

CALIFORNIA COASTAL COMMISSION

NORTH CENTRAL COAST DISTRICT
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Th-14a**RECORD PACKET COPY**

Filed: Dec. 20, 2000
 49th Day: Feb. 7, 2001
 Staff: JAS-SF
 Staff Report: Dec. 21, 2000
 Hearing Date: Jan. 11, 2000

PERMIT AMENDMENT

APPLICATION NO.: 2-00-019-A1

APPLICANT: San Mateo County Harbor District

LOCAL GOVERNMENT: San Mateo County

PROJECT LOCATION: 1 Johnson Pier (Pillar Point Harbor), Half Moon Bay, San Mateo County, APN 047-083-060

DESCRIPTION OF PROJECT PREVIOUSLY APPROVED:

1) Replace 68 timber fender piles with new steel and fiberglass-reinforced recycled plastic piles. There would be no additional piles or changes to the pier structure. 2) Repair docks A, B, and C and upgrade fire system. 3) Place a floating dock between docks D and E, to be used as a temporary berthing facility during repairs and as a transient vessel dock for commercial fishing vessels (Coastal Development Permit No. 2-00-019, approved November 15, 2000).

DESCRIPTION OF AMENDMENT:

As amended, the permit would allow in-place application of wood treatment products to the dock structures and require additional measures to prevent accidental spills of wood treatment products into the harbor.

LOCAL APPROVALS RECEIVED: CEQA Categorical Exemption

SUBSTANTIVE FILE DOCUMENTS: See Appendix A

1.0 EXECUTIVE SUMMARY

In November 2000, the Commission granted CDP 2-00-019 to: 1) replace 68 timber fender piles with new steel and fiberglass-reinforced recycled plastic piles; 2) repair docks A, B, and C and upgrade fire system; and 3) place a floating dock between docks D and E, to be used as a temporary berthing facility during repairs and as a transient vessel dock for commercial fishing vessels. As a condition of approval the Commission required that in-field treatment of wood occur on land only and not occur within 50 feet of harbor waters and storm drains. However, it is not feasible to dismantle the existing docks A, B, and C for treatment on land. The Harbor District seeks an amendment to Coastal Development Permit No. 2-00-019 to include additional measures to prevent spillage of wood treatment products into the harbor, thereby allowing treatment in-place. These measures include a temporary containment curb along the outer edges of the docks and limiting treatment products to a one-gallon container within a containment pan. With the new information provided by the applicant to prevent contamination of harbor waters with treatment products, the Harbor District requests that the Commission allow treatment of the dock structures in-place.

Commission staff recommends approval of the amendment with a condition to mitigate impacts associated with water quality and the marine environment.

2.0 STAFF NOTE

The applicant has provided new information explaining why treatment on land is not feasible, and proposed additional measures to prevent contamination of harbor waters with treatment products. Dismantling the docks to allow treatment on land is not feasible because removing the stringers, which provide the primary support for the docks, would destroy the structural integrity of the dock system. In addition, the stringers are glued in place, making removal infeasible without damaging the stringers and underlying deck. The applicant's engineer has discussed the feasibility of dismantling the docks with the Commission's staff engineer, and the staff engineer concurs that this is not a feasible alternative. Additional measures proposed by the applicant to reduce the potential for spills into the harbor include a temporary containment curb along the outer edges of the docks and limiting treatment products to one gallon containers within a containment pan. With these additional measures to prevent contamination of harbor waters with treatment products, Special Condition 1 is revised, allowing treatment in-place.

3.0 STAFF RECOMMENDATION

The staff recommends conditional approval of Coastal Development Permit Application Number 2-00-019-A1.

Motion: I move that the Commission approve the proposed amendment to Coastal Development Permit No. 2-00-019, pursuant to the staff recommendation.

Staff Recommendation of Approval

Staff recommends a YES vote. Passage of this motion will result in approval of the amendment 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

The Commission hereby approves the coastal development permit amendment on the ground that the development as amended and subject to conditions, will be in conformity with the policies of Chapter 3 of the Coastal Act and will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3. Approval of the permit amendment 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 amended development on the environment, or 2) there are no feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the amended development on the environment.

3.1 Standard Conditions

1. Notice of Receipt and Acknowledgment. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
2. Expiration. If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
3. Interpretation. Any questions of intent of interpretation of any condition will be resolved by the Executive Director or the Commission.
4. Assignment. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
5. Terms and Conditions Run with the Land. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

3.2 Special Conditions

Special Condition 1 is amended by replacing the original condition with the following:

1. Chemical Control

Wood treatment products and any other chemicals shall not enter waters of the harbor under any circumstances.

- a. A floating debris catcher with a plastic cloth top membrane shall be placed underneath and alongside the dock system being constructed.
- b. A continuous containment curb shall be nailed to the outside of the stringers, extending above the stringer by at least three inches. Once the treatment is completed, the containment curb shall be removed and disposed of legally.

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- c. Containers of treatment chemicals shall be pre-mixed on land if pre-mixing is necessary, and sealed until transported to the specific dock area to be treated. The volume of treatment products and adhesives on the docks shall be limited to no more than one-gallon at any time. A sealed metal pan with raised edges shall be placed underneath all containers to assure that any drips are contained.
- d. Treatment products shall be applied with a brush or roller rather than sprayed to minimize spread of chemicals, and shall consist only of products approved by the EPA for use in the field. No treatment products other than copper naphthenate or adhesives other than Lignu resin shall be used during in-place treatment of the docks.
- e. All equipment shall be properly maintained during construction to prevent any spills of petroleum products. When not in use, equipment shall be placed on pans composed of lined plywood sheets with curbs and lined with a continuous plastic membrane. All spills shall be immediately contained and the Commission shall be notified of any spill within 24 hours of the incident. Fuel and equipment maintenance areas shall be located away from the harbor and any drainage courses.
- f. All debris and containers of chemical products shall be removed from the docks and disposed of at a legal disposal facility.

