

**CALIFORNIA COASTAL COMMISSION**

45 FREMONT, SUITE 2000  
SAN FRANCISCO, CA 94105-2219  
VOICE AND TDD (415) 904-5200  
FAX (415) 904-5400

**TU 11.5 a****ADMINISTRATIVE PERMIT**

**APPLICATION NO.:** E-98-05

**APPLICANT:** ALAMITOS BAY FISHERY ENHANCEMENT PROJECT (ABFEP)

**CO-APPLICANT:** CALIFORNIA DEPARTMENT OF FISH AND GAME (CDFG)

**AGENTS:** Dr. Alfred Balitzer / Steve Crooke (CDFG)

**PROJECT LOCATION:** Harbor Master's Dock, Basin #1, Alamitos Bay, City of Long Beach, Los Angeles County. (Exhibits 1-3)

**PROJECT DESCRIPTION:** Construction, installation, and operation of a 10 ft. x 10 ft. x 18 ft. netting and PVC fish rearing pen adjacent to the Harbor Master's dock, for the purpose of rearing and releasing juvenile white seabass as part of the CDFG Ocean Resources Enhancement and Hatchery Program.

**EXECUTIVE DIRECTOR'S DETERMINATION:** The findings for this determination, and for any special conditions, appear on subsequent pages.

**NOTE:** Public Resources Code Section 30624 provides that this permit shall not become effective until it is reported to the Commission at its next meeting. If one-third or more of the appointed members of the Commission so request, the application will be removed from the administrative calendar and set for public hearing at a subsequent Commission meeting. Our office will notify you if such removal occurs.

This permit will be reported to the Commission at the following time and place:

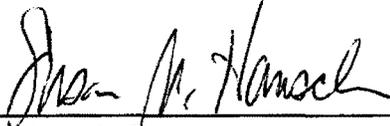
**Date:** Tuesday, April 7, 1998, item #11.5a (addendum)  
**Time:** Meeting Begins at 10:00 A.M.  
**Place:** Hyatt Regency — Long Beach  
200 South Pine Avenue  
Long Beach, CA

**IMPORTANT — Before you may proceed with development, the following must occur:**

Pursuant to 14 CCR §§ 13150(b) and 13158, you must sign the enclosed duplicate copy acknowledging the permit's receipt and accepting its contents, including all conditions, and return it to our office. Following the Commission's meeting, and once we have received the signed acknowledgment and evidence of compliance with all special conditions, we will send you a Notice of Administrative Permit Effectiveness.

**BEFORE YOU MAY PROCEED WITH DEVELOPMENT, YOU MUST HAVE RECEIVED BOTH YOUR ADMINISTRATIVE PERMIT AND THE NOTICE OF PERMIT EFFECTIVENESS FROM THIS OFFICE.**

PETER DOUGLAS  
Executive Director

By:   
Title: Deputy Director

**ACKNOWLEDGMENT:**

The undersigned permittee acknowledges receipt of this permit and agrees to abide by all terms and conditions thereof.

The undersigned permittee acknowledges that Government Code section 818.4 which states in pertinent part that: "A public entity is not liable for injury caused by issuance ... of any permit ..." applies to issuance of this permit.

By: \_\_\_\_\_  
Signature of Permittee

Date: \_\_\_\_\_

## 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. **Compliance.** All development must occur in strict compliance with the proposal as set forth in the application for permit, subject to any special conditions set forth below. Any deviation from the approved plans must be reviewed and approved by the staff and may require Commission approval.
4. **Interpretation.** Any questions of intent of interpretation of any condition will be resolved by the Executive Director or the Commission.
5. **Inspections.** The Commission staff shall be allowed to inspect the site and the development during construction, subject to 24-hour advance notice.
6. **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.
7. **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.

**SPECIAL CONDITIONS**

1. The permittee(s) shall use the grow-out facility only for the purpose of rearing white seabass (*Atractoscion nobilis*) supplied through the Ocean Resources and Enhancement Hatchery Program (OREHP) of the California Department of Fish and Game.
2. The permittee(s) shall design, construct, operate, and maintain the grow-out facility in strict compliance with all directions of the Joint Panel established under the 1994 Memorandum of Agreement by and between the California Coastal Commission, the California Department of Fish and Game, the Ocean Resources Enhancement Advisory Panel, and the Southern California Edison Company (MOA), including those specified in the OREHP *PROCEDURES MANUAL FOR THE GROWOUT OF JUVENILE WHITE SEABASS*. The directions and provisions of the MOA and the Procedures Manual are incorporated herein by reference as though set forth in full and are made a part of this permit.
3. The permittee(s) shall use and maintain the grow-out facility in a manner which protects localized water quality, benthic habitat, and human health. Maintenance measures shall include regular cleaning of the pen to remove excess food, and diseased and parasite infested and deformed fish. Diseased, parasite infested, and deformed fish shall be destroyed and disposed of in a permitted upland solid waste disposal facility. All below water pen screening shall be regularly cleaned to prevent fouling. Damaged screening shall be immediately repaired or replaced to ensure the integrity of all enclosures. Any unplanned release or escape of fish shall be reported immediately to the Executive Director of the Commission and the Department of Fish and Game.
4. All rearing pens shall be sterilized prior to restocking following the infestation of disease or parasitism resulting in a loss equal to or greater than 50 percent of the reared stock. Any major loss of rearing fish (50% or greater) shall be reported immediately to the Executive Director of the Commission and to the Department of Fish and Game.
5. The permittee(s) shall release the pen-reared white seabass in strict compliance with the release plan prepared by the Joint Panel which is incorporated herein by reference as though set forth in full and is made a part of this permit. All white seabass shall be tagged prior to their release. The permittee(s) shall not release any batch of fish until it has been inspected by a Department of Fish and Game biologist or a qualified biologist who has been approved by the Executive Director of the Commission. Fish which the

Biologist determines to be diseased, parasite infested, or deformed shall not be released.

