, gastropods, and oysters. Species in deeper water areas include gaper clams, Washington clams, little neck clams, cockles, and various polychaetes. The eelgrass beds also provide substrate for many invertebrates, including hydrozoans, colonial ascidians, and the aplysid gastropod. Also associated with the eelgrass beds are rock crabs and Dungeness crab.

Replacement of Mooring Dolphin

The existing mooring dolphin is in disrepair and the applicants indicate that to remain a safe, productive shipping facility, this dolphin must be replaced. The dolphin is constructed of approximately thirty timber piles with a catwalk extending to the main dock. The existing piles would be removed and the dolphin would be reconstructed in the same location using composite, concrete, steel or acceptable treated timber piles. The replacement piles would be placed in the location of the original piles and therefore, would not displace any additional mudflat habitat.

Removal of Bulkhead Fill and Placement of Sand

Portions of the existing timber bulkhead and the fill materials behind the bulkhead that the applicants proposed to remove, extend below mean high tide. The applicants indicate that foreign materials such as sands, gravel, mud, and/or debris may have been placed below grade when the bulkhead was originally constructed in the 1940's. These materials would be excavated and removed, resulting in a depression along the shoreline. Thus, the applicants propose to place approximately 750 cubic yards of sand to fill in the depression and restore the beach to its natural grade consistent with the beach gradient adjacent to the north and south (approximately 20' H : 1' V). The removal of the bulkhead and fill materials would result in a net decrease of wetland fill and according to the applicant's estimate, would result in the reestablishment of 8,672 square feet of intertidal habitat.

The Commission finds that the proposed project would result in no net loss of mudflat habitat and would, in fact, result in a net increase of intertidal habitat. Therefore, no mitigation is necessary for impacts to the amount of surface area of mudflat and intertidal habitats associated with the proposed project elements involving dredging and filling in coastal waters.

(2) Eelgrass

As noted previously, an extensive eelgrass bed is located adjacent to the shoreline within the lease area and extends the length of the lease area (approximately 840 linear feet), and extends approximately 40 to 140 feet bayward.

Replacement of Mooring Dolphin

With respect to the mooring dolphin to be removed and replaced, there is no potential for impacts to eelgrass, as the dolphin is located in water approximately 25 feet deep outside the range of eelgrass habitat.

Removal of Bulkhead Fill and Placement of Sand

With respect to the excavation of fill material behind the bulkhead and placement of sand following its removal, there is no eelgrass present in the immediate area of the bulkhead and thus, there would be no direct impacts to eelgrass. All equipment required to remove the bulkhead and fill materials, and to place the sand would operate landward of the bulkhead and therefore, would not adversely impact the adjacent eelgrass.

The Commission notes however, that the placement of sand could have potential adverse impacts on the adjacent eelgrass bed if excess sand were placed such that it was subject to significant erosion. If sand is placed in the area of the removed bulkhead above the level of the existing adjacent beach gradient, it could be subject to increased erosion and result in potential impacts to the adjacent eelgrass beds in the form of burial or increased water turbidity. Additionally, grain size composition is an important factor in determining the suitability of the sand proposed to be placed in the intertidal area from both a physical and chemical perspective. The fractional make-up of sand to be placed on the beach should approximate that found in the receiving area. If the sand is finer in composition from that found at the proposed placement site, it may be more readily mobilized in littoral transport resulting in sedimentation and burial of the adjacent eelgrass bed and intertidal habitat. Furthermore, if the imported sand were contaminated, the contaminants could become entrained in water washing over the area with the tide and be potentially toxic to marine organisms inhabiting the adjacent ESHA.

Therefore, to ensure that the proposed placement of sand is done in a manner that would utilize only the minimum necessary amount of clean sand needed to restore the area and not result in smothering of the adjacent eelgrass beds, the Commission attaches Special Condition No. 2. Special Condition No. 2 requires the applicant to submit, prior to issuance of the coastal development permit for the review and approval of the Executive Director, a plan for placing the sand and shall demonstrate in part, that only the minimum amount of sand required to bring the bulkhead area up to existing adjacent grade be placed within the tidal wetland area and not to exceed a 20'H : 1'V slope ratio. Furthermore, the proposed source of the sand has not yet been clearly identified by the applicant. Therefore, Special Condition No. 2 also requires that the plan (1) identify the source of the sand to be placed at the project site, (2) verify that any required permits to obtain the sand have been secured, or that no permits are required, and (3) demonstrate that the sand proposed to be placed at the site is free of contaminants and is of a grain size that is comparable to the grain size of the sand existing at the site.

As conditioned, the Commission finds that feasible mitigation measures have been incorporated into the project to minimize adverse environmental effects to eelgrass consistent with Section 30233(a).

(3) Water Quality

With respect to the proposed removal and reconstruction of the mooring dolphin, the use of certain kinds of wood preservatives used to treat piles such as creosote, can lead to adverse impacts to water quality and biological productivity. Contaminants in the wood preservative can potentially leach out of the piles and into the water column where they can be absorbed by fish and other aquatic organisms with potentially adverse consequences. The applicant proposes to replace the creosote-treated timber piles that comprise the existing dolphin with composite, steel, concrete, or timber piles treated with an acceptable preservative.

