

# SHORELINE COMMITTEE AGENDA ITEM COVER SHEET

Meeting Date	Staff Contact	
4/09/2009	STEVEN SUNDIN, 778-8359	
Subject:		
<p>Moorage of a mobile and submersible barge to an existing pier. This submersible barge is a mobile dry-dock and does not require any moorage pilings or anchors. It is not a permanent structure. The barge is able to transport vessels in need of repair to the Fairhaven Shipyards facility. The subject vessel has a control tower at the aft end and two crane-towers on each side of the bow. The vessel also includes a self contained storm and wastewater collection and treatment system.</p> <p><b>APPLICANT:</b> Fairhaven Shipyards. <b>LOCATION:</b> Vessel will be moored to the existing Fairhaven Shipyard pier immediately west of the Alaska Ferry Terminal.</p>		
Attachments:		
1. EXHIBIT A Site plan / aerial photograph		
2. EXHIBIT B Compliance with City's SMP		
3. EXHIBIT C Fairhaven Neighborhood Plan – Area 1B		
Meeting Type	Category	
<input type="checkbox"/> Public Hearing	<input type="checkbox"/> Legislative	
<input checked="" type="checkbox"/> Public Meeting	<input checked="" type="checkbox"/> Quasi-judicial	
<input type="checkbox"/> Work Session	<input type="checkbox"/> Information Only	
<input type="checkbox"/> Briefing		
Clearances	Initials	Date
Tim Stewart, Director	<i>TS</i>	4-1-07
Alan Marriner, Legal	<i>AM</i>	3/31/09
Steven Sundin, Planning	<i>SS</i>	3-30-09
Previous Commission Meeting or Action:		
None.		
Recommended Action:		
Approve as proposed.		

1 **STAFF REPORT**

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3 **Agenda Topic:** **Shoreline Permit #SHR2009-00004; Moorage of a 492-foot long**  
4 **132-foot wide mobile submersible barge to an existing pier at**  
5 **Fairhaven Shipyards.**

6  
7 **Applicant:** Fairhaven Shipyards

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9 **For:** April 9, 2009 Shoreline Committee Public Meeting (Quasi-judicial)

10  
11 **Staff Contact:** Steve Sundin, Planner

12  
13 **I. SUMMARY OF PROPOSAL**

14  
15 Moorage of a mobile submersible barge to an existing pier at Fairhaven Shipyards. This  
16 mobile barge is a dry-dock that does not require pilings or anchors. The barge is 492 feet  
17 long and 132 feet wide which is about the same length as the largest of the Washington  
18 State ferries; the M/V Puyallup, M/V Tacoma and the M/V Wenatchee. (The barge must be  
19 towed from one location to another.)

20  
21 The barge includes a control tower at the aft end and two crane towers at the fore end on  
22 both the port and starboard sides. The barge is capable of transporting vessels from other  
23 locations to the Fairhaven Shipyard facility as well as dry-docking vessels in their home  
24 ports. Since the barge is not permanent it may be absent from the Fairhaven Shipyard  
25 location for extended periods of time.

26  
27 The vessel has a self-contained wastewater treatment system capable of holding  
28 approximately 1.98 million gallons of water. This water is discharged directly to the Post  
29 Point treatment facility at off-peak hours to avoid overloading. Containment berms on the  
30 deck and spray curtains will also help to contain pollutants to the vessel itself where they  
31 can be managed appropriately.

32  
33 The work to be conducted on this barge is exactly the same as is currently ongoing at  
34 Fairhaven Shipyards. The existing 80' x 380' stationery dry-dock will remain in its place and  
35 operational.

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37 **II. SHORELINE COMMITTEE ROLE**

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39 The Shoreline Committee will review this proposal and the staff recommendations as  
40 specified in SECTION VII and forward their recommendations to the Planning and  
41 Community Development Director.