6. The permittee(s) shall submit semi-annual monitoring reports to the Department of Fish and Game/OREHP and the Executive Director of the Commission. The first report shall be submitted within 180 days of the issuance of this permit. The monitoring reports shall include accurate records of: (1) the number of white seabass received, tagged, and released; (2) the pen mortality rate; (3) the time and location of release of all reared fish; and (4) any and all additional data required by the Joint Panel for monitoring operation of the grow-out facility for environmental degradation. The permittee(s) shall promptly correct any incompleteness or inadequacy the Executive Director finds in the submitted data. If the Commission, after consulting with the Joint Panel determines that operation of the grow-out facility is causing significant environmental degradation, including genetic degradation, the Commission may order modification or cessation of the operation of the facility to abate the degradation.
7. If the MOA described in **Special Condition 2** should be terminated, the permittee(s) shall be required to obtain an amendment to this permit to continue operations. The permit amendment request shall demonstrate how the permittee(s) shall provide an equivalent level of genetic quality control and monitoring for environmental degradation as is provided through the MOA.

#### EXECUTIVE DIRECTOR'S DETERMINATION (continued)

The Executive Director hereby determines that an Administrative Coastal Development Permit may be granted for the proposed development pursuant to Coastal Act Section 30624. As conditioned, the proposed White Seabass grow-out facility is in conformity with the provisions of Chapter 3 of the Coastal Act of 1976, and will not have any significant environmental impacts within the meaning of the California Environmental Quality Act.

#### FINDINGS FOR THE EXECUTIVE DIRECTOR'S DETERMINATION

##### 1. Project Description and Location

The Alamitos Bay Fisheries Enhancement Project (ABFEP) and the California Department of Fish and Game (CDFG) propose to construct, install, and operate a 10 ft. x 10 ft. x 18 ft. PVC and net fish pen for the purpose of rearing and releasing juvenile white seabass as part of the CDFG Ocean Resources Enhancement and Hatchery Program. The pen will be

located in Alamitos Bay adjacent to the Harbor Master's dock in the City of Long Beach (Exhibit 1-3).

## **2. California Department of Fish and Game Ocean Resources Enhancement and Hatchery Program**

The proposed fish pen is part of a larger endeavor to produce and release hatchery reared fish in the ocean waters off of southern California. The overall project is coordinated by the CDFG's Ocean Resources Enhancement and Hatchery Program (OREHP).

The OREHP was created by state legislation (Fish and Game Code § 6592) in 1983 and extended for an additional ten years in 1992. The purpose of the program is to support research into the artificial propagation, rearing, and stocking of marine fin-fish species that have a high sport and commercial fishing value, in the ocean waters off southern California. Marine fish hatcheries are considered experimental, and OREHP has had recent successes as well as failures with the artificial propagation and small scale pen-rearing of white seabass. The OREHP is self supporting, funded by a tax on fishing licenses. An advisory panel, (the Ocean Resources Enhancement Advisory Panel, (OREAP)), counsels the CDFG on funding and policy decisions for the OREHP.

The OREHP has targeted white seabass for artificial propagation, rearing and release due to the decline in the wild population and fish size since the early 1900's. An analysis of commercial boat catches indicated a decisive decline in the white seabass stock between 1918 and 1928. Later studies conducted between 1951-60 and 1973-84 indicated that the population may have stabilized at the level found in 1960. This equilibrium is at a much lower level than the historic white seabass population.

In March 1994, the Coastal Commission approved a Coastal Development Permit for an experimental hatchery (CDP No. 6-93-113), which is capable of producing 450,000 juvenile white seabass per year for release. White seabass are currently cultured at a hatchery administered by Hubbs Sea World Research Institute (HSWRI) in San Diego under contract to the OREHP. The OREHP completed construction in June 1996 of the experimental hatchery at Agua Hedionda Lagoon in Carlsbad. A condition of the Coastal Development Permit for the San Onofre Nuclear Generation Station, CDP No. 183-73, required Southern California Edison Company to contribute \$1.2 million toward the construction and evaluation of the fish hatchery, as a part of its mitigation package. Action by the Coastal Commission in April 1997 on the SONGS permit added \$3.6 million in mitigation funds to the OREHP account and calls for those monies to be used for additional hatchery construction, build-out and operating expenses. Pen-rearing facilities, such as this one, are proposed by OREHP as the preferred grow-out method for the white seabass propagated by the new hatchery.

### 3. Memorandum of Agreement

In April 1994, the Executive Director of the Coastal Commission signed a Memorandum of Agreement (MOA) with the CDFG, the Ocean Resources Enhancement Advisory Panel (OREAP) and the Southern California Edison Company. The MOA establishes the roles and responsibilities of the various parties in the construction and evaluation of a marine fish hatchery and related grow-out facilities. The MOA also requires the CDFG to prepare a Comprehensive Hatchery Plan (CHP) and a Grow-Out Facilities Procedures Manual.

A Joint Panel made up of representatives of each party to the MOA (with the exception of SCE, which may participate in the Joint Panel meetings as an observer only), plus the National Marine Fisheries Service and the University of California, will oversee the evaluation regarding the success of the hatchery and development and implementation of a genetic quality assurance program. **Special Condition 2** requires the permittee(s) to operate the grow-out facility in compliance with the directions of the Joint Panel as described in that condition.

The MOA also includes provisions to limit the potential environmental degradation associated with the hatchery and grow-out facilities. Accordingly, if the Commission finds that the facility is causing significant environmental degradation, including genetic degradation, the Commission can require modifications to or the cessation of the hatchery or grow-out facility operation to abate the degradation.

**Special Condition 7** requires that if the MOA is terminated, the permittee(s) must obtain a permit amendment or a new permit to provide the equivalent level of genetic quality control and environmental degradation monitoring as is guaranteed through the MOA. This condition is necessary to ensure that, in the absence of the MOA and the related Joint Panel, the grow-out facility will be continue to be operated in conformance with the Chapter 3 policies of the Coastal Act.

### 4. Grow-Out Facility Procedures Manual

The MOA requires the preparation of a Grow-Out Facility Procedures Manual to provide guidance for the individual grow-out facility operators. The CDFG has completed the manual and distributed it to the grow-out facility operators. The Grow-Out Facilities Procedures Manual provides guidance in the following areas: (1) the application process; (2) site selection; (3) pen design and construction; (4) preparation for receiving fish; (5) feeding; (6) monitoring, recognition, and treatment of diseases; (7) procedures for releasing fish; and (8) record keeping procedures. **Special Condition 2** requires the permittee(s) to adhere to the standards and procedures of the Grow-Out Facilities Procedures Manual, and incorporates the directions and provisions of the manual as a

Procedures Manual, and incorporates the directions and provisions of the manual as a part of this permit.