4.0 FINDINGS AND DECLARATIONS

4.1 Project Location and Site Description

The proposed project is in the Inner Harbor of Pillar Point Harbor, in the unincorporated Princeton Area of San Mateo County, California (Figures 1 and 2).

4.2 Description of Project Previously Approved

The original permit, CDP 2-00-019, was granted to San Mateo Harbor District to:

- 1) **Replace 68 timber fender piles with new steel and fiberglass-reinforced recycled plastic piles.** The approved project includes no additional piles or changes to the pier structure. When existing fender piles can be pulled out, new fender piles will be driven in the same location as the existing piles. However, where existing pile stubs cannot be removed, new fender piles would be driven as close as possible to the existing stubs. Where existing fender piles break or cannot be removed, the remaining piles will be cut off two feet below the mud line;
- 2) **Repair docks A, B, and C, and upgrade fire system.** Repair of the docks will not include any new piles or dredging. Decking lumber will be precut, drilled, and treated with an approved pressure-treated preservative prior to deck installation. The applicant proposes to treat plywood and drilled holes in-place by applying copper naphthenate. The applicant also proposes to treat deteriorated top surfaces of stringers (wooden framing beneath the decking) in-place with "Lignu" impregnating resin (Cash & Associates 2000a). However, Special Condition 1 of CDP 2-00-019 required that in-field treatment of wood for repair of docks A, B, and C occur on land only and not occur within 50 feet of harbor waters and storm drains.

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The Harbor District will upgrade the fire system to meet flow requirements of the North County Fire District; and

- 3) **Place a floating dock between docks D and E**, to be used as a temporary berthing facility during repairs and as a transient vessel dock for commercial fishing vessels. The floating dock will be 320 feet long by eight feet wide, and is designed to side-tie eight boats or 16 boats using a stern-tie approach. The dock is adjacent to Johnson Pier between docks D and E.

4.3 Description of Amendment

In accordance with approved CDP 2-00-019, the Harbor District will replace deteriorated plywood decking on approximated 23,420 square feet of docks (Figure 3). Repair of the docks will not include any new piles or dredging (Figure 4). Most of the work will be done from the docks, and to reach certain areas a small (20-foot) tender boat may be used. These docks are floating, and areas to be treated are approximately eight to nine inches above the water level.

Decking lumber will be precut, drilled, and treated with an approved pressure-treated preservative prior to deck installation. The applicant proposes to treat plywood and drilled holes in-place by applying copper naphthenate with a brush or roller. No spraying of the treatment product is proposed. The plywood consists of two 3/8-inch layers. Only the top layer of plywood would be treated. The applicant proposes to treat deteriorated top surfaces of stringers (wooden framing beneath the decking) in-place with "Lignu" impregnating resin (Cash & Associates 2000a).

4.4 Other Authorizations

4.4.1 U.S. Army Corps of Engineers

The U.S. Army Corps of Engineers issued an authorization for the proposed project under Department of the Army Nationwide Permit 03 Maintenance (65 FR 12818, March 9, 2000), pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S. Code 403) (U.S. Army Corps of Engineers 2000).

Pursuant to section 307(c)(3)(A) of the Coastal Zone Management Act, any applicant for a required federal permit to conduct an activity affecting any land or water use or natural resource in the coastal zone must obtain the Coastal Commission's concurrence in a certification to the federal permitting agency that the project will be conducted in a manner consistent with the California Coastal Zone Management Program. The Commission's action on this permit application shall comprise its federal consistency review for the San Mateo Harbor District's proposed pier and dock project.

4.4.2 San Francisco Bay Water Quality Control Board

The San Francisco Bay Regional Water Quality Control Board regulates water quality in the project area. San Mateo County Harbor District has submitted an application to the San Francisco Bay Regional Water Quality Control Board for a water quality Certification or Waiver under Section 401 of the Clean Water Act. **Special Condition 2** of CDP 2-00-019 requires San Mateo County Harbor District to provide the executive director with a copy of the final 401 Certification or Waiver prior to commencement of the project.

4.5 Coastal Act Issues

4.5.1 Water Quality Protection

The Coastal Act protects marine resources, including water quality, as cited below:

Section 30230

Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Section 30231

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Section 30232

Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur.

The applicant proposes to treat some of the wooden dock structures in-place over harbor waters using copper naphthenate and Lignu resin. Although, copper naphthenate is the only EPA-approved wood treatment chemical that can be applied in the field and that is available for sale directly to the general public, it is toxic to aquatic organisms, including invertebrates, algae, and fish in very low concentrations (National Coalition Against the Misuse of Pesticides 2000; Cupronol Group 2000). There is no information concerning the toxicity of Lignu resin to aquatic organisms.

The applicant states that approximately five percent of the 23,000 square feet of plywood decking, or 1,100 square feet, would be treated with copper naphthenate, and that the treatment would be applied with a brush or roller and not sprayed. The plywood decking consists of two layers, and the treatment would only be applied to the top layer. Lignu resin would be applied to approximately 20 percent of the 4,500 linear feet of stringers.

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Dismantling the docks to allow treatment on land is not feasible because removing the stringers, which provide the primary support for the docks, would destroy the structural integrity of the dock system. In addition, the stringers and decking are glued in place, making removal infeasible without damaging the stringers and underlying deck. Because removal of the stringers to avoid treatment in-place is not feasible, the Commission finds that there is no less environmentally damaging feasible alternative to the project as proposed.

For CDP 2-00-019 the applicant proposed several measures to prevent chemicals used during in-place treatment of wood from entering harbor waters. Because the dock system has a continuous bottom, any spills of the wood treatment chemicals will be contained and will not enter the water. The floating debris catcher will be used to prevent chemicals or treated materials from contacting harbor waters. The debris catcher includes a plastic cloth top membrane that creates an impervious barrier.