The proposed project would result in the permanent removal of 190 creosote-treated piles and two pile-supported structures, thereby resulting in an overall improvement to the water quality of Humboldt Bay. Approximately 30 new piles would be installed to create the new mooring dolphin. The Department of Fish and Game has indicated that they prefer the installation of plastic or concrete piles to treated wood piles in the marine environment. The DFG has further indicated that if timber piles are proposed to be used, an acceptable wood preservative is Chemonite. To ensure that contamination of the marine environment from the use of certain wood preservatives in these new piles is avoided as proposed by the applicant, the Commission attaches Special Condition No. 4, which prohibits the use of creosote and specifies that only plastic composite, steel, concrete, or timber piles treated with Chemonite or an equivalent preservative be installed.

The water quality of Humboldt Bay could also be adversely affected by demolition debris entering the water. The removal of numerous piles, fill material, and concrete rubble would generate a significant amount of debris. To ensure that project debris does not adversely impact water quality, the Commission attaches Special Condition No. 3(a-e) which imposes certain construction related responsibilities on the applicant. These responsibilities include: (a) storing construction debris in a manner such that it will not be subject to entering coastal waters; (b) removing all construction debris from the site within 10 days of project completion; (c) preventing machinery or materials not essential to project construction from being placed in the bay at any time, (d) recovering any non-buoyant debris that may be discharged into coastal waters as soon as possible; and (e) employing booms around the pile removal operation to contain debris that may break off. The applicants have not identified a debris disposal location for concrete, asphalt, metal, and other debris generated by the proposed project. To ensure that debris is adequately disposed of in an approved location, the Commission attaches Special Condition No. 5 which requires the applicant to submit a debris disposal plan prior to issuance of the permit, identifying all temporary stockpiling and permanent disposal locations for all project-related debris and demonstrating that the debris can be lawfully stockpiled and disposed of in these locations in accordance with all regulatory requirements.

The applicant proposes that material not readily disposed of including the excavated fill materials and the creososte-treated piles to be removed would be stockpiled in an adjacent paved parking area at the plywood mill site. To ensure that any stockpiled material does not result in the potential for sediment or other pollutants such as creosote from being entrained in storm water runoff, Special Condition No. 6 requires that all stockpiled material including creosote-treated piles, excavated fill materials, and any other project debris not subject to immediate disposal be stockpiled at least 75 feet from the edge of the bay waterline and be covered and contained at all times during the rainy season between October 1 and April 30.

The proposed project involves the use of heavy equipment in and around Humboldt Bay. To further ensure that the project does not result in significant adverse impacts to water quality from oil and fuel entering bay waters, the Commission attaches Special Condition No. 9. Special Condition No. 9 is consistent with a condition imposed by the Humboldt Bay Harbor, Recreation, and Conservation District and requires that no fuel be stored below the level of mean higher high water and that equipment fueling occur only during daylight hours. This condition further requires that oil absorbent booms and/or pads be on site at all times during project construction. Additionally, the condition requires all equipment fueling to occur in a designated fueling area at least 75 feet away from the edge of Humboldt Bay and requires that all construction equipment be in good working order and free of fuel and oil leaks.

The applicant has indicated that there is some uncertainty as to whether any fill materials were placed below grade when the bulkhead was constructed in the 1940's that would need to be excavated with the proposed removal of the bulkhead and associated above- grade fill material. It is possible that sands, mud, or potentially deleterious materials and debris exist behind and below the bulkhead. The applicant is proposing to do the fill excavation and bulkhead removal during periods of low tide. However, it is assumed that it may take several tidal cycles to complete this portion of the project. If the bulkhead structure were removed prior to excavation of the fill materials, the fill and any associated debris contained by the bulkhead structure would become exposed to tidal action and subject to dispersal into the bay and adjacent environmentally sensitive habitat areas. Excavating the fill material prior to removing the timber bulkhead structure would provide some barrier and protection against the fill material becoming dispersed by tidal action. It is possible however, that at high tide water could extend behind the landward extent of the bulkhead and come in contact with fill materials, potentially washing fill material and debris into the bay resulting in adverse water quality impacts.

To ensure that the fill materials are removed prior to removal of the bulkhead structure and that the excavation area is protected from contact with bay waters at high tide, the Commission attaches Special Condition No. 7. This condition requires that prior to issuance of the permit, the applicant submit for review and approval by the Executive Director, a plan for removing the fill and containing the excavation site in a manner that would prevent water from coming in contact with the fill materials behind the bulkhead such as the installation of a berm or cofferdam around the bulkhead. In the event that any contaminated materials are discovered during excavation, the applicant is required by Special Condition No. 7 to notify the Department of Fish and Game, the Department of Environmental Health, and the Regional Water Quality Control Board. If

revisions to the methods of fill removal, or any other changes to the project are required, the permittee is required to inform the Executive Director and such changes shall not be incorporated into the project until the applicant obtains an amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.

As conditioned, the Commission finds that feasible mitigation measures have been incorporated into the project and the proposed project will not have significant adverse impacts on water quality.

(c) Alternatives

The third test set forth by the Commission's fill policies is that the proposed fill project must have no feasible less environmentally damaging alternative. In this case, the Commission has considered the various identified alternatives, and determines that there are no feasible less environmentally damaging alternatives to the project as conditioned. Alternatives that have been identified with respect to the mooring dolphin include: (1) the installation of a new mooring dolphin without removal of the existing dolphin, and (2) the no project alternative. Alternatives that have been identified with respect to the excavation of fill materials behind the bulkhead and placement of sand include: (1) removing the bulkhead only to existing grade, (2) excavating fill materials below grade and not placing sand, and (3) the no project alternative. As explained below, each of these alternatives are infeasible and/or do not result in a project that is less environmentally damaging than the proposed project.