## 5. Marine Environment

Coastal Act Section 30230 states:

*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 such 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.*

Coastal Act Section 30231 states in part:

*The biological productivity 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 ...*

This permit will allow the applicants to rear and release a portion of the total amount of juvenile white seabass authorized for the OREHP. The OREHP is currently authorized to release 125,000 juvenile white seabass per year. The potential impacts associated with hatchery-reared white seabass being reared and released into the southern California bight include: 1) impacts on water quality and the benthic habitat in the vicinity of the rearing-pen; and 2) potential adverse genetic impacts of hatchery propagated fish on the native white seabass population.

Fish rearing facilities such as this proposed fish pen-rearing operation can potentially release significant quantities of organic matter or detritus (excess food and waste products) to the local aquatic ecosystem. Such organic matter releases can contribute to elevations in the biochemical oxygen demand, reduce water clarity, and smother benthic habitat. Data collected by the Hubbs Seaworld Research Institute, indicates that pen-rearing operations like that proposed by the applicants would not significantly impact local water quality or the local benthic habitat.

As currently approved, the CDFG regulates the quantity of released white seabass on a program-wide basis. This method of regulating the number of seabass released into the southern California bight provides the CDFG with the necessary flexibility to conduct experiments to determine the optimum stocking densities at each grow-out facility location. Determining the optimum stocking densities of individual grow-out facilities will better

equip the CDFG in dealing with the increased numbers of hatchery propagated fish which are now being produced by the new hatchery at Agua Hedionda Lagoon. At the optimum annual production rate, the new hatchery will produce approximately 450,000 fingerling white seabass for distribution to the grow-out facilities.

The potential that the introduction of hatchery propagated fish could decrease the genetic diversity of the wild seabass population is a concern. A loss of genetic diversity has the potential to reduce the adaptability of the natural population in dealing with changes in environmental conditions, such as global climate changes or human-related impacts. **Special Condition 1** restricts the use of the grow-out facility to rearing white seabass supplied from the OREHP white seabass hatchery. In accordance with the MOA, the Joint Panel is conducting an ongoing genetic quality assurance program concerning preservation of the genetic diversity of the native stock. The program informs the Joint Panel in decisions concerning the operations of the OREHP white seabass hatchery. Thus, genetic quality assurance will be addressed at the hatchery, prior to fish being supplied to the grow-out facility. **Special Condition 2** requires the applicants to comply with any directives issued by the Joint Panel, including directives based on any findings of the genetic quality assurance program. In addition, as a means of facilitating the evaluation of impacts associated with hatchery propagated and pen-reared fish on the genetic diversity of the wild white seabass population, the permittee(s) are required by **Special Condition 5** to tag all reared fish prior to release and to comply with the release plan prepared by the Joint Panel, which may require transporting the pen-reared white seabass to another location for release. **Special Condition 6** requires the permittee(s) to maintain accurate records of the rearing facility's operational practices and the release of fish. Additionally, **Special Condition 3** requires the permittee(s) to prevent the premature release of untagged fish and to report any accidental release of untagged fish. The tagging and record keeping requirement will also ensure the integrity of CDFG's future evaluation of the OREHP, and allow for an assessment of whether the release of hatchery propagates are increasing the stock of wild white seabass.

Thus, the Commission finds that the proposed project as conditioned is consistent with Coastal Act Section 30230 which requires that "[u]ses 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." The Commission also finds the project consistent with Coastal Act Section 30231 which requires that the "biological productivity 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...."

## 6. Cumulative Impacts

Coastal Act Section 30250(a) states in part:

*(a) New residential, commercial, or industrial development, except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources.*

Coastal Act Section 30105.5 defines the term "cumulatively" as it is used in Section 30250(a) to mean that "the incremental effects of an individual project shall be reviewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects."

The Commission has approved a total of eleven white seabass grow-out facilities associated with the CDFG's OREHP, since early 1993. All eleven of the Commission approved white seabass grow-out facilities are located along the southern California bight in the local jurisdictions of the City of Santa Barbara, the City of Newport Beach, City of Avalon, County of Los Angeles, the City of Marina del Rey, the City of Redondo Beach, the City of Oxnard, the City of Huntington Beach, City of Carlsbad, City of Dana Point and the City of San Diego. Through the OREHP, which includes all eleven of the permitted white seabass grow-out facilities, a maximum total of 125,000 juvenile white seabass have been approved for release per year. The total number of white seabass released from the OREHP can be increased by approximately 20% per year. The OREHP also includes a provision that with a positive recommendation from the Joint Panel, the CDFG may request and the Executive Director may approve that this maximum total release number be increased upon completion of certain program benchmarks contained in the MOA.

A significant expansion in the grow-out facility operation has the potential to result in food and/or animal detritus which may add to the cumulative marine impacts that already exist in developed harbor settings. However, cumulative water quality impacts to the local marine environment resulting from the use of the proposed floating fish pen are not expected to be significant. The relatively small numbers of seabass reared and released from the grow-out facility, local tidal flushing action, and the facility maintenance requirements contained in the Growout Procedures Manual and **Special Condition No. 3**, should reduce the potential cumulative impacts to marine resources to insignificant levels.

The impact of hatchery propagated fish on the genetic diversity of wild populations is of particular concern. The cumulative impacts associated with extensive marine fin-fish

mariculture operations could potentially be severe and irreversible, and have the potential to result in cumulative impacts on the wild white seabass population. A loss of genetic diversity has the potential of reducing the adaptability of the natural populations in dealing with changes in environmental conditions, such as global climate changes, or other human induced impacts.

To assist in the evaluation of cumulative impacts associated with hatchery propagated and pen-reared fish on the native white seabass population, the permittee(s) are required by **Special Condition 5** to tag all reared fish prior to release and to comply with the release plan prepared by the Joint Panel, which may require transporting the pen-reared white seabass to another location for release. **Special Condition 6** requires the permittee(s) to maintain accurate records of the rearing facility's operational practices and the release of fish. Additionally, **Special Condition 3** requires the permittee(s) to prevent the premature release of untagged fish and to report any accidental release of untagged fish. The tagging and record keeping requirement will also ensure the integrity of CDFG's future evaluation of the OREHP, and allow for an assessment of whether the release of hatchery propagates are adversely affecting the genetic diversity of the white seabass population.