The applicant proposes the following additional measure to prevent spills from entering harbor waters (see Exhibit 1, particularly page 4, Wood Treatment/Containment, Detail & Notes):

In addition to measures noted to contain the treatment of stringers, the stringer shall be fitted with a continuous exterior wood 2 x 6 nailed to the outside face of the stringer, and extending above the stringer by at least 3 inches. This 2 x 6 will be tightly held against the stringer via removable nail, to contain possible droplets of chemicals from entering coastal waters. Once the treatment is complete, these temporary 2 x 6's will be removed and disposed.

The applicant also has provided the following additional information regarding proposed handling of treatment products (copper naphthenate and Lignu resin) in the field that will reduce the potential for contamination of harbor waters (Exhibit 1):

Containers of treatment chemicals shall be pre-mixed, if pre-mixing is necessary, and sealed until transported to the specific dock area to be treated. Quantities of containers shall be limited to one gallon. A sealed metal pan with raised edges shall be placed underneath the container to assure that any drips are contained.

Because removal of the stringer for treatment on land is infeasible, **Special Condition 1** of CDP 2-00-019 is revised to allow treatment of the stringers in-place. To reduce the risk of spilling wood treatment chemicals and adhesives into harbor waters **Special Condition No. 1** is also revised to require the Harbor District to implement all of the following spill prevention measures:

- Install a floating debris and chemical catcher underneath the dock;
- Install a Containment curb along the stringers;
- Pre-mix treatment products and adhesives;
- Allow containers of treatment products and adhesives no greater than one gallon;
- Place a sealed metal pan beneath containers;
- Apply treatment products and adhesives with a brush or roller;

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- Use only of chemicals approved for use in the field;
- Maintain equipment away from harbor areas and drainage courses; and
- Dispose of debris and chemical containers at a legal facility.

These measures are adequate to minimize the likelihood of an accidental spill of hazardous substances.

In the case of an accidental spill of wood treatment chemicals or fuel from construction equipment occurs despite the prevention measures, the Harbor District maintains on-site spill containment and cleanup equipment including several hundred feet of spill containment boom and sorbent pads. Harbor District personnel are trained in spill response procedures.

The Commission finds that the proposed project, as conditioned, will not adversely affect the quality or biological productivity of coastal waters, includes appropriate spill prevention measures, and provides effective containment and cleanup facilities and procedures in the event of an accidental spill. Therefore, the Commission finds that the proposed project is consistent with Sections 30230, 30231, and 30232 of the Coastal Act.

4.6 California Environmental Quality Act

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

The Commission incorporates its preceding findings on consistency of the proposed project with the Coastal Act policies at this point as if set forth in full. As conditioned, there are no feasible alternatives or feasible mitigation measures available, beyond those required, which would substantially lessen any significant adverse impacts that the development may have on the environment. Therefore, the Commission finds that the proposed project has been conditioned to mitigate the identified impacts and can be found consistent with Coastal Act requirements to conform to CEQA.

Substantive File Documents

References

Albert Forest Products, Inc. 2000. Wood Preservatives. At <http://www.city-net.com/albertfp/treat.htm>.

Cash & Associates. 2000a. Construction Documents for San Mateo Harbor District, Pillar Point Marina, Dock A, B & C. July 24, 2000.

Cash & Associates. 2000b. Construction Documents for San Mateo Harbor District, Fender Pile Replacement, Johnson Pier, Pillar Point Harbor. July 24, 2000.

Cuprinol Group. 2000. Material Safety Data Sheet for No. 10 Green Preservative (Copper Naphthenate). October 24, 2000.

National Coalition Against the Misuse of Pesticides. 2000. Poison Poles – A Report About Their Toxic Trail and Safer Alternatives. At <http://www.ncamp.org/poisonpoles/copper.html>. October 16, 2000.

U.S. Army Corps of Engineers, Calvin Fong. 2000. Letter to Peter Grenell, San Mateo Harbor District, regarding Nationwide Permit 03 for fender piles and associated structures, File Number 25488S. August 30, 2000.

Personal Communication

Randy Mason, Project Engineer, Cash & Associates, October 27, 2000.

Mike Rugg, California Department of Fish and Game, Yountville, October 31, 2000.