Alternatives to Replacement of Mooring Dolphin

Installation of a New Mooring Dolphin Without Removal of Existing Dolphin

An alternative to the proposed removal and reconstruction of the existing mooring dolphin is to install an entirely new mooring dolphin nearby, but in a slightly different location than the existing mooring dolphin and simply abandoning and leaving the existing dolphin in place. As discussed above, the existing mooring dolphin is comprised of approximately thirty piles. Abandoning the existing mooring dolphin that is in disrepair and constructing a new mooring dolphin in the same vicinity without removal of the existing dolphin would result in a net increase of wetland fill and a net loss of wetland surface area and habitat. Therefore, installing a new mooring dolphin rather than removing and replacing the existing dolphin in the same location would not be a less environmentally damaging feasible alternative.

No Project

The applicants indicate that the poor condition of the existing mooring dolphin presents a potential safety hazard, as it does not ensure the stability and security of moored ships. The no project alternative would perpetuate the unsafe condition of the existing mooring dolphin and would not meet the applicant's objective of ensuring a safe, secure mooring at the docking facility. Furthermore, the no project alternative would not result in any less wetland fill than

removing and replacing the existing mooring dolphin in the same location as proposed. Moreover, the no project alternative would not achieve the water quality benefits of replacing the creosote treated piles of the existing mooring dolphin with either new concrete piles or wooden piles treated with preservatives that would not leach contaminants into bay waters. Therefore, the no project alternative is not a less environmentally feasible damaging alternative.

Removing Bulkhead Fill Materials Only to Existing Grade

As discussed previously, the applicants indicate that it is likely that miscellaneous fill materials were used at and below grade for the original construction of the bulkhead. The applicants propose to excavate all of the fill material behind the bulkhead and fill the area with sand to restore a grade consistent with the gradient of the adjacent beach. An alternative would be to not remove fill below grade and leave the existing fill materials at a grade consistent with the beach adjacent to the north and south of the bulkhead. This alternative would avoid the need for placing fill (sand) in wetland areas below mean high tide. However, the fill expected to have been placed at the time the bulkhead was constructed is likely to be materials that are not compatible with the sandy substrate of the surrounding beach. Therefore, leaving miscellaneous fill materials at and below grade level following removal of the bulkhead would not restore the natural condition of the beach and would expose these materials to potential erosion and runoff into the bay and surrounding areas. Although this alternative would avoid the need for placing wetland fill, it is not less environmentally damaging than removing the miscellaneous fill behind the bulkhead and below grade and filling the area with sand that is comparable to the surrounding area. Therefore, removing fill materials behind the bulkhead only to existing grade is not a less environmentally damaging feasible alternative.

Alternatives to Removal of Bulkhead Fill and Placement of Sand

Excavating Fill Materials Below Grade and Not Placing Sand

The applicants propose to excavate and remove fill materials behind the bulkhead below grade and place sand to fill in the area and restore the beach to a grade consistent with the existing adjacent beach slope. Excavating the materials below grade and not placing sand is an alternative that would avoid the need for placing sand in wetland areas below mean high tide, but would result in a depression in the beach. It is likely that the depression would fill in over time through natural shoreline processes. However, the Humboldt Bay Harbor, Recreation, and Conservation District has indicated that leaving a depression in the beach in the area of the removed bulkhead and fill materials would pose a safety hazard and would not be consistent with the terms of the lease agreement requiring the applicant to restore the site to the conditions existing prior to placement of the bulkhead. Therefore, this is not a less environmentally damaging feasible alternative.

No Project

The no project alternative would leave the existing bulkhead and fill materials at the site and would not require any additional dredging or filling in coastal wetlands. This alternative would not be consistent with the terms of the lease agreement would not accomplish the project objectives. Furthermore, the no project alternative would not achieve the habitat enhancement benefits of removing wetland fill and restoring the natural condition of the beach. Therefore, the no project alternative is not a less environmentally damaging feasible alternative.

(d) Maintenance and Enhancement of Marine Habitat Values

The fourth general limitation set by Sections 30230 and 30233 is that any proposed dredging or filling project in coastal waters must maintain and enhance the biological productivity and functional capacity of the habitat, where feasible.

As discussed in the section of this finding on mitigation, the conditions of the permit will ensure that the project will not have adverse impacts on mudflat and intertidal habitat, eelgrass, water quality, or other coastal resources. By avoiding impacts to coastal resources, the Commission finds that the project will maintain the biological productivity and functional capacity of the habitat consistent with the requirements of Sections 30231 and 30233 of the Coastal Act. Moreover, the project not only avoids adverse impacts to marine habitats, but actually enhances habitat by (1) restoring an area of intertidal habitat that existed prior to construction of the bulkhead, (2) increasing the quantity and quality of eelgrass habitat by making more area available for eelgrass growth by removing piles and by reducing shading impacts on the eelgrass by the removal of over-water structures, and (3) eliminating creosote-treated piles from bay waters.

The Commission thus finds that the project is an allowable use, that there is no feasible less environmentally damaging alternative, that adequate mitigation is required for potential impacts associated with the filling of coastal waters, and that marine habitat values will be maintained or enhanced. Therefore, the Commission finds that the proposed development, as conditioned, is consistent with Sections 30231 and 30233 of the Coastal Act.

5. Visual Resources

Section 30251 of the Coastal Act states that the scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance, and requires in applicable part 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, and to be visually compatible with the character of surrounding areas.

