

DEPARTMENT OF BOATING AND WATERWAYS

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**BOATING INFRASTRUCTURE GRANT PROGRAM
TIER 2**

GRANT PROPOSAL FOR:

WESTPOINT MARINA & BOAT YARD - TRANSIENT FACILITIES

SUBMITTED BY:

STATE OF CALIFORNIA
DEPARTMENT OF BOATING AND WATERWAYS
2000 EVERGREEN STREET, SUITE 100
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Application for Tier II Boating Infrastructure Grant Program Westpoint Marina and Boatyard Redwood City, California

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1. Introduction

This grant application is for funding of public transient boat tie-up facilities in the South San Francisco Bay as part of the construction of Westpoint Marina (WPM), a new privately owned facility in Redwood City. Accommodations for up to 48 transient boats 26 feet or more in length are provided, together with dock accommodations for water, power, sewer and telecommunications. Shore-side accommodations for visiting boaters include food, fuel, boatyard services, restaurant and shops, restrooms and showers, as well as access to important historical and natural destination points.

A favorable climate allows year-round boating in the South Bay, and nautical activities are very popular. Ironically, accommodations for boaters and other aquatic activities have steadily declined in the South Bay for a combination of reasons. Five marinas in the South Bay have closed in recent years, and few guest slips are available for visitors. Westpoint Marina will revitalize boating activities in the South Bay and provide excellent accommodations for transient boaters.

2. Project Site and Historical Significance

The South San Francisco Bay is by far the largest of the region's bays, 33 miles long and 12 miles wide, and contains one of only four deep-water harbors in the region—the Port of Redwood City. (Other deep-water ports are San Francisco, Oakland, Stockton and Sacramento). Redwood Channel is maintained to an operating depth of 30 feet and has been an important shipping region for two centuries and remains so today; two million tons of cargo crossed the port's wharves in 2005.

Redwood City boasts a nautical heritage that rivals San Francisco. It was historically important for fishing and both cement and lumber shipping throughout the 1800's and 1900's (rebuilding San Francisco after the quake). Salt too has been shipped from Redwood City since the gold rush, and at one time Redwood City was home to a dozen shipyards building sailing ships for commercial use. Interest in recreational boating grew rapidly in the last fifty years and continues to expand. The South Bay is a particularly popular destination for transients because of its exceptional climate and central location.

3. Need

The San Francisco Bay area boasts 2,000 classes of sailboats and more than 200 yacht clubs, and is a premier boating area and sailing destination in the United States. Two of the region's most popular destinations for boaters are the Sacramento Delta and the South San Francisco Bay, both a day sail from the Golden Gate. Historically South Bay harbors such as Alviso, Palo Alto and Redwood City were popular destinations for transient and regional boaters, and fishing boats often choose to "winter over" in the South Bay to avoid blustery weather and crowded conditions in the North Bay. Unfortunately, over the last two decades numerous marinas have been lost to development and dredging issues. Today there are few guest slips available in the South Bay, and none left in Alviso or Palo Alto. Boaters venturing south find few safe harbors and fewer accommodations, despite the scale of the South Bay (nearly 400 square miles) and its standing as one of the largest population centers in California.

One reason for the decline in South Bay boating accommodations is siltation in this shallow bay and the high cost and difficulty of maintenance dredging. This led to the loss of Belmont Harbor, Palo Alto Harbor, Alviso Harbor and Cooley's Landing.

A second reason for the decline is high land values on the peninsula, especially for waterfront property. Marinas have been purchased and closed by entrepreneurs seeking a higher return from other uses such as office space and condominiums. A recent example is Peninsula Marina in Redwood City, representing 412 slips lost. Pete's Harbor in Redwood City is expected to follow.

Third, the shallow shoreline and warm climate make the South Bay ideal for salt-farming. Cargill Salt Company remains active today, having been consolidated from over one hundred salt companies in the last century. This further limits an area which has few natural marina sites.

Finally, the once rich boating infrastructure has deteriorated in concert with the decline in local boating, and today no boatyards remain in the South Bay. The few existing facilities (sail lofts; engine, canvas and rigging shops; boat supplies) are scattered and inefficient, and a single fuel dock remains near San Francisco Airport at Coyote Point. Market data shows that marine services in a common location reinforce each other and make for more successful operations. Such co-located services are particularly helpful to transient boaters.