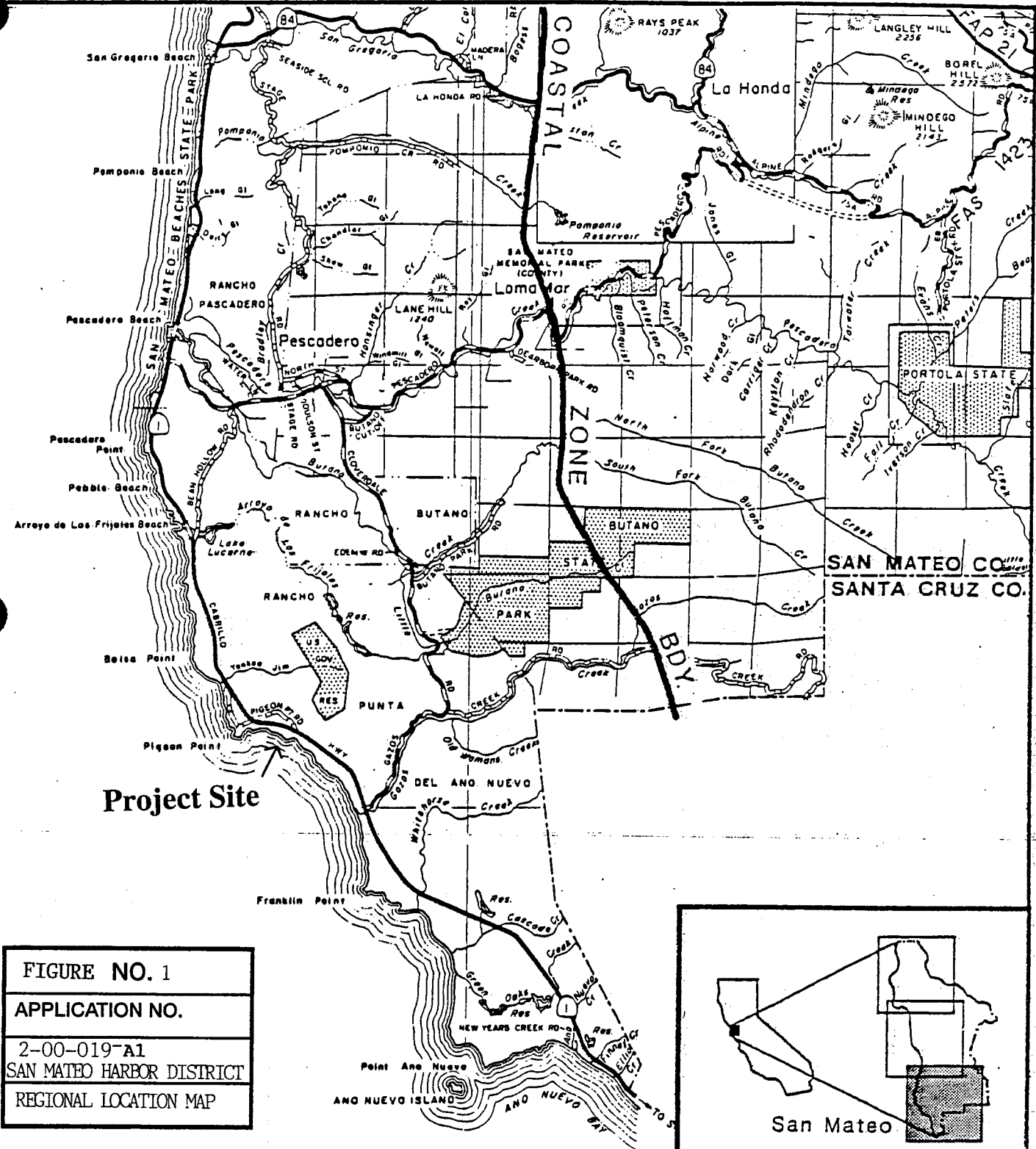
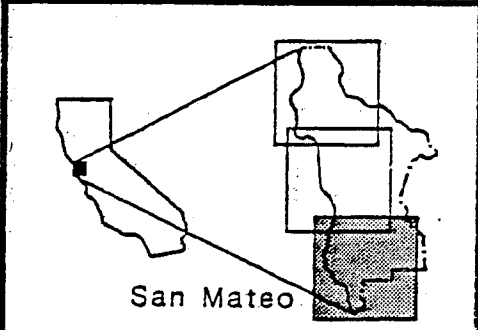
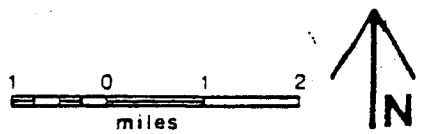