42  
43 **III. ATTACHMENTS**

44  
45 EXHIBIT A Vicinity Map / Site Plans / Aerial EXHIBIT B SMP Compliance  
46 EXHIBIT C Fairhaven Neighborhood Plan – Area 1B

47  
48 **IV. STAFF RECOMMENDATION**

49 Approve as proposed.  
50  
51

1 **V. ISSUES**  
2

3 **MARINE IMPACTS:** The submersible barge will be moored at the Fairhaven Shipyard pier.  
4 The barge will be moored over bed-lands that have a depth greater than 30-feet below the  
5 elevation of mean-lower-low-water. This marine industrial area is specifically set up for these  
6 types uses because the water-depths are significant enough that near-shore inter-tidal areas  
7 and species will not be impacted by excessive shading or in-water structure.  
8

9 **WATER & AIR QUALITY:** Fairhaven Shipyard has been coordinating with the Department  
10 of Ecology on the Shipyard's stormwater permit. The Shipyard currently holds a National  
11 Pollution Discharge Elimination System permit (NPDES). That permit will be revised in order  
12 to reflect the additional pollution generating surface of the submersible barge.  
13

14 The capacity of the wastewater / stormwater holding tanks on the barge is approximately  
15 1.98 million gallons. The wastewater is pumped to the 8-inch sanitary sewer main over to  
16 the treatment plant at off-peak hours.  
17

18 An eight-inch high containment 'berm' will also be constructed around the perimeter of the  
19 barge deck to direct waste and stormwater to the holding tanks where that water will be  
20 detained and treated. When flows are low at the city's wastewater treatment plant discharge  
21 to the existing sanitary service will be authorized.  
22

23 The barge also employs spray curtains that are intended to catch paint spray and other  
24 particulates that result from vessel maintenance. The curtains will be draped 40-feet from  
25 the barge deck. Spray curtains are currently utilized on an upland portion of the Shipyard  
26 facility and on the existing dry-dock.  
27

28 **VIEWS:** The submersible barge will be moored in a marine industrial area. In this industrial  
29 area there are periods time when other large vessels are moored to the existing pier such as  
30 a Washington State Ferry for maintenance and repair. The market will demand how often a  
31 vessel is on top of the barge deck for maintenance and repairs.  
32

33 The deck of the barge is approximately 28-feet above the water-surface. The cabin is 50-  
34 feet tall and the two crane towers are nearly 40-feet tall – all three as measured from the  
35 water-surface. When a large vessel is on board - the deck of the barge would be  
36 approximately 8-10 feet above the water-surface.  
37

38 For reference, the top of the existing dry-dock's permanent walls are approximately 30-feet  
39 above the water-surface elevation. Furthermore – it should be noted that this dry-dock is  
40 unique in that it does NOT have permanent sidewalls like the existing dry-dock. This  
41 eliminates the 'wall-on-the-water' effect that is common with these types of facilities.  
42

43 Views from residential properties will not be negatively impacted. There will be no view  
44 blockage as a result of the barge or if vessels are on the barge deck. Residential properties  
45 to the south /southeast of the Post Point treatment facility start at 80 feet above sea level.  
46 These residences are elevated enough that they will still maintain their horizon and distant  
47 shoreline views. There will be some loss of water-surface area views. Since the majority of  
48 those same residential properties to the south are oriented towards the *width* of the barge  
49 there may be isolated instances view-feature obstruction.  
50

1 Residential properties to the east are approximately one-third of a mile away and beginning  
2 on 10<sup>th</sup> Street are at least 55-feet above sea-level. While the majority of these residences  
3 are oriented towards the length of the barge they are elevated high enough to be able to  
4 retain most (if not all) of their distant shoreline, horizon and land mass view features. Very  
5 small portions of water-surface view, a very small portion of either Eliza or Portage Island as  
6 well as portions of the existing dry-dock facility could be obstructed when the barge is  
7 servicing a vessel.

8  
9 Public views from Marine Park are oriented towards the west. The barge is proposed around  
10 the point to the north and east and likely will barely be visible from this public access  
11 amenity. The existing dry-dock currently obstructs views to the portions of the city's skyline  
12 from the very northern tip of Marine Park.

13  
14 Public views from the perimeter of the exterior of the Alaska Ferry Terminal are already  
15 obstructed by either the existing dry-dock, vessels tied to the existing pier for repair, the  
16 Arrow-Wac building or the Alaska Ferry docking pier and catwalk. Views of Portage and  
17 Eliza Islands are blocked and only the top of Lummi Island can be seen. The only  
18 unobstructed view available is to the northwest from the Hotel Bellwether on the Squalicum  
19 Peninsula around the west to at least the Tilbury Cement property. The city skyline,  
20 Whatcom Museum, Boulevard Park and Taylor dock are not able to be viewed unless the  
21 view originates along the east side of the terminal upon which view of the features to the  
22 west are extinguished.