The few guest slips that exist in the South Bay are mostly small, and today's larger vessels often cannot find accommodations. Westpoint Marina will offer high-quality accommodations for larger transient boat, and in sufficient quantity to draw clubs and organizations looking for interesting destinations. Extensive public amenities and local attractions are appealing to those who want to disembark and explore. Additionally, the desire to "stay together" makes a linear dock more attractive than the common practice of distributing visitors over unoccupied slips.

Westpoint Channel is a long, protected waterway connecting directly to Redwood Channel, bounded by salt ponds and wildlife refuge areas. It is a highly valued waterway for competitive rowers, and has produced more Olympic medallists than any other location in the United States. It is also home to dozens of rowing, paddling and sailing clubs, and it is on this channel that WPM is being constructed (aerial photograph in Exhibit C). These aquatic activities are popular with transient boaters both as viewers and as participants, and no other South Bay location offers such an array of choices.

4. Objective

Westpoint Marina intends to stem the decline in boating facilities in the South San Francisco Bay and create a world-class marina by offering substantial new transient berthing as well as permanent vessel accommodations, particularly for larger boats (40 to 60 feet). The project commenced in 1988, and it has taken 14 years to work through the complex and difficult permitting process. It is located on the only remaining site in the South Bay viable for a full-service marina and boatyard—a former salt/bittern pond on a natural navigable channel. It enjoys close access to the Bay, convenient landside transportation, and is central to many attractions for visiting boaters. In addition to 400 deep-water slips and dry storage for several hundred more boats, a boatyard, fuel dock, aquatic center and retail area are planned.

Studies show that high-quality destination marinas have as much upland as water areas, whereas poor quality marinas tend to be simply “parking lots for boats”. With 24 acres of uplands and a 26 acre marina basin, WPM will be the only full-service destination in the largest of San Francisco’s Bays, and it is the extensive uplands which allow the varied attractions which distinguish the most popular destinations.

WPM will provide accommodations for up to 48 non-trailerable vessels of 26 feet or more by constructing transient vessel facilities consisting of (1) a 10-foot wide, 1,000-foot long floating dock; (2) an 8-foot wide, 336-foot long floating dock; (3) dock utilities including water, power, telecommunications, fire suppression, and a vacuum sewage pump-out system; and (4) restroom, shower, laundry, and locker areas.

5. Approach

The marina site is within Redwood City and San Mateo County, at the foot of Seaport Boulevard in an area designated “Port Priority”. The 50-acre site was originally a bittern pond operated by Leslie (now Cargill) Salt Company. Exhibit B shows the project location, bounded on the north and east by Westpoint Slough, a navigable channel connecting to Redwood Channel, and Greco Island, a wildlife refuge. The geotechnical analysis indicates maintenance dredging will not be required for twenty years or more, and the marina basin is excavated to 12 feet below mean sea level. The entrance is protected by Greco Island, providing a safe haven for visiting vessels in bad weather.

Exhibit G is an illustrative site plan for Westpoint Marina, showing its 400 wet slips, 160 dry-stack slips, a two-lane launch ramp and three restroom/shower facilities. To the east

is a full service boatyard with fuel dock and dry stack storage and to the west is a retail area with marine store, restaurant, yacht club, harbormaster office, sailing school and aquatic (rowing) center. There are a variety of marine-oriented shops situated on a long boardwalk overlooking the marina.

To develop this former salt pond it is necessary to: (a) remove the bittern material, (b) install a “wick drain” and surcharge system to dewater and stabilize the underlying mud, (c) excavate the marina basin, and (d) install riprap and dredge the entrance to the bay. The bittern was safely removed in 2002, and the wick system installed in 2003. The basin excavation started in summer 2004 and will be completed in summer 2006, at which time docks and infrastructure will be put in place. The guest docks will be installed in the first phase and are expected to take four months to complete.