FIGURE NO. 1
APPLICATION NO.
 2-00-019-A1
 SAN MATEO HARBOR DISTRICT
 REGIONAL LOCATION MAP



LOCATION MAP



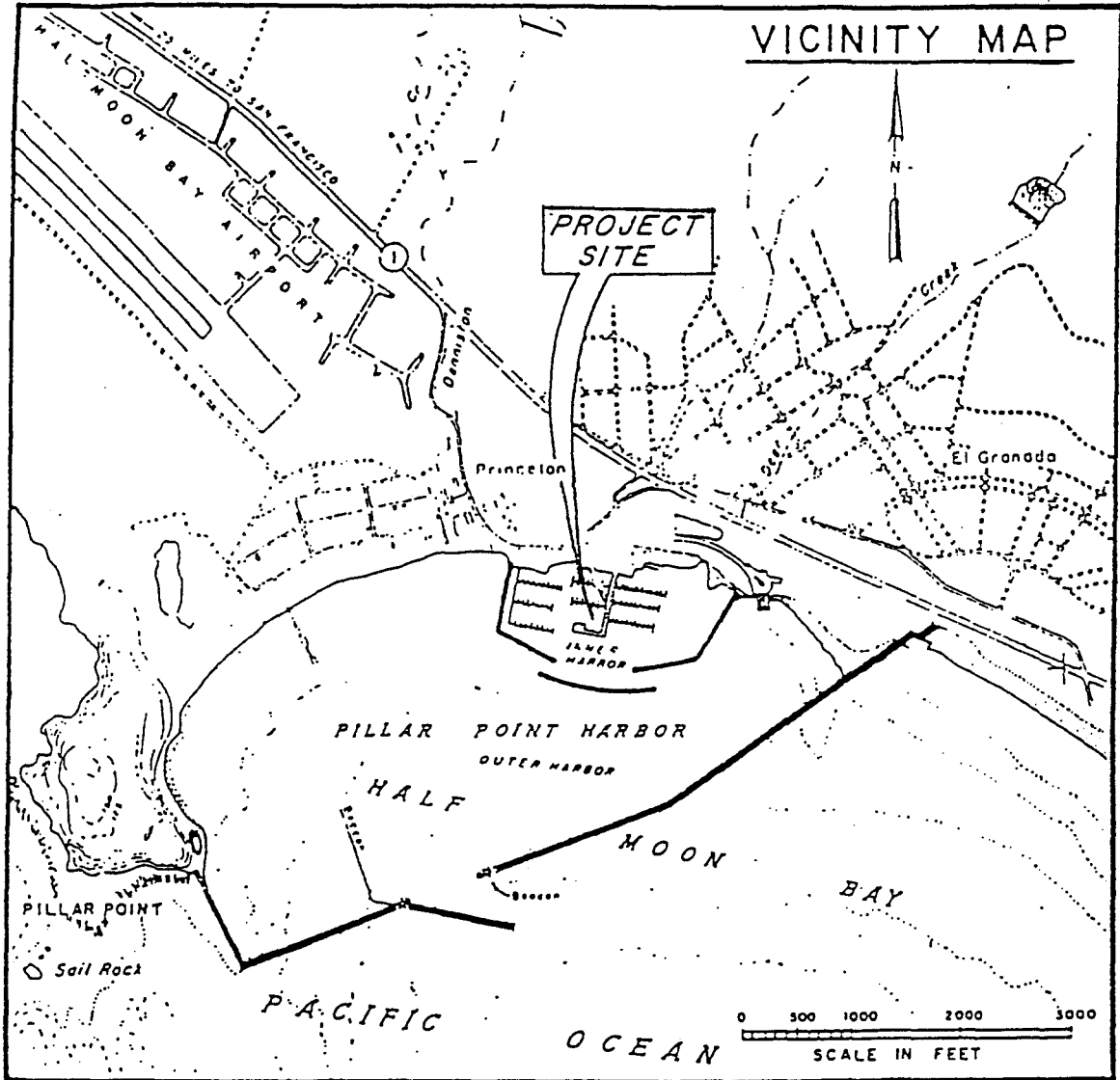


FIGURE NO. 2

APPLICATION NO.

2-00-019-A1
SAN MATEO HARBOR DIST.

SITE LOCATION MAP



CASH & ASSOCIATES

SAN MATEO COUNTY HARBOR DISTRICT
PILLAR POINT HARBOR - JOHNSON PIER

FENDER PILE REPLACEMENT
VICINITY MAP

DATE: 7/17/0

DRAWING NUMBER

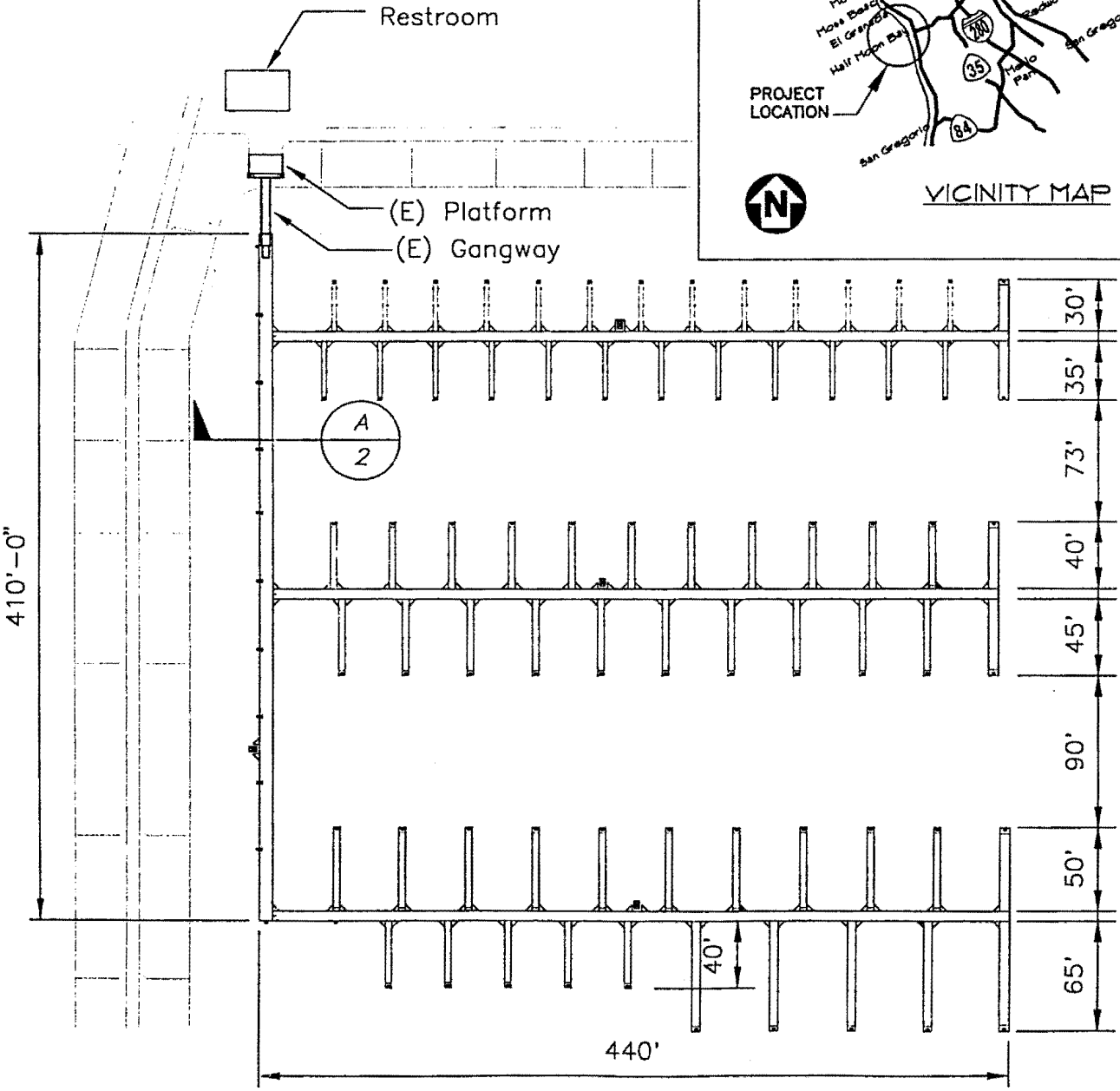
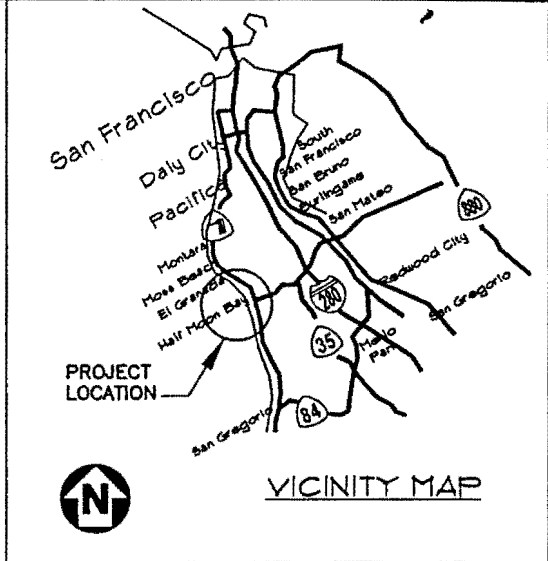
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.. FIGURE NO. 3