The Simpson Paper Company pulp mill complex and adjacent shoreline is visible from many vantage points in and around Humboldt Bay as well as from New Navy Base Road. The industrial facility has existed at the site for many years and the proposed project would not result

in a change to the site that would adversely impact visual resources. The site is located along the waterfront in an area surrounded by similar industrial facilities. The project does not involve any significant alteration of land forms and does not involve the placement or construction of any permanent structure that would adversely impact any public views to or from the bay. The purpose of the project is to restore the site to its natural condition that existed prior to installation of industrial facilities in the 1940's. The proposed project would remove 190 piles and two dilapidated pile-supported structures from the water and would remove a timber bulkhead and surrounding concrete and asphalt rubble from the shoreline. Removal of these structures and debris and returning the site to its former natural appearance would result in an improvement to the visual qualities of the shoreline along Humboldt Bay.

Therefore, the Commission finds that the proposed development is consistent with Section 30251 of the Coastal Act as the development will not block views to and along the coast, will not involve any alteration of land forms, and the proposed demolition activities will not result in any adverse change to the visual character of the waterfront area.

6. Public Access

Section 30210 of the Coastal Act requires that maximum public access shall be provided consistent with public safety needs and the need to protect natural resource areas from overuse. Section 30212 of the Coastal Act requires that access from the nearest public roadway to the shoreline be provided in new development projects except where it is inconsistent with public safety, military security, or protection of fragile coastal resources, or adequate access exists nearby. Section 30211 requires that development not interfere with the public's right to access gained by use or legislative authorization. Section 30214 of the Coastal Act provides that the public access policies of the Coastal Act shall be implemented in a manner that takes into account the capacity of the site and the fragility of natural resources in the area. In applying Sections 30210, 30211, 30212, and 30214, the Commission is also limited by the need to show that any denial of a permit application based on these sections, or any decision to grant a permit subject to special conditions requiring public access, is necessary to avoid or offset a project's adverse impact on existing or potential access.

The proposed project involves the removal of numerous piles from Humboldt Bay. If the piles are only partially removed, or broken off during removal and left in the water, they could pose a safety and navigation hazard to boaters and recreators on the bay. Therefore, to avoid adverse impact to public access and recreation on the bay from hazardous piles, the Commission attaches Special Condition No. 9 to ensure that all piles are removed in their entirety.

Although the project is located between the first public road and Humboldt Bay, an inlet of the sea, it would not otherwise adversely affect public access. The project site is within a fenced industrial area with controlled access. There are no trails or other public roads that provide shoreline access within the vicinity of the project. Furthermore, the proposed project would not increase the nature or intensity of use, and thus would not create any new demand for public access or otherwise create any additional burdens on public access.

Therefore, the Commission finds that the proposed project does not have any significant adverse effect on public access, and that the project as proposed without new public access is consistent with the requirements of Coastal Act Sections 30210, 30211, 30212, and 30214.

7. U.S. Army Corps of Engineers Review

The project is within and adjacent to a navigable waterway and is subject to review by the U.S. Army Corps of Engineers (USACE). Pursuant to the Federal Coastal 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 USACE, 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. 11 that requires the applicant prior to the commencement of construction, to demonstrate that all necessary approvals from the USACE for the proposed project have been obtained.

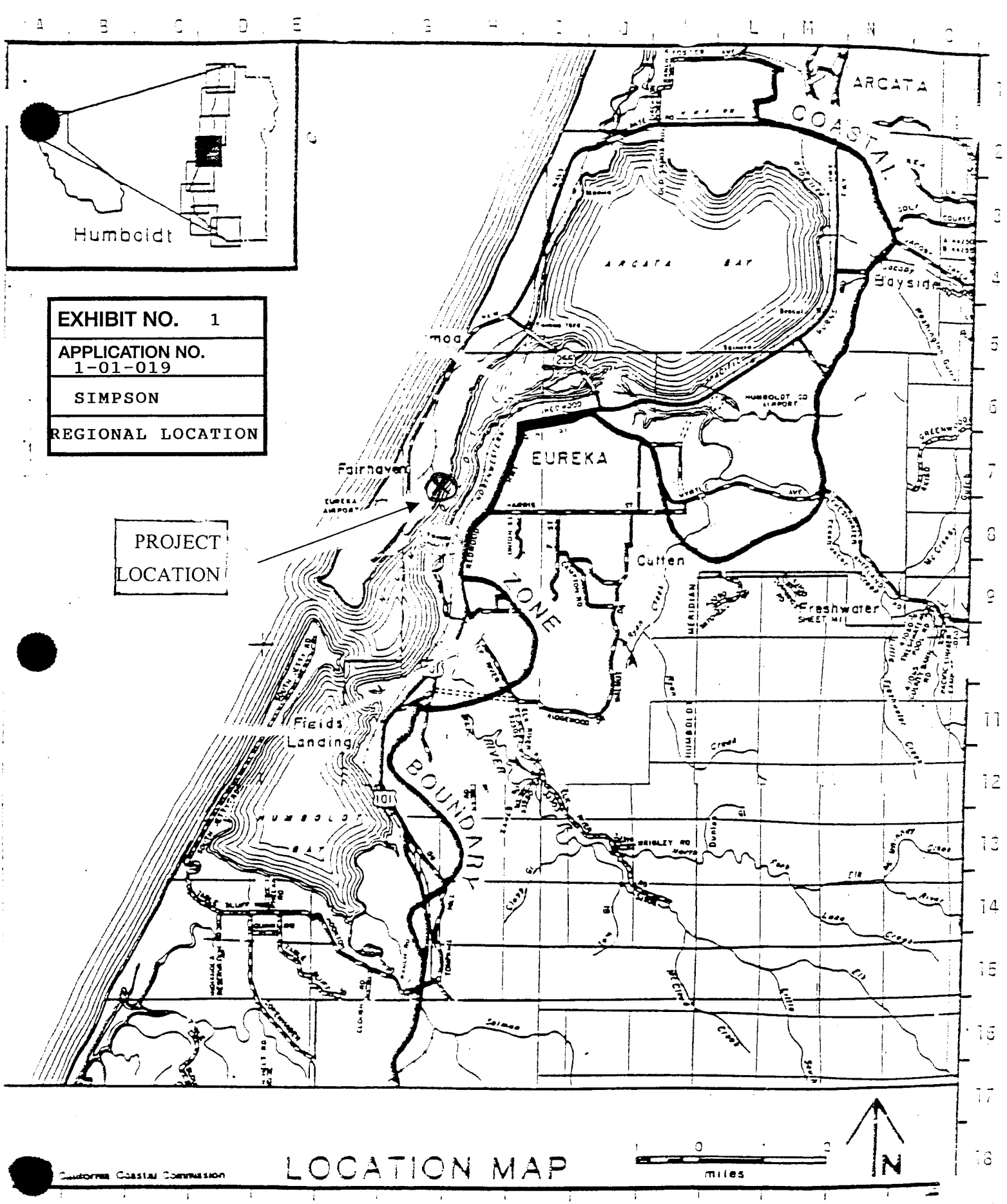
8. California Environmental Quality Act (CEQA)