As a hub for aquatic activities in the South Bay, WPM must offer ample guest berthing and services for transient vessels. The main (1000 feet) transient dock parallels the public boardwalk with a restaurant, coffee shop, marine store and outside seating for visitors. The secondary (336 feet) transient dock is adjacent to the fuel dock, boatyard and haulout facilities for transients seeking such services. These accommodations are located at the east and west ends of the marina basin to afford the safest and easiest access without the need to transit through berthing fairways.

Two dock systems have been approved: Concrete flotation docks from Bellingham Marine, and aluminum truss docks with Ipe hardwood decking from Shoremaster Marine. Both systems feature concrete pilings, piling caps, sealed flotation systems and protective rub rails. Dock deck height is 16 inches. A final selection will be made shortly, and costs in the competing bids are similar. The transient docks are expected to have a life in excess of 30 years.

The main guest dock is oriented so that visiting boats can round up into the prevailing wind to easily tie up.

6. Funding Requirements

This grant application is for two separate transient docks:

Guest Dock A consists of a 1,000X10 foot (10,000 sf) dock which parallels a public boardwalk and marine retail area, and is close to the yacht club and harbormaster office. It will accommodate up to 36 vessels of 26 feet or more.

Guest Dock B consists of a 336X8 foot (5,376 sf) transient dock near the boatyard and fuel docks. It can accommodate 12 vessels of 26 feet. Based on historical use, both docks can be expected to be utilized to capacity, especially in summer months when yacht clubs sponsor cruises, as no other comparable facilities remain in the South Bay.

Three public restroom/shower facilities are provided in the marina. Two are keyed for general berthing use, and one is in the harbor master building, accessed from the guest dock. This restroom/shower/laundry facility will be designated for visitor use.

Westpoint Marina proposes to match 50% in cash as detailed below, and is funded by Mark L. Sanders.

Item	Total Cost	Matching Funds	Federal Funds
Dock A (10,000 sf)	\$993,960.00	\$496,980.00	\$496,980.00
Dock B (5,376 sf)	\$532,224.00	\$266,112.00	\$266,112.00
Restroom (500 sf)	\$50,000.00	\$25,000.00	\$25,000.00
Total A and B:	\$1,576,184.00	\$788,092.00	\$788,092.00

These costs include the following:

- Concrete or aluminum truss dock systems
- Cost to install docks
- Piles and pile driving (20)
- Power pedestals with water, power and telecommunications
- Vacuum sewer pump-out system
- Fire suppression systems
- Three ramps including one ADA compliant ramp
- A bath/shower/laundry facility primarily for visiting vessels
- Trash and recycling receptacles

Cost for the restroom/shower/laundry facility is \$100.00/sf.

Cost for the transient docks is \$99/sf, and is the result of three competitive bids. Recently installed dock systems at other marinas incurred a cost/sf as follows:

Port of San Diego police and transient dock (2002)	\$132/sf
Channel Islands Marina (2005)	\$100/sf
Cabrillo Isle Marina (2004)	\$96/sf
Ventura Harbor Village Marina	\$105/sf

Westpoint Marina is a new development, and site development costs common to the whole project are excluded from this application. These additional costs include:

Purchase cost of land	\$1,750,000.00
Site development (dredging, wicking, riprap, excavation)	\$5,500,000.00
Engineering and design services	\$617,000.00
Bonding, permits, insurance and city fees	\$570,000.00
Planning, environmental and geotechnical	\$1,748,000.00
Infrastructure (roads, water, power, sewer)	\$3,034,000.00

Total site development costs: \$13,219,000.00

Transient slips represent 10% of all wet slips, or \$1,321,900.00 of the total site development costs. If this cost was apportioned to the transient slips, the owner match for this grant would actually be 73%.

7. Expected Benefits and Results

Westpoint Marina will afford up to 48 transient boaters a safe harbor in the South San Francisco Bay. First-class amenities as well as ready access to downtown Redwood City and the mid-peninsula are provided. The site creates more than 4,800 lf of new public shoreline and 3.8 acres of public access with multiple connections to the Bay Trail, all available to visiting boaters. In addition to dockage for guest vessels, the shore-side of the docks allow dinghy tie-up for more visiting boaters who choose to anchor in Westpoint Slough.