23  
24 Public views from Taylor Dock and the over-water walkway are still available. The view is  
25 largely oriented due west. When the barge is servicing a vessel a portion of Eliza and  
26 Portage Islands could be blocked although when vessels are serviced presently (without the  
27 barge) at the Shipyard's pier that same view could be blocked. As one travels along the  
28 over-water walkway to the north more of those previously blocked views become available.

29  
30 Given that the Shipyard's pier currently services vessels that can temporarily obstruct and  
31 block some view features such as those stated above the submersible barge's impacts on  
32 views – most notably public views – is not enough to warrant mitigation or denial of the  
33 project.

34  
35 **ECONOMIC DEVELOPMENT:** The submersible barge is proposed to be fully operational by  
36 the end of 2009. This will allow Fairhaven Shipyards to expand its client base significantly  
37 because it can attract larger vessels, it can transport vessels from other ports back to  
38 Fairhaven and because it is mobile, it can dry-dock vessels at their current port of call. This  
39 is significant because the submersible barge will allow Fairhaven Shipyards to compete with  
40 other larger Puget Sound dry-dock facilities in Seattle, Tacoma and Everett.

41  
42 The proposed submersible barge dry-dock is consistent with a report that was conducted in  
43 June 2007 by Berk & Associates titled "Northwest Washington Marine Industry Cluster  
44 Study." The report inventories the Marine trades sector in Whatcom, Skagit, San Juan and  
45 Island Counties. (This report does not include analysis of seafood processing / commercial  
46 fishing, freight / cargo / raw material shipping and handling, tourism and sports and  
47 recreation businesses.) The report was funded by a CTED Grant to analyze strengths and  
48 job-creation opportunities within the cluster boundaries.

49 The report projects that the NW Washington Marine Industry Cluster area has the potential  
50 to expand and develop its marine industry due to its physical location, access to training /  
51 schooling in marine trades and the network of marine related industry. This expansion and

1 development has important economic benefits in terms of job creation, revenues to local  
2 economies, competitive advantages both nationally and globally, the indirect jobs and  
3 services that result and entrepreneurial opportunities that have not yet been discovered.  
4

5 The report estimates the economic activity within the NW Washington Cluster area. Total  
6 economic activity in 2005 was approximately 362 million dollars, total jobs was about 4,000  
7 (direct and indirect) and total wages was about 148 million dollars. The report also makes  
8 recommendations for strategic operations to continue to develop and expand marine trades  
9 in the cluster area. Among these that are consistent with this proposal are:

- 10
- 11 1. Develop and promote new facility space for marine businesses.
- 12 2. Develop pier expansion / reconstruction projects to support marine industry  
13 particularly at shipyards.
- 14 3. Assess the market demand for location and construction of heavy boat haul lifts in  
15 Anacortes, Bellingham and Whidbey Island.
- 16

17 This is a timely proposal in our currently stressed economic climate and could help to  
18 improve our local economy and our local marine industry. The economic benefits that this  
19 proposal could provide is not the sole rationale for approval. However, its significance  
20 should not be kept silent.

## 21

### 22 VI. ANALYSIS SUMMARY

## 23

- 24 ✓ The proposal is consistent with the City's 1989 Shoreline Master Program.
- 25 ✓ The use is exactly what is intended in this area per the SMP and the Fairhaven  
26 Neighborhood Plan.
- 27 ✓ The proposal and as permitted by other agencies (DOE and WDFW for water quality  
28 and NW Clean Air Agency for air quality) is not anticipated to have negative impacts  
29 on marine aquatic or avian species.
- 30 ✓ Additional structure is not necessary to facilitate the barge. (No pilings, piers or  
31 anchors.)
- 32 ✓ The expansion of the Fairhaven Shipyard facility is consistent with the findings in the  
33 Northwest Washington Marine Industry Cluster Study prepared in June, 2007.
- 34 ✓ The barge expands the future customer base of the applicant which in turn could  
35 provide up to 100 additional employment opportunities not to mention revenues.
- 36