Section 13096 of the Commission's administrative regulations requires Commission approval of a coastal development permit application to be supported by findings showing that the application, as modified by any conditions of approval, is 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 Coastal Act consistency at this point as if set forth in full. As discussed above, the proposed project has been conditioned to be found consistent with the policies of the Coastal Act. These findings address and respond to all public comments regarding potential significant adverse environmental effects of the project that have been received. Mitigation measures that will minimize or avoid all significant adverse environmental impact 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 would 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.

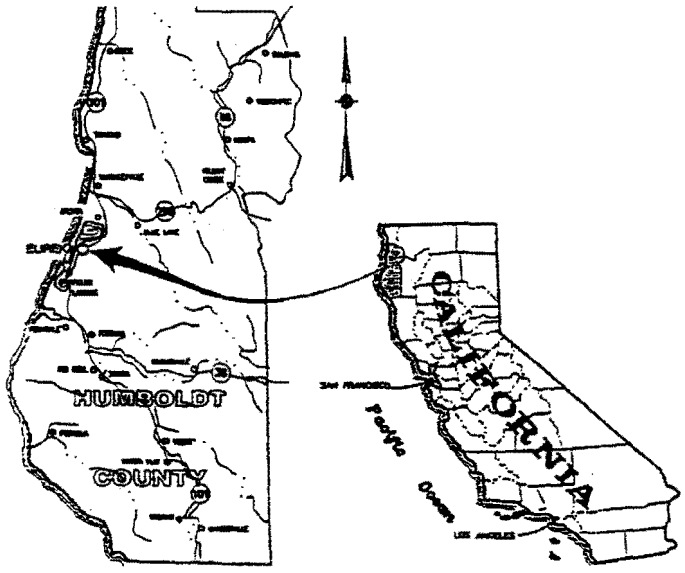
Exhibits:

1. Regional Location
2. Vicinity Map
3. Site Map
4. Site Plan
5. Structures/Debris to be Removed
6. Mooring Dolphin to be Replaced



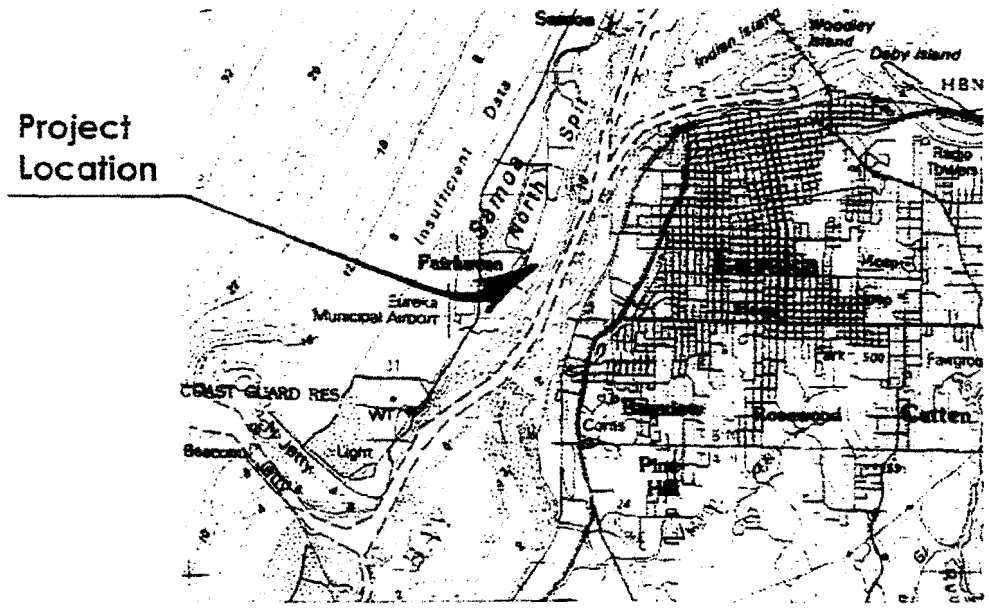
California Coastal Commission

County of Humboldt



VICINITY MAPS

N.T.S.