Transient boaters want more than just temporary berthing, and WPM's extensive attractions match those of the best destination marinas on the California coast. It supports Redwood City's revitalization of the downtown area and emphasis on the importance of its port. Finally, it brings substantial economic benefit to the area.

The project has significant environmental benefits. It adds 26.8 acres of new Bay surface, with three million gallons of additional flushing water to Westpoint Channel. It removes an unused and toxic bittern pond which threatened the Bay, and provides new fish and fowl habitat as well as much-needed access to the Bay for area residents and visitors. The marina basin excavation generates more than 500,000 cubic yards of Bay mud, and all is used onsite to create the uplands portion of the project. WPM extends the Bay Trail by nearly one mile.

Cooperation with the U.S. Fish and Wildlife Service includes monitoring of wildlife habitat and endangered species on Greco Island, posting of FWS signs around the island, and installation of navigational aids in Westpoint Channel. Ongoing boating safety and environmental awareness classes are planned on site.

8. Regulatory compliance

The Westpoint Marina and Boatyard is fully permitted by all State and Federal regulatory agencies having jurisdiction, including the US Army Corps of Engineers, the Bay Conservation and Development Commission (BCDC), the Regional Water Quality Control Board, The City of Redwood City, The Port of Redwood City, and the US Fish and Wildlife Service. It complies with the Bay Area Long Range Plan and zoning ordinances for public access and water-oriented activities at this site, as well as the Redwood City Long Range Plan.

The WPM site is the first salt pond ever permitted for development by BCDC, due to its compelling public and environmental attributes and overwhelming public support by local citizens, the boating community and environmental groups.

9. Summary

Westpoint Marina will be the only full-service destination marina in the South San Francisco Bay, and provides first-class accommodations for substantial numbers of transient boats as well as tenants, and hosts public and private water-oriented activities.

The project is environmentally thoughtful, providing 26.8 acres of new Bay surface, and a protective buffer for Bair Island and Greco Island wildlife refuges. It is located on a deep-water channel and requires minimal maintenance dredging. WPM continues the San Francisco Bay Trail and provides much-needed public access to and from the Bay.

WPM secures the last location in the South San Francisco Bay ideally suited to this use, and it is permanently designated a marina/boatyard by deed.

There has been no opposition to this project by a public or private group, and WPM is regarded as one of the most beneficial developments in the South Bay. Active supporters include the Friends of Redwood City, the Audubon Society, the Marine Science Institute, noted local environmentalists, the Sea Scouts, Coast Guard Auxiliary, Stanford University, the Port and City of Redwood City, and a host of local paddling, rowing, fishing and kayaking organizations, yacht clubs, and hundreds of individual boaters.

The provision of ample, up-to-date transient berthing in the South San Francisco Bay will enable visiting boaters to explore and enjoy one of the most varied and interesting regions in Northern California and find refuge in a safe South Bay harbor.

Ranking Criteria Worksheet

	Points
1. Tie-up facilities for transient non-trailerable recreational vessels	15
This grant provides for two separate docks. One is near retail facilities including a restaurant, yacht club, and marine store for visiting boats. The second is near the boatyard for haulout, fuel dock and boatyard services for vessels seeking repairs. The South Bay is nearly 400 square miles, yet has few safe harbors and fewer transient accommodations. These transient accommodations are well protected and offer refuge as well as restroom, shower and laundry facilities.	

2. Partnerships

15

The Stanford Masters (a non-profit alumni rowing organization) plans a boathouse on land provided by Westpoint Marina (exhibit P), and it in turn provides legal and architectural support. (The existing Stanford boathouse can only accommodate current students). This aquatic center will support a wide variety of sailing, rowing and paddling organizations, including more than two dozen groups seeking close access to Westpoint and First Slough.

Accommodations are also provided for a Redwood City Police boat and potentially a Redwood City fire boat, the Coast Guard Auxiliary, the Sea Scouts, and the Marine Science Institute. MSI operates a large research vessel and teaches marine biology to Bay Area K-12 students. MSI and Stanford accommodations are also guaranteed in the property deed.

State and local agencies have designated this site for “public use, water-oriented facilities”, and the Port of Redwood City and City of Redwood City have worked closely with WPM in its conception, design and construction. WPM is a key element in Redwood City’s ongoing downtown redevelopment project.