The white seabass grow-out facility project, and the others like it, offer an opportunity to evaluate the impacts (both direct and cumulative) associated with the artificial propagation, rearing and stocking of important marine fish species. The California Department of Fish and Game, the California Coastal Commission, the National Marine Fisheries Service, the University of California, and the Ocean Resources Enhancement Advisory Panel, through the Joint Panel's oversight and evaluation of the white seabass hatchery, will produce important information on both direct and cumulative impacts, which will assist the agencies in guiding and regulating future marine fish hatchery and rearing/release projects. The Commission finds therefore that the proposed project as conditioned is consistent with the Coastal Act Section 30250(a).

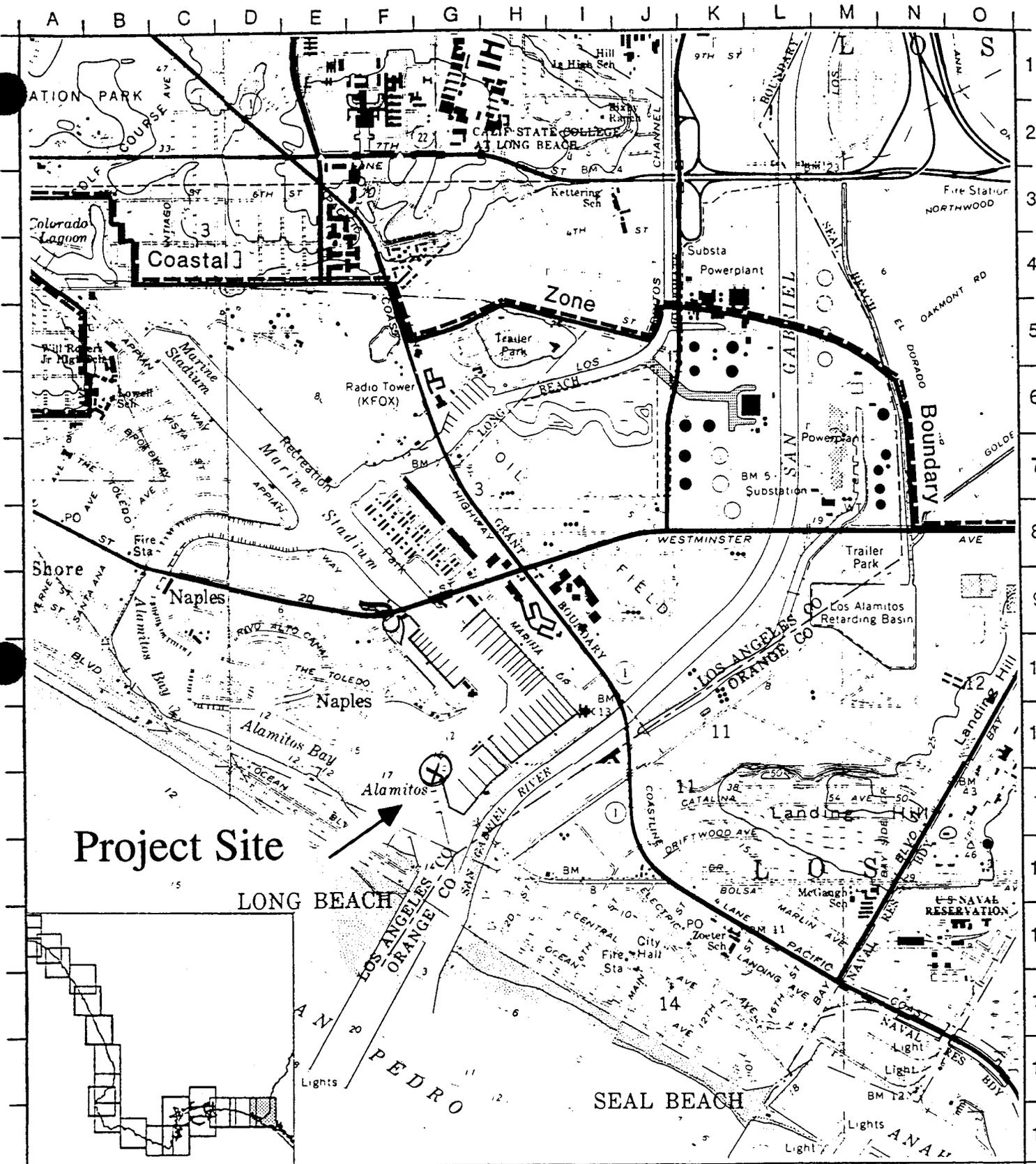
## 7. California Environmental Quality Act (CEQA)

California Public Resources Code. Section 21080.5(d)(2)(i) states:

*The rules and regulations adopted by the administering agency shall require that an activity will not be approved or adopted as proposed if there are feasible mitigation measures available which would substantially lessen any significant adverse impact which the activity may have on the environment.*

Thus, CEQA requires the consideration of feasible alternatives and mitigation measures to lessen any environmental impacts of the project to a level of insignificance.

The project, as conditioned, meets the mitigatory requirements of Section 21080.5 (d)(2)(i) of the CEQA. Although the Commission believes that the white seabass pen-rearing/release project has the potential to result in adverse impacts to marine resources and marine water quality, the Commission finds no feasible less environmentally damaging alternatives or additional feasible mitigation measures, other than those identified herein, that would substantially lessen any significant adverse impact which the activity may have on the environment. Therefore, the proposed project, as conditioned, is consistent with the CEQA.



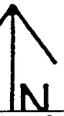
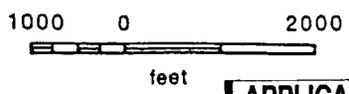
**Project Site**

LONG BEACH

SEAL BEACH



California Coastal Commission



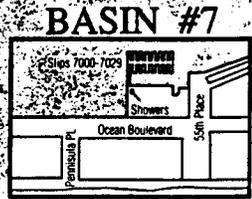
County of Los Angeles

APPLICATION NO.
E-98-05
Exhibit 1

NORTH

Sho P

Long Beach Yacht Club



# ALAMITOS BAY

VISITING VESSELS MUST CHECK IN TO MARINE HEADQUARTERS FOR GUEST ASSIGNMENTS.