APPLICATION NO.

2-00-019 -A1
SAN MATEO HARBOR DIST.

DOCK REPLACEMENT - PLAN VIEW



PURPOSE: Dock replacement

Datum: MLLW = 0

Adj. Property Owners:

1. See Attached List
- 2.
- 3.

PLAN VIEW

Scale: 1"=100'

San Mateo Harbor District
One Johnson Pier
Half Moon Bay, CA 94019

Proposed replacement of Existing Dock System in like and kind. No new piles or dredging.

IN: San Mateo County Harbor District
AT: San Mateo County of S.B. State: CA.
Application By: San Mateo Harbor District.
Sheet 1 of 2 Date: 8/1/00

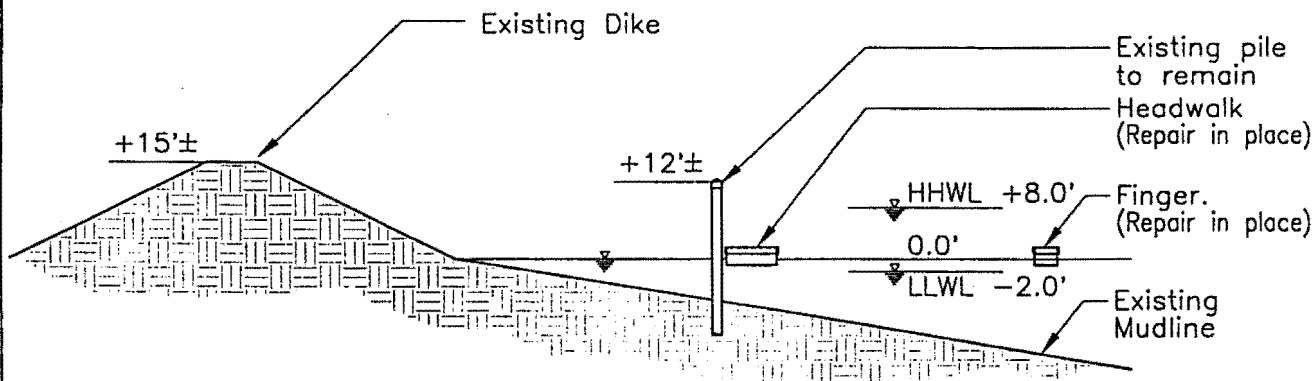


FIGURE NO.	4
APPLICATION NO.	
2-00-019-A1 SAN MATEO HARBOR DIST.	
DOCK REPLACEMENT - SECTION	

A
2 SECTION

PURPOSE: Dock replacement

Datum: MLLW = 0
 Adj. Property Owners:
 1. See Attached List
 2.
 3.

Section
 Scale: 1/8" = 1'-0"

San Mateo Harbor District
 One Johnson Pier
 Half Moon Bay, CA 94019

Proposed replacement of Existing Dock System in like and kind.
 No new piles or dredging.
 IN: San Mateo County Harbor District
 AT: San Mateo County of S.B. State: CA.
 Application By: San Mateo Harbor District.
 Sheet 2 of 2 Date: 8/1/00



CASH & ASSOCIATES
Engineering and Architecture

Elliott H. Boone
Randy H. Mason
Wilfrido B. Simbol

November 27, 2000

California Coastal Commission
45 Fremont Street
Suite 2000
San Francisco, CA 94105-2219

Attn: Mr. Steve Scholl, North Coast Director
Subject: Pillar Point Harbor Dock Repair and Fender Pile Replacement

The following responses noted in *italics* were prepared subsequent to the November 1, 2000 response letter to Jane Steven. Please call if you have any other questions.

Based on comments from staff and the Coastal Commissioners at the November 15, 2000 meeting, it was obvious that a misunderstanding existed regarding the application of preservative wood treatment either over the water, or on land. Due to the nature of the construction of the existing docks, it is not feasible to dismantle the existing docks, hoist them out of the water onto land, and begin the wood treatment process. The dismantling of these docks would destroy the structural integrity of the dock system, due to the nature of their construction and age, and would require all new docks. New docks are not necessary, since the existing docks can be repaired and provide 10 to 15 years of additional useful life. Due to this condition, the primary wood support stringers need to be treated in-place. It should be noted that only the primary wood support stringers are proposed to be repaired, and only a small portion of the overall length of these members will require treatment. The majority of the existing stringers do not require repair treatment and secondary support members within the structure are not being proposed for treatment.

Dock Debris and Chemicals Containment

Construction materials, including field preservative treatments, timber cuttings and debris, and adhesives will be contained and not allowed to enter coastal waters. **Prior to any demolition or construction activity, a floating debris catcher, consisting of floating pontoons with a sealed plywood membrane and curbs to prevent spills, shall be installed underneath and along the area of the deck where any activity will take place to capture construction debris from entering the harbor and to facilitate project cleanup. The debris catcher shall remain in use throughout the project's demolition, construction, and final cleanup phases.** All construction debris shall be removed from the site and disposed of at a lawful disposal site. Work will not be permitted to begin until a containment plan has been submitted by the contractor and approved by the San Mateo County Harbor District.