MFG, INC. Consulting Scientists and Engineers 1165 G Street, Suite E, Arcata, CA 95521-5817 PH (707) 826-8430 FAX (707) 826-8437	Figure 1 Vicinity Map	S ...on

EXHIBIT NO. 2
APPLICATION NO. 1-01-019
SIMPSON
VICINITY MAP

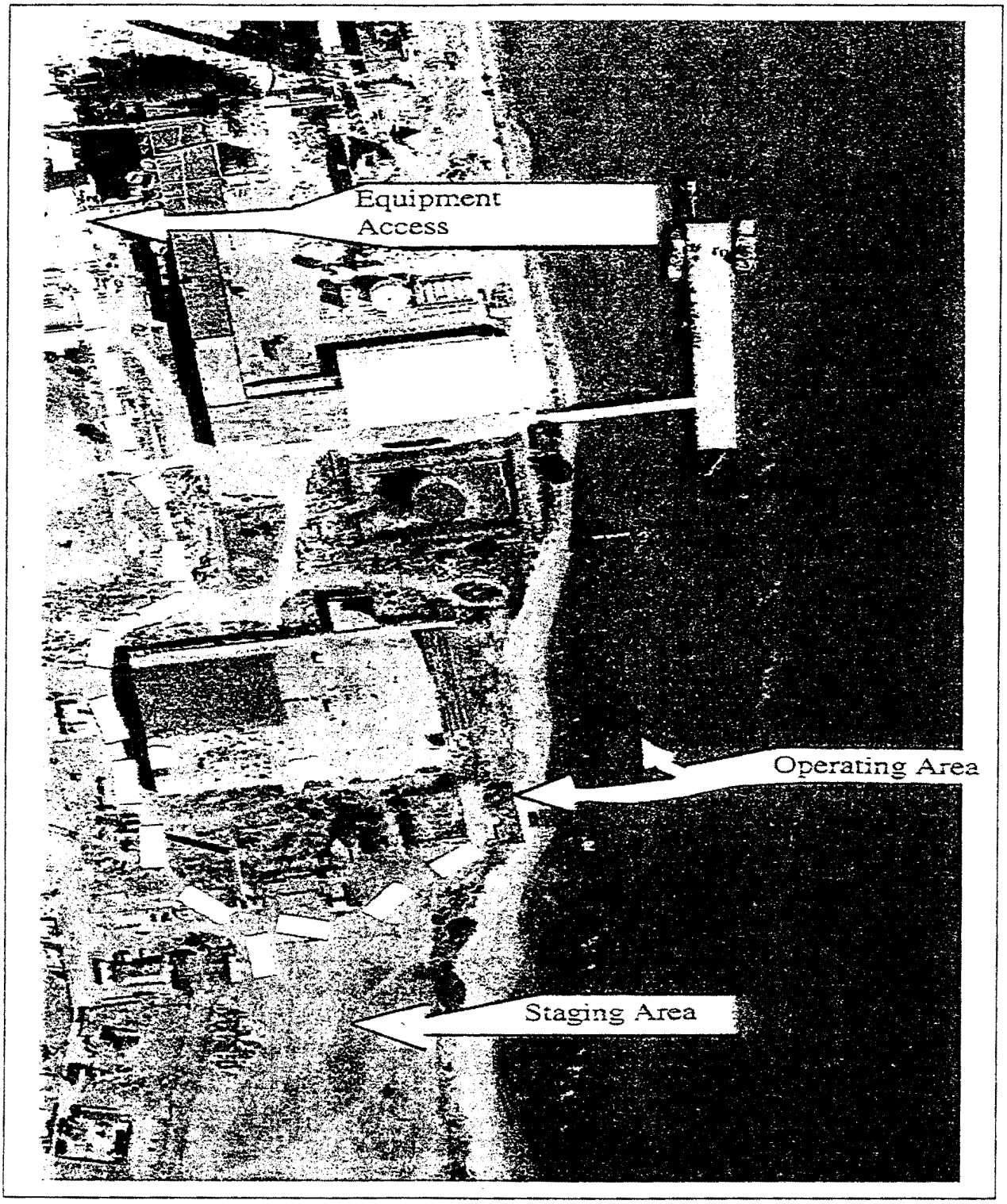


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Figure 6