3. Innovative Techniques

15

The marina site was originally a bittern storage pond under which lay 40 feet of saturated bay mud surrounded by a levee. Using advanced dewatering techniques which include vertical wicks and horizontal drain fields, the site has been dried in two years instead of a projected 35 years, realizing final design stability and settlement (nearly six feet) very quickly. This innovative approach was developed in Holland. The location requires little dredging, restores a highly degraded site to a desirable public use, and involves no intrusion into the bay. Using conventional techniques this site could not have been developed.

Westpoint Marina docks are fitted with a continuous vacuum sewer system, operated at no cost to boaters. This will greatly reduce the chances of discharge into the bay when compared to conventional pump out stations.

The design of the marina is driven by geography as well as the need to minimize “standing waves” in the basin. This basin shape allows inclusion of two long public docks in areas of limited use for permanent berthing. As side-ties, the public docks can accommodate various boat lengths efficiently, and an internal piling design allows inboard tie-up for dinghies of visiting vessels.

4. Matching funds

15

Westpoint Marina proposes to match funds 50%. If necessary, partial funding would still be welcome.

5. Cost efficient (takes full advantage of new construction marina) 10

Only costs *specific* to transient dock accommodations are included (docks, piling and utility pedestals). Costs common to the whole project are not apportioned in any way. Those other costs include land cost, site development, utilities and engineering costs.

6. Links to destination points 10

Redwood City is centrally located and ideally situated to provide access to the peninsula as well as destinations from San Francisco to San Jose and beyond. Transportation includes freeway access and nearby air, bus and passenger rail service, including BART. Shuttle transportation to San Jose and San Francisco Airports, plus nearby San Carlos and Palo Alto airports is available.

The extension of ferry services from San Francisco to Redwood City is being planned and Westpoint Marina as a participant. All destination sites under consideration are all within walking distance to Westpoint Marina.

7. Access to recreational and cultural destinations 15

The San Francisco Peninsula offers numerous attractions for visitors. Within walking distance are the historic San Mateo County seat and Museum, the Hiller Aviation Museum, Bair and Greco Island wildlife refuges, the Fox Theater complex, downtown Redwood City, Menlo Park and Atherton. It is at the center of Silicon Valley, and by bicycle, car and bus innumerable additional attractions are available including Filoli, NASA Ames, the Winchester House, the Tech Museum, and Bay Meadows.

Westpoint Marina offers direct access to the Bay Trail, and adds nearly a mile to the trail including two spur trails for exploring wetland areas. Other convenient mid-peninsula hiking, biking and equestrian trails include the Skyline Trail in the Redwood Corridor.

8. Positive economic impact to community 5

Westpoint will generate \$4M in annual revenues in the marina, and additional retail spending by boating visitors to the site. The boatyard and fuel dock will attract visiting boaters from throughout the Bay. WPM is an important element in the revitalization of Redwood City's deep-water port, as well as historic downtown Redwood City.

9. Coordination of transient berthing 5

Coordination with the Redwood City Municipal Marina and Pete's Harbor (two remaining marinas in the area) occurs on a continuing basis. These older marinas have smaller berths and no dedicated public docks, fuel or boatyard services. They cannot accommodate larger vessels. Westpoint Marina is designed to fill this void.

In October, 2005, California and Oregon entered into a Memorandum of Understanding that establishes coordination between the States in the planning and location of transient boating facilities as identified in the Oregon Six-Year Statewide Boating Facilities Plan (2005-2011) and the California Statewide Boating Facilities Needs Assessment (October 2002). This project helps meet transient boater needs as identified in the California Statewide Boating Facilities Needs Assessment (October 2002), and is recognized as an integral part of the multi-state effort between California and Oregon.

**Memorandum of Understanding
Between
The Oregon State Marine Board and
The California Department of Boating and Waterways**

This Memorandum of Understanding is between the State of Oregon, acting by and through the Oregon State Marine Board, hereafter called the "Board" and the State of California, acting by and through the California Department of Boating and Waterways, hereafter called the "Department".

The purpose of this Memorandum of Understanding is to establish mutual support and coordination between the Board and the Department in transient boating facility development for the benefit of recreational vessels traveling along the California and Oregon coastlines.