EXHIBIT NO.	1
APPLICATION NO.	2-00-019-A1
SMC Harbor District Letter and Figure	
from Applicant's Engineer	

The wood treatment, copper naphthenate, will be applied to the plywood portion

of the docks. The plywood treated by the copper naphthenate will consist of two overlapping plywood layers. Only the top layer will be treated and the lower layer will provide an additional barrier to prevent any materials from entering the harbor. Approximately five percent of the 23,000 square feet (only 1,100sq.ft.) of plywood is expected to require treatment. **Treatment of plywood on the docks will be done using brushes or rollers, only.** No spraying of treatment will be allowed. *Containers of treatment chemicals shall be pre-mixed, if pre-mixing is necessary, and sealed until transported to the specific dock area to be treated. Quantities of containers shall be limited to one (1) gallon. A sealed metal pan with raised edges shall be placed underneath the container to assure that any drips are contained.*

The Lignu resin sealer will be applied to areas of the stringers that are deteriorated by dry rot, consisting of approximately 20 percent of the 4,500 linear feet of stringers. **The dock system has an existing continuous bottom membrane composed of plywood, which provides primary containment for any debris or treatment. In addition, the floating debris catcher will be placed underneath and alongside the dock system being constructed, preventing materials from making contact with harbor waters. The debris catcher will include a plastic cloth top membrane that will create an impervious barrier.** *Containers of treatment chemicals shall be pre-mixed, if pre-mixing is necessary, and sealed until transported to the specific dock area to be treated. Quantities of containers shall be limited to one (1) gallon. A sealed metal pan with raised edges shall be placed underneath the container to assure that any drips are contained.*

In addition to measures noted to contain the treatment of stringers, the stringers shall be fitted with a continuous exterior wood 2 x 6 nailed to the outside face of the stringer, and extending above the stringer by at least 3 inches. This 2 x 6 will be tightly held against the stringer via removable nails, to contain possible droplets of chemicals from entering coastal waters. Once the treatment is complete, these temporary 2 x 6's will be removed and disposed. See the attached sketch for a graphic illustration of the procedures proposed.

Construction Equipment

Petroleum fluids in equipment will be prevented from contaminating the harbor by maintaining equipment (generally air compressors) in areas away from the harbor and drainage courses and **providing all equipment with pans that would contain any spills that may occur at the site.** Pans would be composed of lined plywood sheets with curbs composed of 2-by material. Lining would be composed of a continuous pvc membrane that would contain spills, if they occur.

Fender Piles

Siltation curtains will be installed around piles during removal and replacement. Siltation curtains are designed to limit the turbidity caused by the pile extraction or driving effort. As sediment and water are vibrated and mixed during the construction effort and emulsify, the curtains contain this condition and the solids in the water eventually drop out of the mixture and

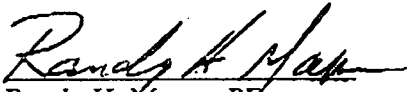
return to the bay bottom. The curtains prevent the near-surface emulification condition from spreading beyond the limits of the curtain.

These curtains are normally installed around a large area encompassing the floating pile driving rig as well as several piles. Since, in our case, all piles will be driven with equipment staged on the pier, no floating barges will be used and the extent of siltation curtains will only be required to surround the piles being removed or replaced. Depth of floating curtains is dependent on the depth of water, tidal range, type of bay sediment, currents and tidal flow. As a general rule, curtains are normally installed at lengths between 1 ½ to 6 feet long within California harbor conditions. These curtains shall not be long enough to make contact with the bay bottom at lowest low tidal conditions.

This description of measures to contain the chemical treatment of wood stringers has been added to the project description, based on inquiries and concerns voiced by several of the Coastal Commissioners at the November 15, 2000 meeting. It is our strong belief that the measures proposed relate to providing both primary and secondary containment, and will eliminate the possibility of coastal waters being contaminated with treatment materials. We request the Coastal Commission's reconsideration of these measures proposed, to allow for the repair project to go forward. Thank you for this consideration.

If you should have any other questions, please do not hesitate to call. Thank you for your help.