Equipment Access, Operating and Staging Areas

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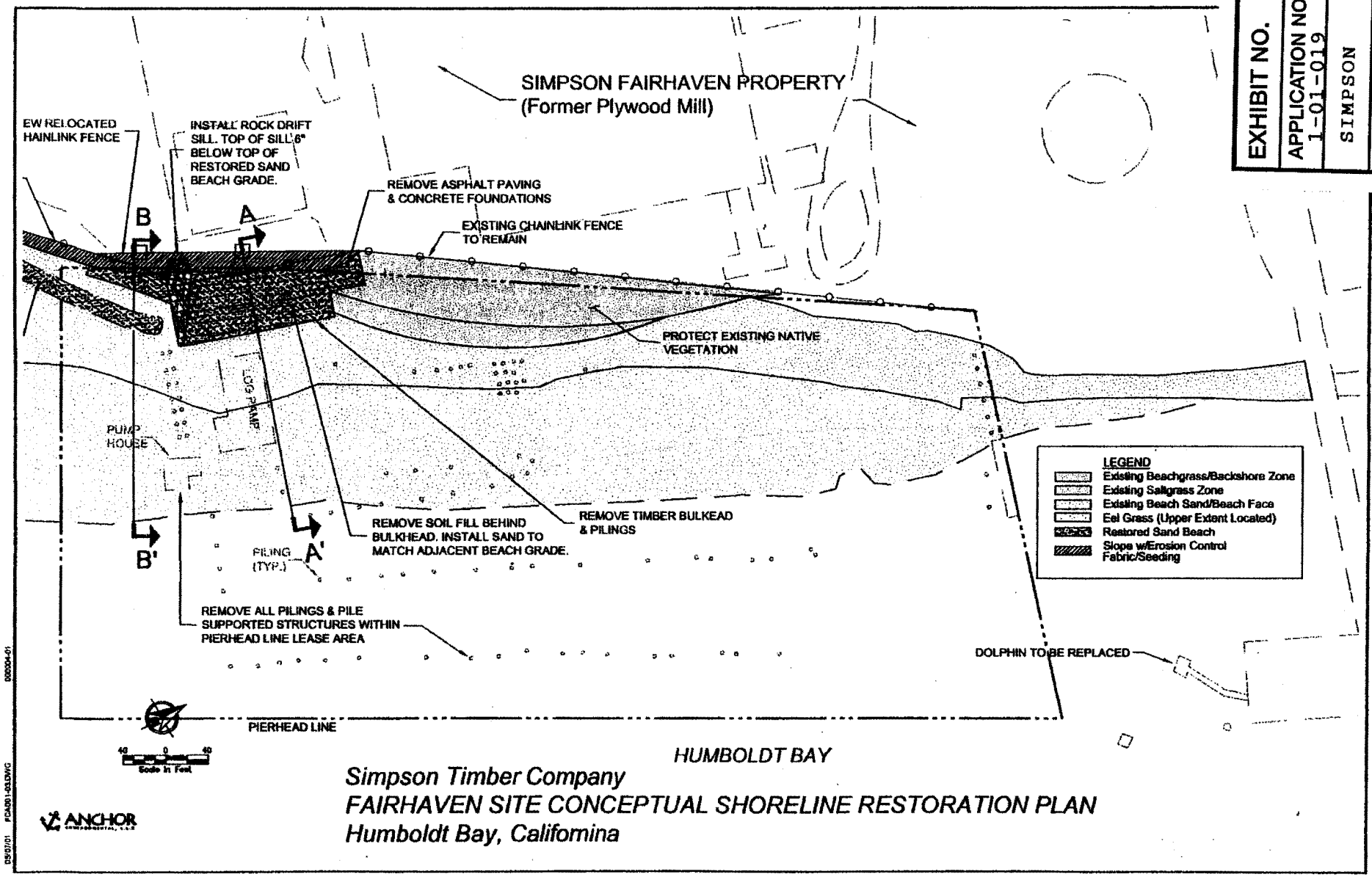
EXHIBIT NO. 3
APPLICATION NO. 1-01-019
SIMPSON
SITE MAP

EXHIBIT NO. 4
APPLICATION NO. 1-01-019
SIMPSON
SITE PLAN



ANCHOR

Simpson Timber Company
FAIRHAVEN SITE CONCEPTUAL SHORELINE RESTORATION PLAN
Humboldt Bay, Califomina