Fueling Dock

Little Ships Fleet Yacht Club

Marine Bureau

Harbour Masters Dock

Public Telephones

Pump

BASIN #1

Phones

Restricted Parking

Public

Boat Owners Showers & Restrooms

Public Tele

Ice House

Project Site

Berth #1

Berth #2

Berth #3

Boat Owners Showers & Restrooms  
Public Telephones

Boat Owners Shower & Restrooms

Seaport Village

Boat Owners Showers & Restrooms/  
Public Telephones

North Long Dock

Seaport Village Parking

South Long Dock

Public Dock

Entrance Channel

SAN GABRIEL RIVER

Marina Drive

Alamitos Bay Yacht Club

BASIN #5

**Legend**  
# Gangways

## FACILITIES

- 1,975 Slips
- Dock Boxes
- Dinghy Storage
- 24 Hour Security
- Parking
- Boat Owners Showers & Restrooms
- Fuel Dock

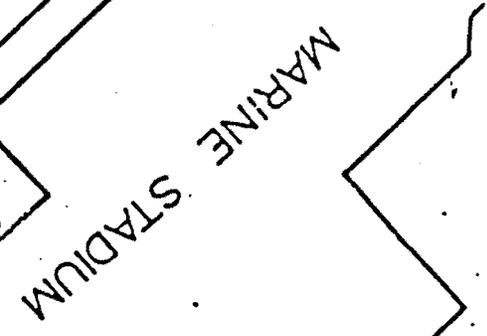
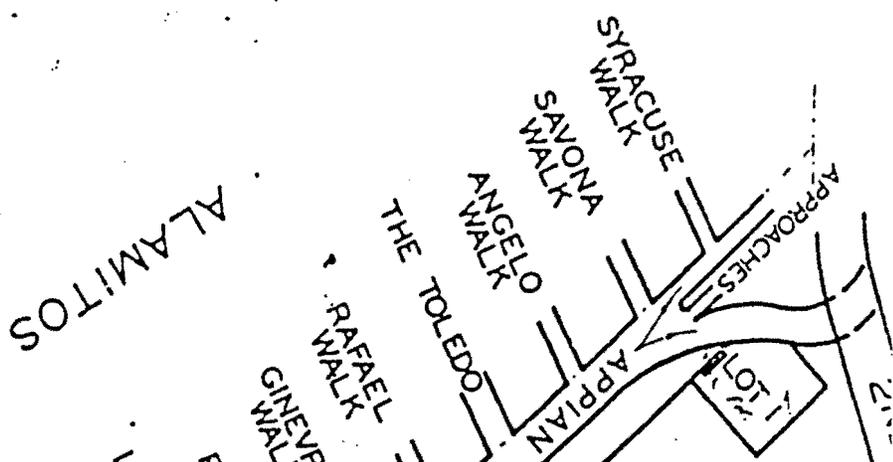
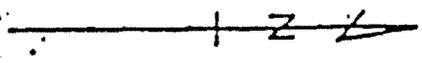
### Guest Moorings

There are 1,300 feet of guest docking available in marinas. C moorings are available, year-round. The rental fee is 50 cents per foot per night. Visiting boaters may come to either office and rent a mooring or call and make arrangements.

**General**  
The Long Beach Marina is a beautiful, clean, and pleasant place for all boaters. To this end, the following simple rules are in mind. So, whether you are a long time permittee, we ask you to follow the following, simple rules. This is an enjoyable place for all boaters.

- Nothing may be stored in the marina except in your own name. If properly stored will be removed, they will be removed.
- All dogs must be kept on a leash. This is a requirement for all owners must carry a leash and clean up after their pets.
- Fishing is not allowed in the marina. No fishing gear is permitted from fishing parties.
- Only minor repairs are allowed. No major repairs are allowed now federal and state laws.

<b>APPLICATION NO.</b>
E-98-05
Exhibit 2

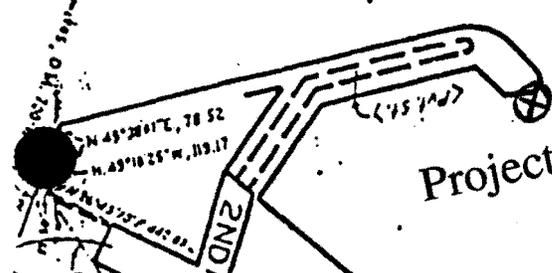


TRACT NO. 1077  
 M.B. 18-195  
 TIDE LANDS SURVEY  
 NO. 106 IN T. 5 S., R. 12 W.