Best Regards,

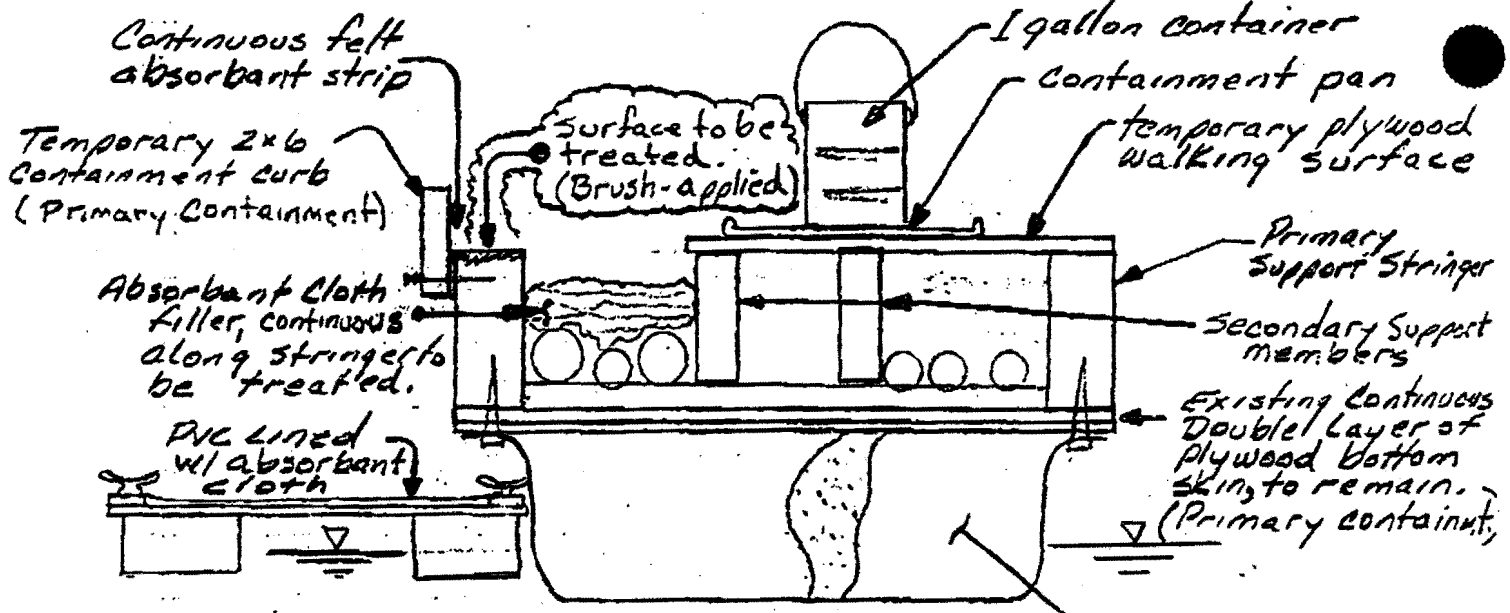


Randy H. Mason, PE
Owners Representative
Cash & Associates
President

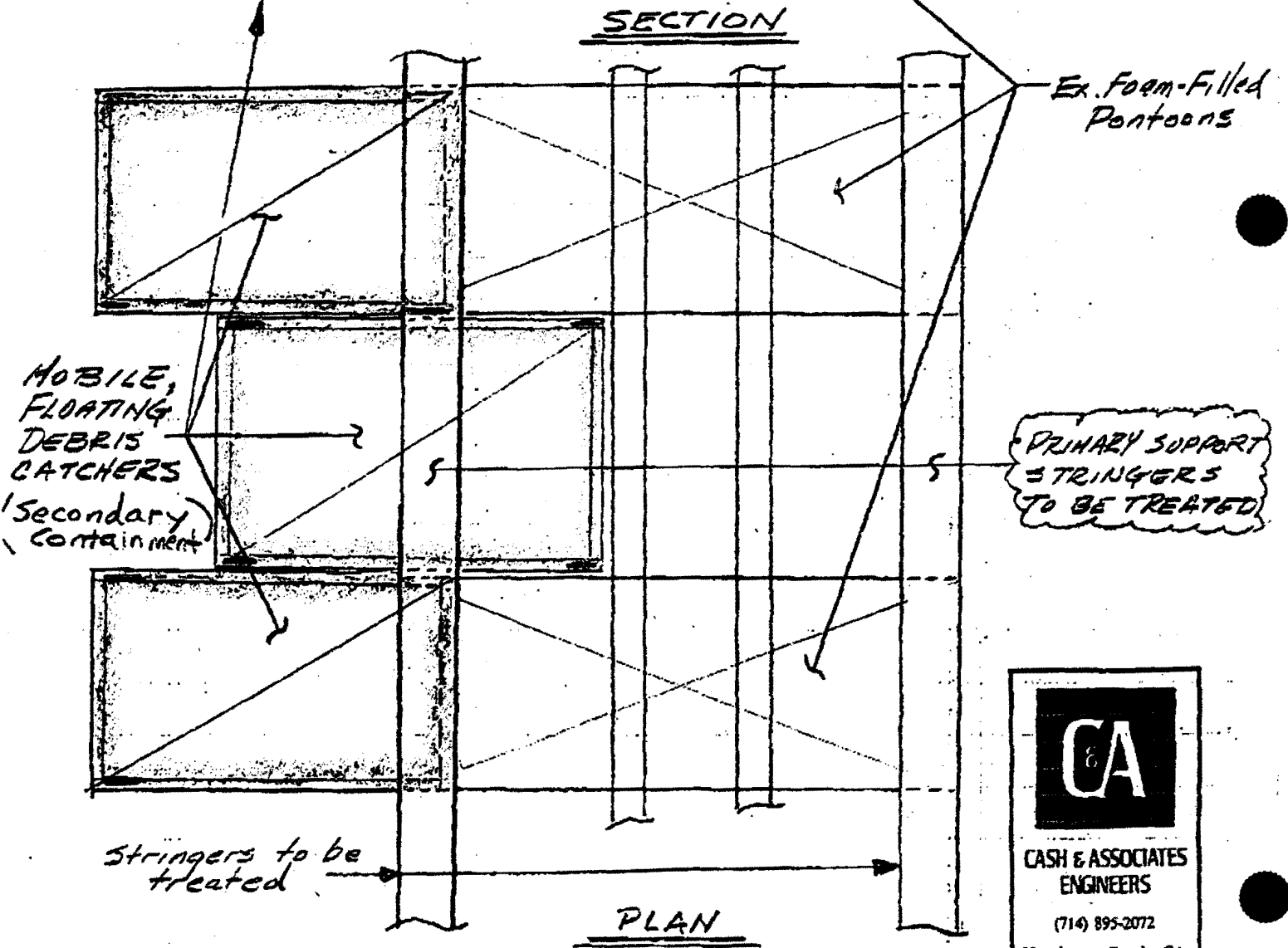
cc/ Peter Grenell, General Manager, San Mateo County Harbor District
Dan Temko, Harbor Master, Pillar Point

WOOD TREATMENT / CONTAINMENT

DETAIL & NOTES



SECTION



PLAN

CA

CASH & ASSOCIATES ENGINEERS

(714) 895-2072

Huntington Beach, CA