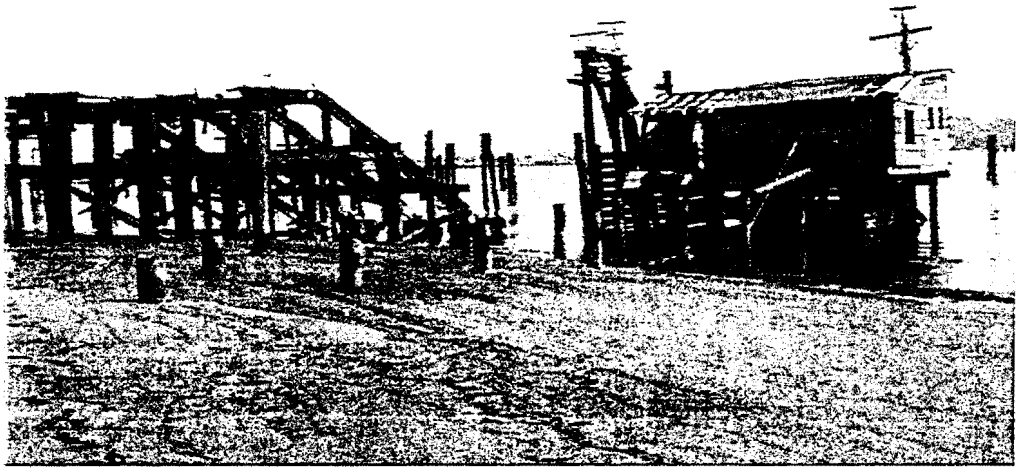


Photo #1 Southern end of Site, Log Ramp and Pumphouse

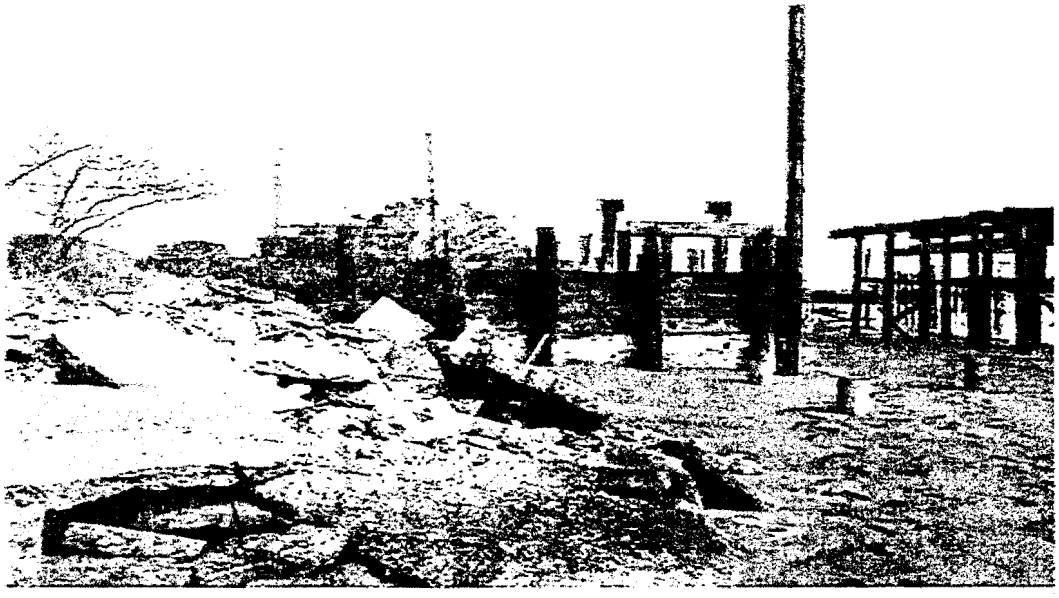


Photo #2 Southern end of Site, Concrete Rubble and Bulkhead

EXHIBIT NO. 5
APPLICATION NO. 1-01-019
SIMPSON
STRUCTURES/DEBRIS TO BE REMOVED

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Figure 3

Site Photographs 1 & 2

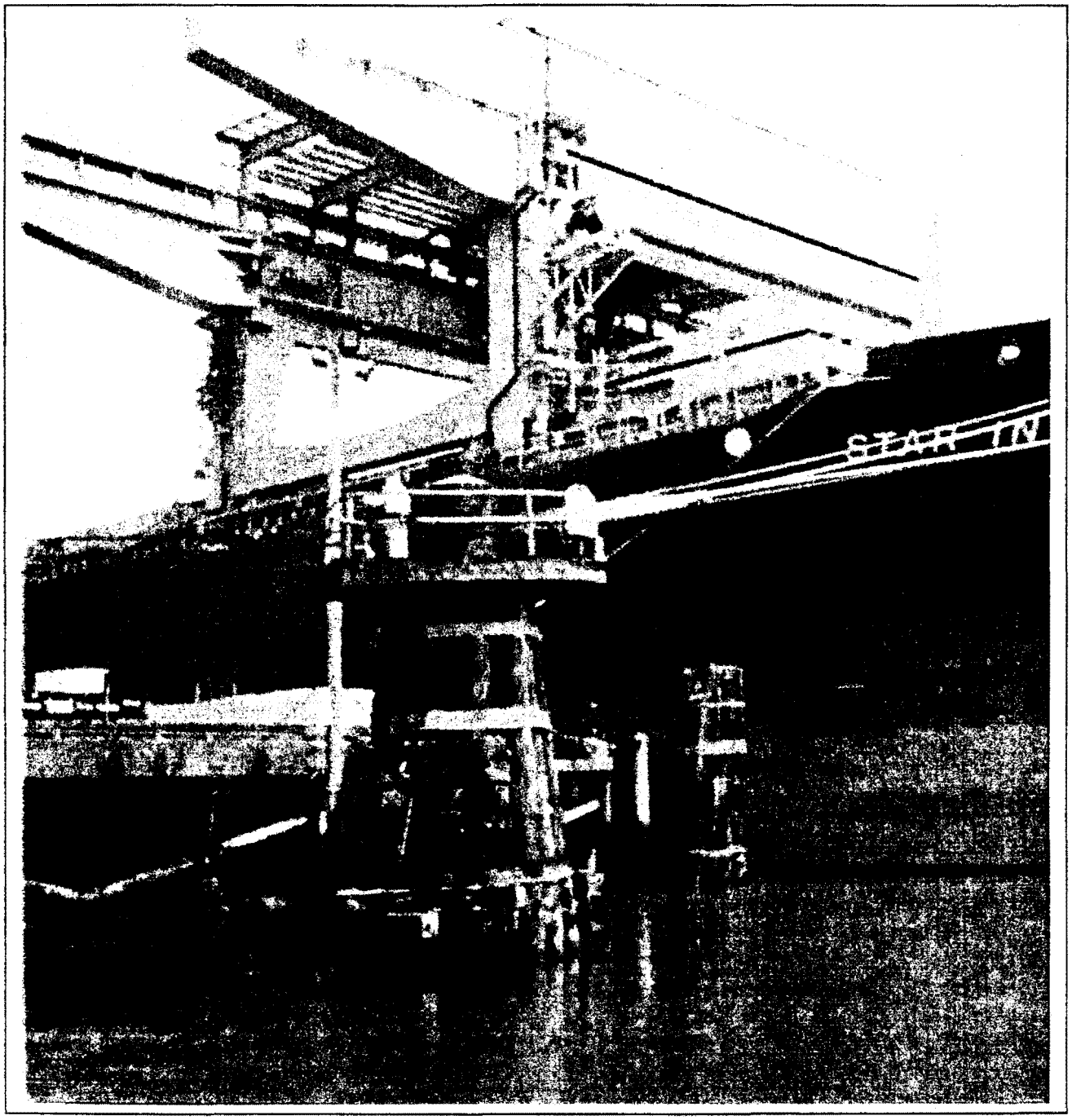

Photo #3 Mooring Dolphin to be Replaced

EXHIBIT NO. 6
APPLICATION NO. 1-01-019
SIMPSON
MOORING DOLPHIN TO BE REPLACED

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Figure 4

Site Photograph 3

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