CODE  
 5500

NO. 106 FOR PREP. ASSM'T. SEC. 151-21 & 23  
 149-18

Project Site



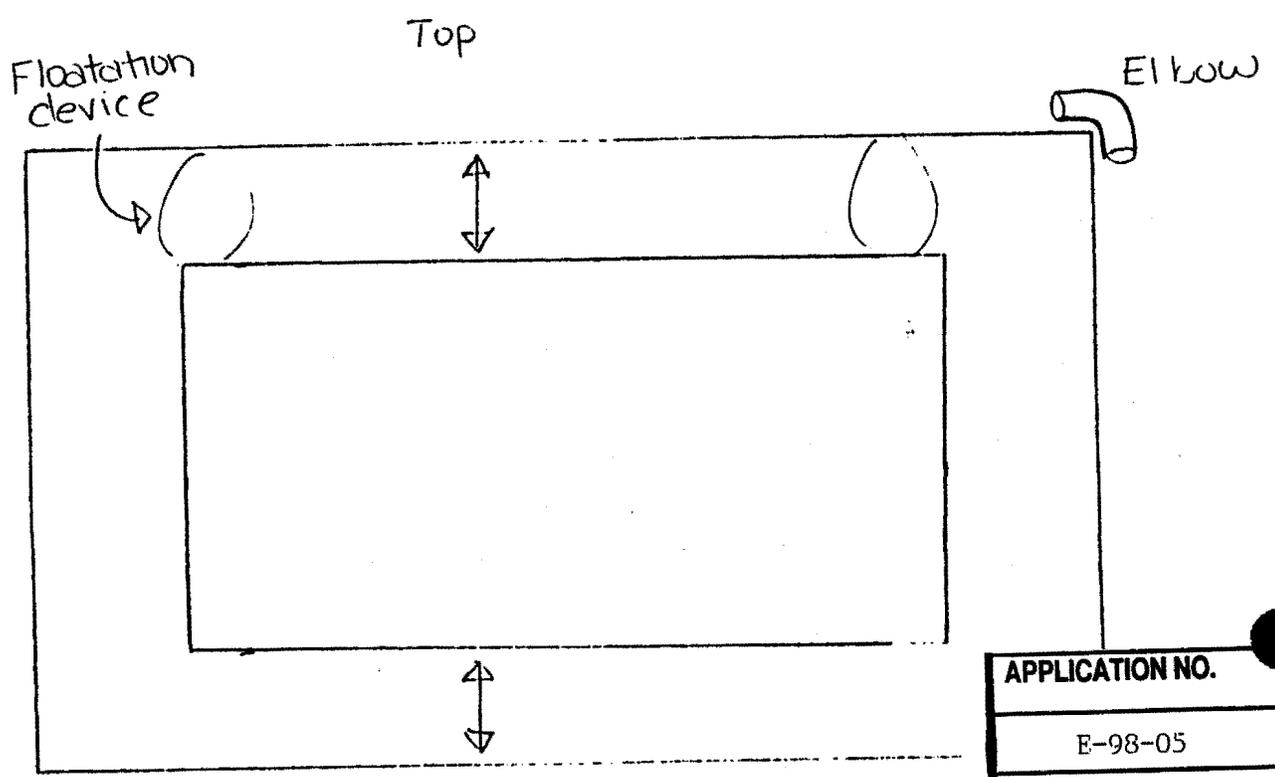
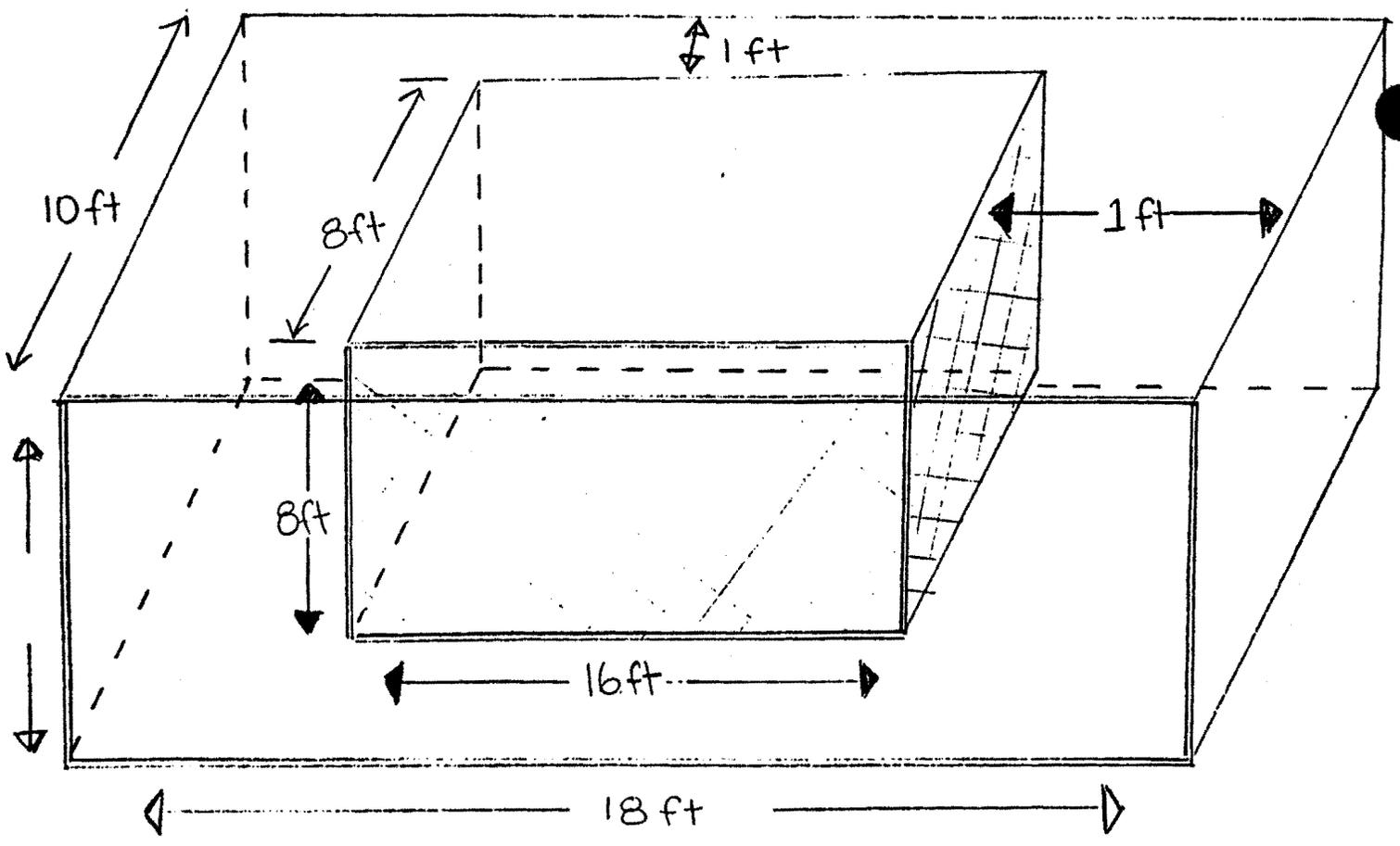
RIVER

SAN GABRIEL RIVER

STUDEBAKER DR.

APPLICATION NO.
E-98-05
Exhibit 3

Vertical text on the left edge of the page.



<b>APPLICATION NO.</b>
E-98-05
Exhibit 4

# Predator Net

est.  
~ \$150-200)

●  
w/ piping

.15 / 1" x 10'