This Memorandum of Understanding is intended to establish bi-state cooperation resulting in the coordinated location of coastal transient boating facilities.

The Board and the Department hereby agree to coordinate and cooperate through respective efforts in the planning of transient boating facilities as identified in the Oregon Six Year Statewide Boating Facilities Plan (2005-2011) and the California Statewide Boating Facilities Needs Assessment (October 2002).

This Memorandum of Understanding is executed on behalf of the Board and the Department through the undersigned representatives on the dates indicated after their signature hereto:

STATE OF OREGON
Marine Board

By: *Paul Donheffner*
Paul Donheffner

Title: Director

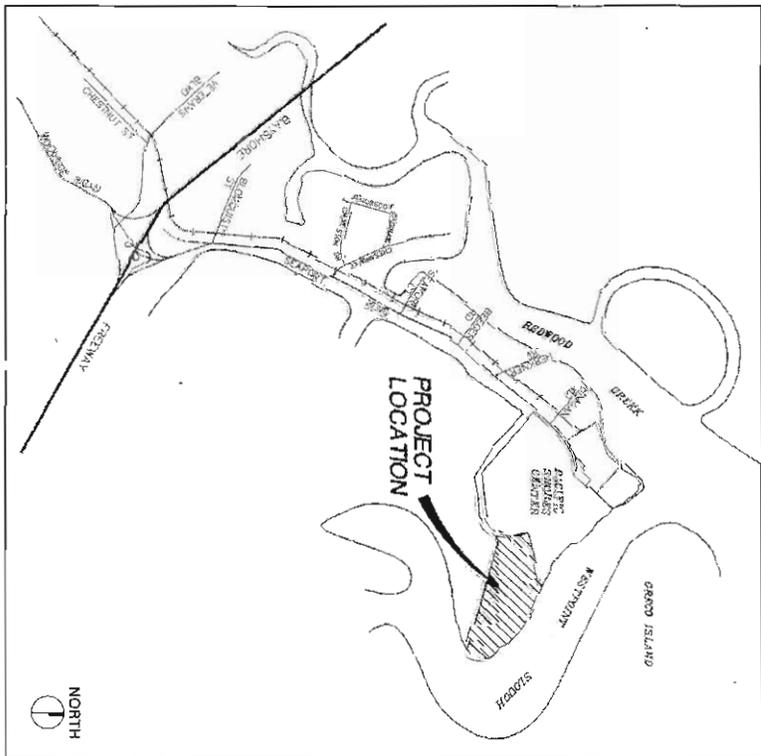
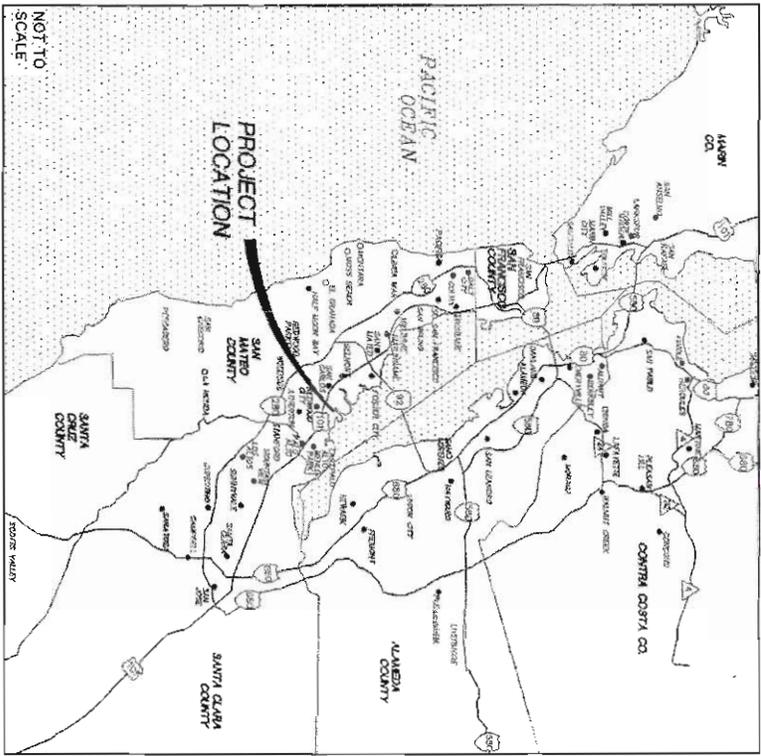
Date: 10/10/05