### 37 VII. STAFF RECOMMENDATION

## 38

39 **Staff recommends approval of the proposal as proposed.**

40

41 **Prepared by:**

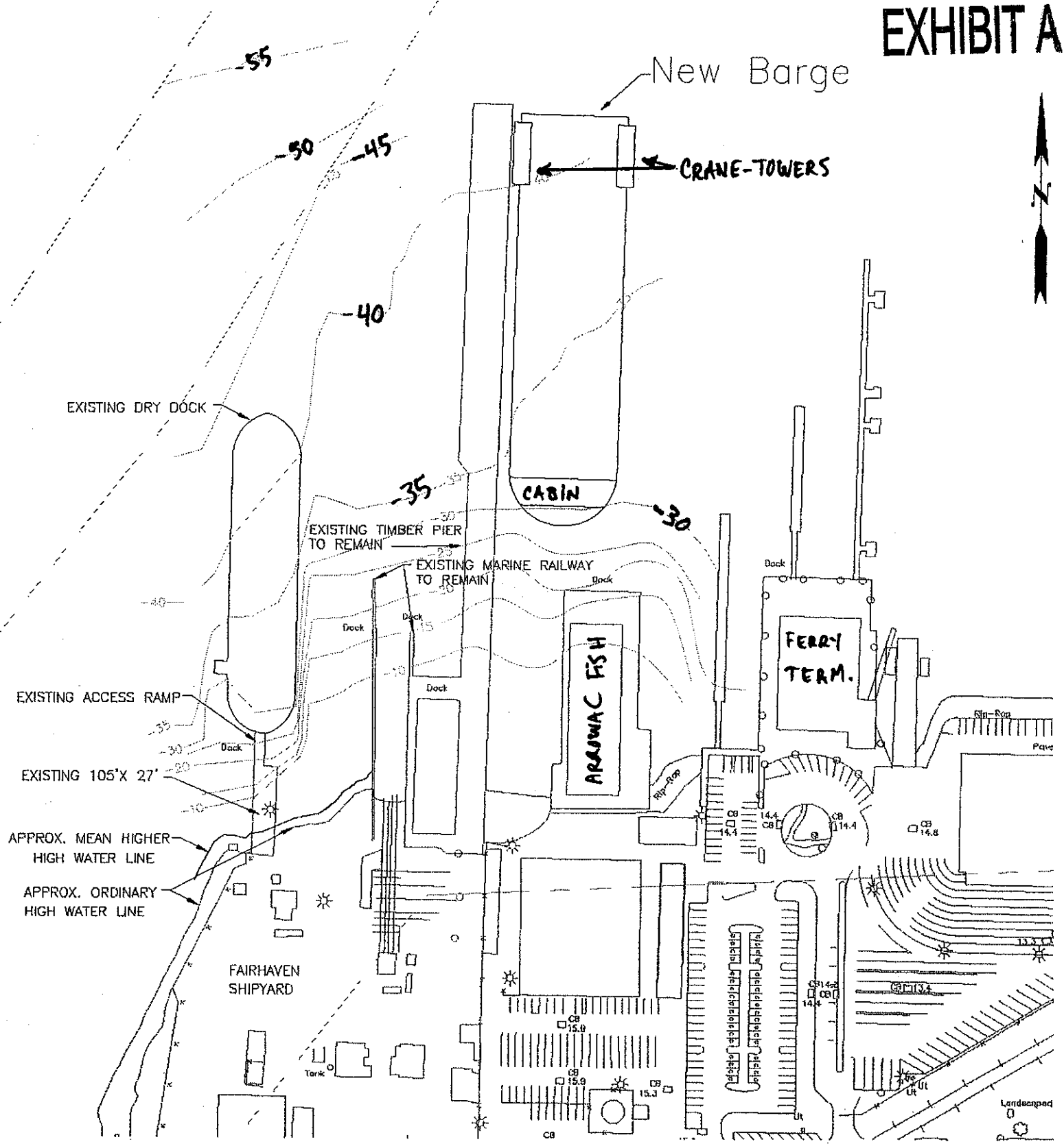
42 

43  
44  
45 **Steven Sundin, Planner**

**Approved by:**



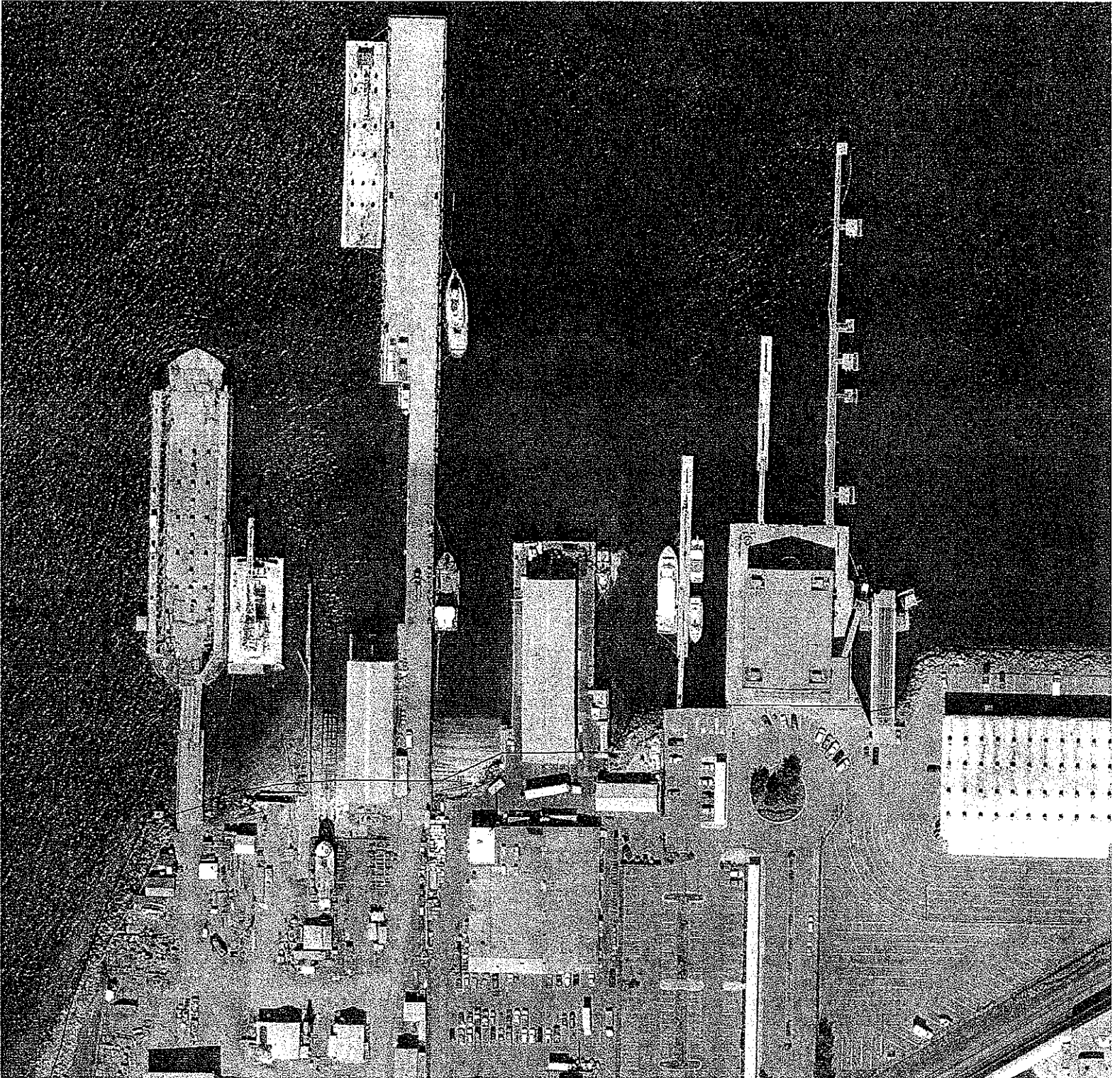
**Tim Stewart, Director**



## NEW ARRANGEMENT

SCALE: 1"=200'

# EXHIBIT A



# EXHIBIT B

## COMPLIANCE WITH THE CITY'S SHORELINE MASTER PROGRAM

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### **SECTION 24: - URBAN MARITIME ENVIRONMENT:**

- A. DEFINITION: Areas proximate to navigable waters and are suitable for water borne commerce or other water dependent use.
- B. PURPOSE AND INTENT: The purpose of the Urban Maritime Environment is to reserve areas of land use activities that require proximity to navigable waters.
- C. REGULATIONS
  - 1. Permitted uses must be:
    - a. Water-dependent, or
    - b. Publicly owned waterfront recreational uses, which make use of a unique shoreline resource such as a waterfront park, view, tower, public pathway, public maritime interpretive display, or aquarium.
    - c. Required public access features. The above uses are permitted on over-water construction.
  - 2. Non-water dependent uses, excluding residences, may be permitted as accessory uses provided they functionally support a permitted use. Accessory uses must be vacated if the primary use they support is vacated. Uses permitted as accessory uses shall not be built on over-water construction in the Urban Maritime Environment.
  - 3. Conditional Uses: Water enjoyment uses may be permitted as conditional uses on land above the ordinary high water mark in the Urban Maritime Environment provided they meet all other ordinances, codes and regulations and provided they meet the following conditions:
    - a. The proposed development provides continuous public access at the water's edge.
    - b. The proposed use does not interfere or restrict existing or permitted water-dependent uses. Water-dependent commercial and industrial uses have primary over water-enjoyment uses in the Urban Maritime Environment.
    - c. Other conditions as set by the Direction of the Planning and Economic Development. Water enjoyment uses except for publicly owned waterfront recreational uses may not be built on over-water construction in the Urban Maritime Environment.