2 x \$2.15 =

\$25.80

●  
Elbows

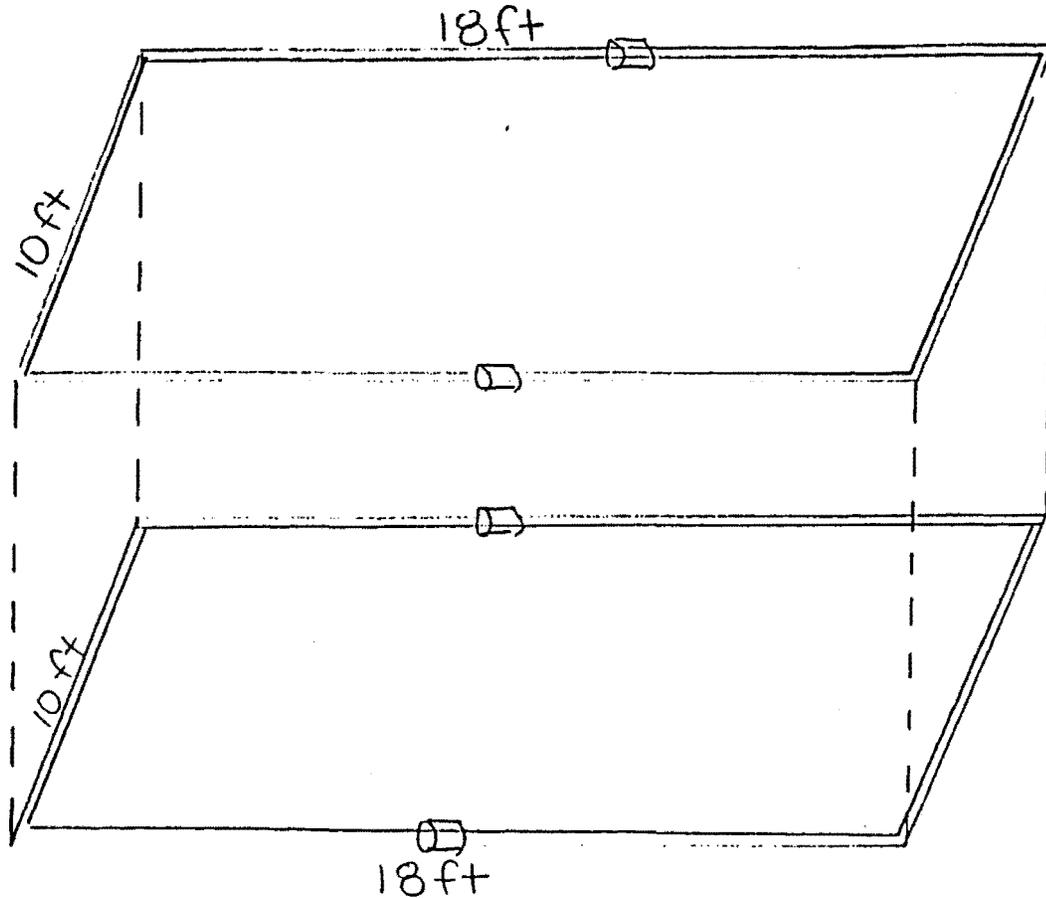
\$4.24

●  
slips

\$1.56

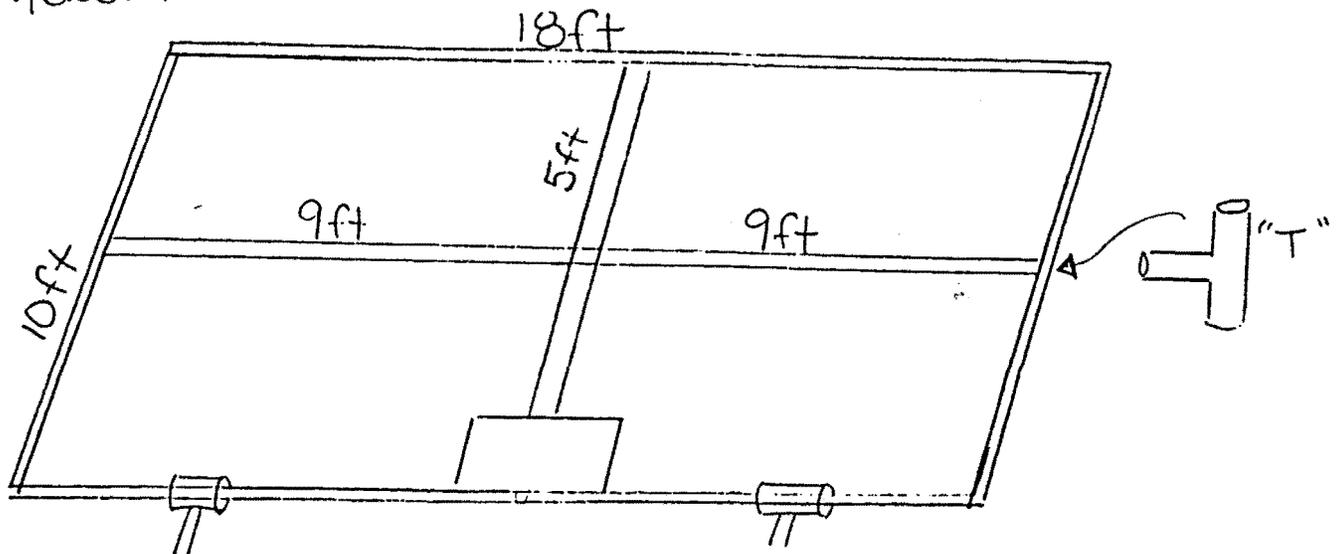
Total

\$31.60



●  
1" dock on  
right hand side  
(connection to dock 1)  
basin 1, dock 1

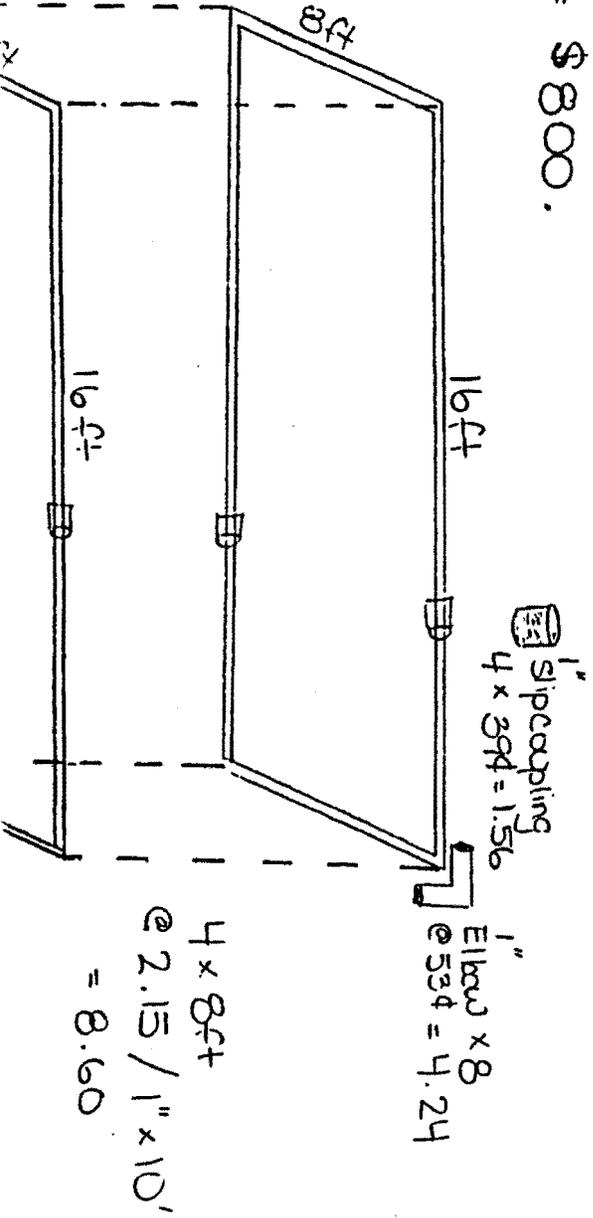
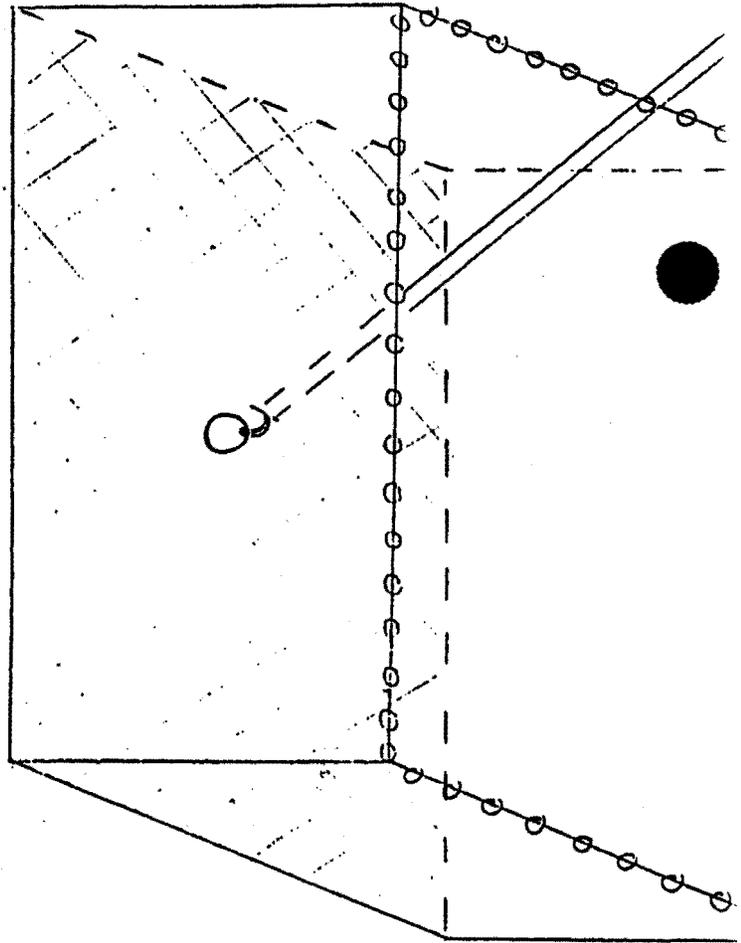
Top (Cover)



●  
9 x (1" x 10') = \$19.35

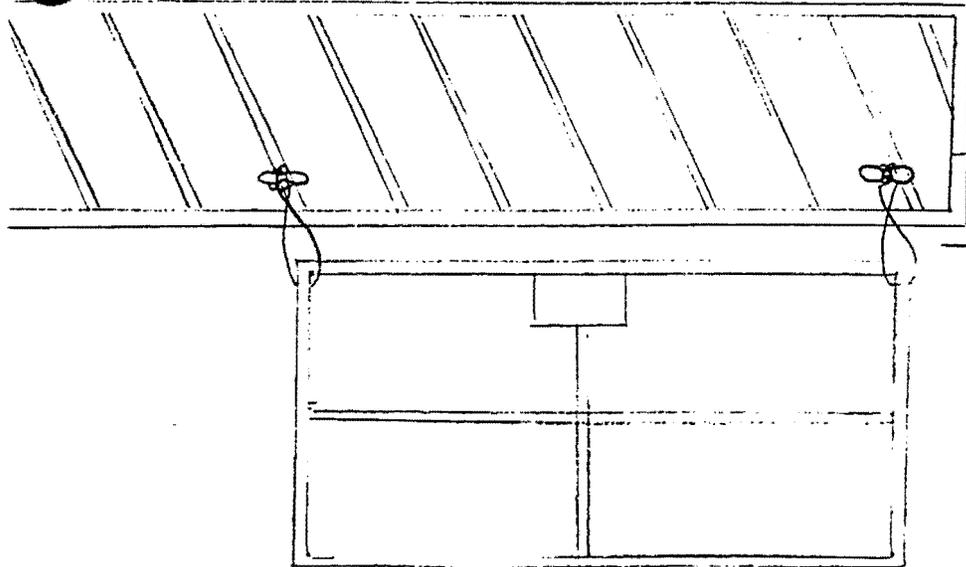
APPLICATION NO.