STATE OF CALIFORNIA
Department of Boating and Waterways

By: *Ray Tsunoyoshi*
Ray Tsunoyoshi

Title: Director

Date: 10/4/05



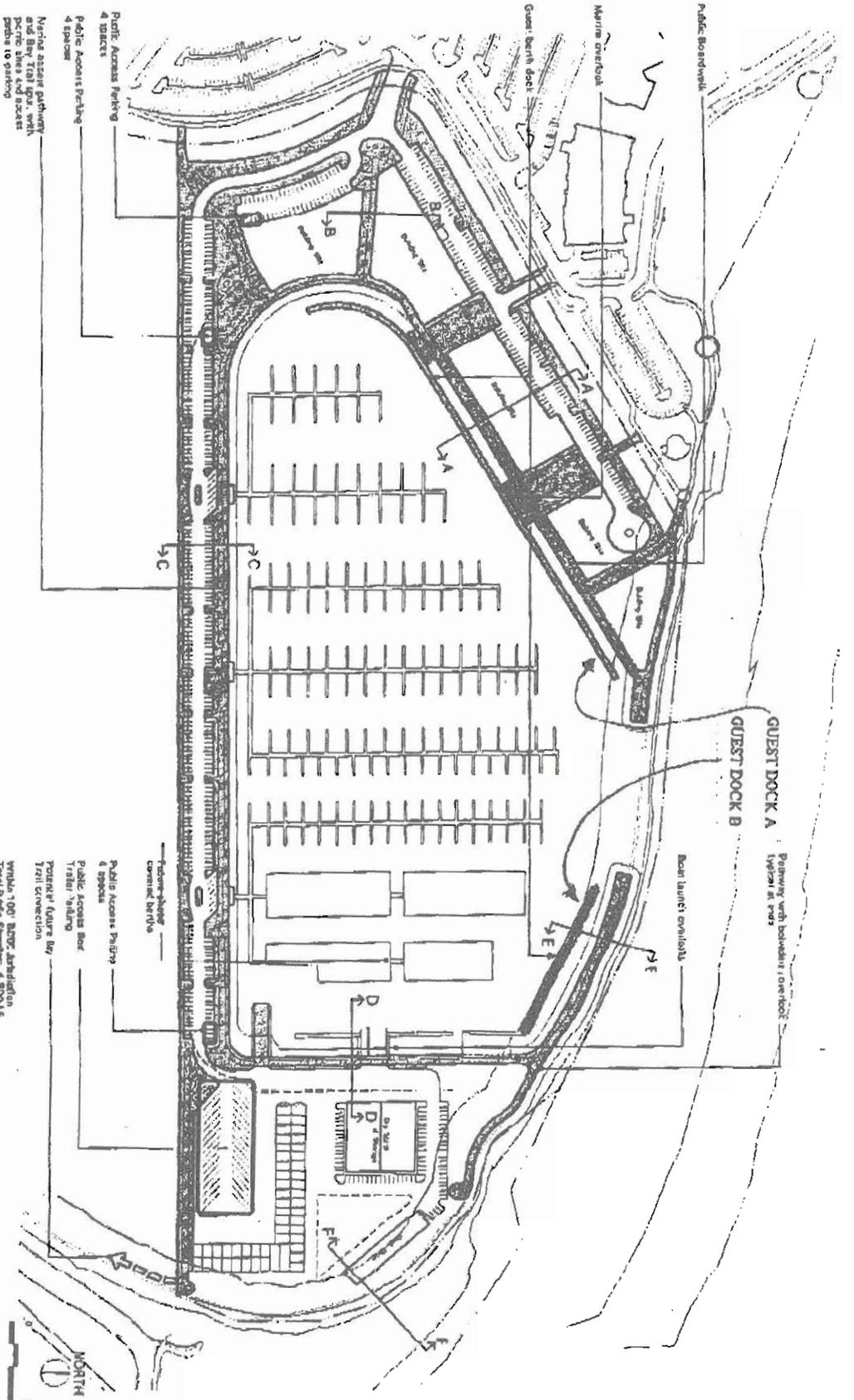
Westpoint Marina and Boatyard

Redwood City, California
27 June 2003

Vicinity Maps

BMS
DESIGN GROUP
BOHLEY CONSULTING

Exhibit B



Westpoint Marina and Boatyard
 Redwood City, California

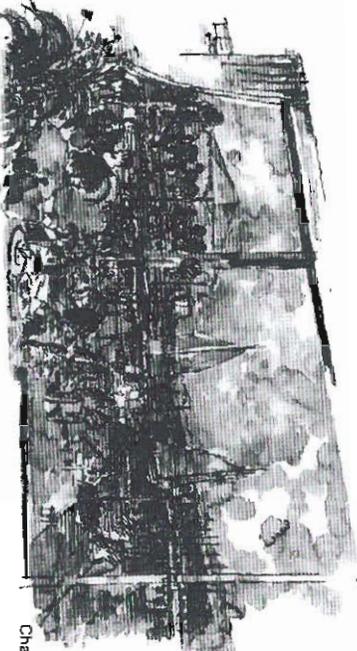
Public Access Plan

Public Boatyard
 Marine overlock
 Guest berth dock
 Public Access Parking
 4 spaces
 Public Access Parking
 4 spaces
 Marine access gateway
 Public lines and access
 paths to parking

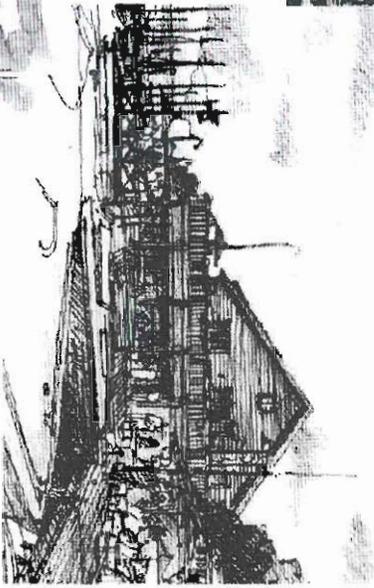
Boat launch embankment
 Boat launch
 Public Access Parking
 4 spaces
 Public Access Boat
 Trailer Storage
 Potential Future Bay
 Tidal Circulation
 Within 100' Boatyard
 Total Public Storage: 4 BODS LP
 Total Public Access: 3.8 AC

BMS
 CIVIL & ARCHITECTURAL
 CONSULTING

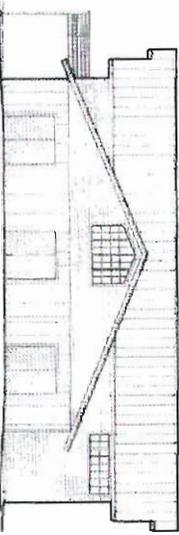
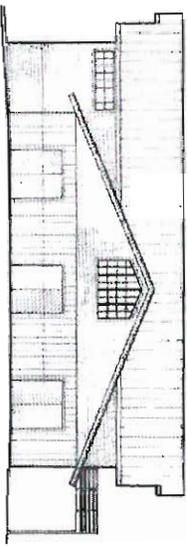
Exhibit H



Character studies of the marina environment



Character studies of the boat house



The architectural character of Westpoint Marina will be expressive of both a marina environment and northern California traditions of form and material. Natural or lightly stained wood will be the primary material for buildings, accessory structures, decks, railings, docks, and site furnishings. Strong horizontal ridge and eave lines reflect the topography of the Bay and Redwood City shoreline, while building mass is reduced by eave shadow lines, form elements such as dormers and bays, and small-scale materials such as board-and-batten, shiplap, or shingle siding. Large areas of operable glass will be provided to allow for indoor-outdoor use and to take advantage of the southern exposure of the retail and harbormaster buildings.

Westpoint Marina and Boatyard

Redwood City, California

27 June 2003

Architectural Character

Exhibit P