**SECTION 26: GENERAL REGULATIONS:** (General regulations are intended to deal with uses or activities that either is associated with a permitted use or that can occur in any shoreline designation type. For example, utilities, public access, shoreline stabilization, parking, landscaping, over-water structures.)

- 7. Over-water construction including: Piers docks, floats, breakwaters, jetties and groins are permitted within Urban I, Urban Maritime and Urban Multi-Use Environments and those areas of Conservancy I designation located from the north section line of Section 14 Township 37 north, Range 2 east northerly to the south right-of-way line of Willow Road and from the extended north line of Lot 7, Block 3, Division No. 2 northerly to the southerly line of Cowgill Avenue extended westerly subject to pertinent provisions contained herein.

**SECTION 27: USE ACTIVITY REGULATIONS** (The following regulations shall apply respectively to all developments established consistent with Sections 17 through 25 of this ordinance.)

- N. **PIERS:** The following regulations shall apply to the installation of all piers, docks, and floats on the shorelines of the City.
1. Piers, docks or floats shall be constructed so as to cause minimum interference with the public use of the water surface and shoreline, and so as to cause no undue harm to adjacent properties.
  2. Prior to the granting of a permit for a pier, dock or float, the effect of that structure upon adjacent shorelines shall be determined by the Director of the Bellingham Planning and Economic Development Department and the disposition of the permit shall reflect such determination.
  3. Where feasible pile or floating piers and docks shall be used instead of rip-rapped or bulkheaded supports.
  4. Piers, docks, or floats within 200 feet of the point of entrance of a freshwater stream into marine waters shall not interfere with or endanger the migration of anadromous fish species nor be constructed over estuarine mudflats which are exposed at mean lower low tide.
  5. No covered moorage or boathouses shall be constructed on the shorelines except in an authorized marina.
  6. Use of treated wood on Lake Whatcom: Piles, floats or other members in direct contact with the water on Lake Whatcom shall not be treated or coated with paint, pentachlorophenol, arsenate compounds, creosote or other preservative treatment. Wooden members situated above the water may be constructed of factory applies copper arsenate providing it is approved by the U.S. Environmental Protection Agency (EPA) for the purpose and the EPA regulations for its use are adhered to. No field application of paint, preservative treatment or other chemical is permitted over the water of Lake Whatcom or in a location where water run-off could enter the lake.

**Use Activity Policies: Piers**

A pier, dock or float is a structure built over or floating upon the water, used as a landing place for marine transport or for recreational purposes. Construction of dock, designed for pleasure craft only, for the private noncommercial use of the owner, lessee or contract purchaser of a single family residence, the cost of which does not exceed \$2,500 is exempted from the provisions of the Shoreline Act.

Policy: The cooperative use of piers, docks and floats should be encouraged.

Policy: Piers, docks or floats should be constructed so as to cause minimum interference with the public use of the water surface and shoreline.

Policy: Prior to the granting of a permit for a pier, dock or float, the effect of that structure upon adjacent shorelines should be determined by the Department of Planning and Economic Development and the disposition of the permit shall reflect such determination.

Policy: Preservative treated wood should not be placed in direct contact with the water in the Lake Whatcom watershed. All treated wood and other materials used for over-water construction on Lake Whatcom shall conform to E.P.A. standards applying to the protection of drinking water.

Policy: Over water construction on piers, docks or floats should be reserved for water oriented uses and where feasible should provide public access.

**CITY OF BELLINGHAM SHORELINE GOALS AND OBJECTIVES**  
**SHORELINE USE ELEMENT**

GOAL: Coordinate the regulation of shoreline uses so as to insure uses which result in long-term over short-term benefit, protect the resources and ecology of the shorelines, increase both visual and physical public access to the shorelines, and accommodate water dependent uses.