E-98-05
Exhibit 5

Netting: 3/4-1 inch  
 ~ \$400 x 2 = \$800.

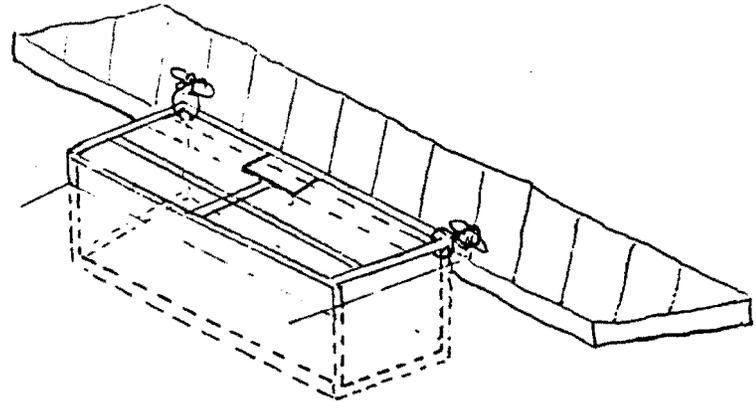


APPLICATION NO.
E-98-05
Exhibit 6

# ALAMITOS BAY FISHERY ENHANCEMENT PROJECT CAGE MOORING,



CAGE IS MOORED TO DOCK CLEATS BY STRONG ROPE FASTENED TO CAGE JOINTS



IN THE EVENT OF EXTRAORDINARILY ROUGH SEA, CAGE WILL BE HELD IN PLACE BY SEA ANCHOR ATTACHED TO SUBMERGED CAGE JOINTS.

APPLICATION NO.
E-98-05
Exhibit 7