OBJECTIVE: Identify and reserve shoreline and water areas with unique attributes for particular long-term uses, including commercial, industrial, residential, recreational and conservational uses.

OBJECTIVE: All uses should be developed in a manner which will result in the least modification of the shoreline unless such modification contributes to the attainment of Master Program goals.

OBJECTIVE: Uses which will provide an opportunity for a substantial number of people to enjoy the shorelines should be permitted.

OBJECTIVE: Inappropriate shoreline uses should be identified and established as nonconforming uses.

**ECONOMIC DEVELOPMENT ELEMENT**

GOAL: Provide for economic activity and development of water dependent uses and permit water enjoyment uses in appropriate locations, consistent with environmental goals.

GOAL: Recognize the finite quantity of waterfront land and the limits of funds for public acquisition, direct development towards a multi-use concept to provide public access to the shorelines and protect the habitat while enhancing and maintaining the economic viability of the use.

OBJECTIVE: Where navigability is a viable asset, and in appropriate environments, economic development on the shorelines of the City should be water surface dependent or should provide an opportunity for a substantial number of the general public to enjoy the shorelines.

OBJECTIVE: Economic activity on shorelines of the City where navigability is not a viable asset, and in appropriate environments, should not interfere with the natural function of the shoreline and water body and should provide open space along the shoreline adequate for potential public access.

**OBJECTIVE:** Future appropriate economic development on the shorelines of the City should be compatible with existing appropriate uses.

**STAFF RESPONSE:** The proposed use is considered a water-dependent use and therefore is permitted within this Urban Maritime shoreline designation. The Urban Maritime designation also allows over-water 'structures.'

There are only several of these types of vessels in the world and because it is a vessel as recognized by the United States Coast Guard it is not a structure. Since it is not a structure the SMP has relatively few regulations pertaining to vessels. Nonetheless, staff analyzed the proposal as if it were a structure. A pier was the most similar use upon which we could conduct our analysis. The barge

The submersible barge will be located within a heavily impacted and utilized marine industrial area. It will not impact the rights of and safety navigation of other vessels of any size. The barge is not within proximity to the mouth or pocket estuary of Padden Creek. The mouth of Padden Creek lagoon is about one-quarter of a mile to the east. Due to depths at this location the impact to marine near-shore species is anticipated to be negligible.

Storm and waste water will be managed like all other pollution generating surfaces in the city such as roads and parking lots. The water will be contained to the barge deck and conveyed to a water quality treating and detaining facility. When authorized by the City's Wastewater treatment plant (at off peak hours when flow is less than 20- million gallons per day) the waste / stormwater will be discharged to the existing sanitary sewer main to the treatment plant.

The Department of Ecology and the NW Clean-Air Agency are regulating the barge for its dry-dock use in terms of water and air quality under the EPA's Clean Air and Clean Water Acts.

## EXHIBIT C

### Fairhaven Neighborhood - Area 1B – Industrial Marine

Ideally, the scarce industrial waterfront should be reserved for marine related industrial uses. As has been identified in the land use description of Area 1 however, the south side Marine Industrial lands have not been utilized to their full potential.

Area 1B, a subarea of Area 1, represents property that could possibly be commercially developed if further marine industrial expansion fails to materialize. Marine industrial uses shall continue to be the primary permitted use of this area and are not subject to planned procedures.

Commercial activity in this area could serve as a catalyst to economic revitalization of the Fairhaven Business District. Appropriate commercial growth could also compliment a desired shoreline management goal of bringing more of the general public to the City's waterfront. Before any commercial uses should be permitted through, issues of compatibility and appropriate development standards must be determined.

Commercial uses should only be permitted which recognize the industrial nature of the area and which attempt to blend into the waterfront atmosphere, rather than requiring legitimate industrial uses to "commercialize." Therefore, while marine industrial uses shall continue to be permitted outright, commercial uses shall be subject to the procedures and safeguard of the City's "planned" designation.

The planned process should be utilized to ensure issues vital to the area are addressed. These issues are identified as "special conditions" in this subarea's zoning regulations. In addition to "shorelines," which acknowledges jurisdiction of the Shoreline Management Program, the special conditions are listed in the Fairhaven zoning section of Land Use and Development Code.

# EXHIBIT A



# EXHIBIT A

