COLUMBIA RIVER USER DATA REPORT

Draft Report

April 2012

Columbia River CROSSING

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ACRONYMS

ADA	Americans with Disabilities Act
BN	Burlington Northern
CBC	Columbia Business Center
CRC	Columbia River Crossing
CRD	Columbia River Datum
DOE	U.S. Department of Energy
GMA	General Management Area
I-5	Interstate-5
LOA	Length overall
MLLW	Mean Lower Low Water
MSL	Mean Sea Level
NOAA	National Oceanographic and Atmospheric Administration
PTIP	Public Transportation Improvement Plan
SMA	Special Management Area
USACE	U.S. Army Corps of Engineers
USCG	U.S. Coast Guard
U.S. Navy PSNS	U.S. Navy Puget Sound Naval Shipyard and Intermediate Maintenance Facility
WIPP	Waste Isolation Pilot Plant

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DESCRIPTIONS

Air Draft	Height of the highest fixed point of the vessel above the water line
Air Gap	Clearance from the highest fixed point of the vessel to lowest part of bridge
Beam	Width of the vessel
Draft	Depth of vessel's hull below the waterline
Freeboard	Height of vessel's deck above the waterline
Length	Overall length of the vessel

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EXECUTIVE SUMMARY

The purpose of this report is to document the findings of a Columbia River user survey of vessels, equipment, and fabrications that currently transit, and may in the future transit, underneath the Interstate-5 Bridge both along the main channel and Oregon Slough. This data report does not make a bridge height recommendation.

River users who have vessels, equipment, or fabrications transiting underneath the Interstate-5 Bridge, both along the main channel and Oregon Slough, were interviewed or questioned to obtain navigation characteristics and clearance requirements. A list of known users was supplemented with additional users identified through responses to public notices.

The main channel was the primary route for the majority of the respondents. Few respondents provided data on Oregon Slough transits due to the existing height limitations of that route.

Commercial tugs and tows have the greatest frequency of usage on the river and transit year round. Air drafts for tugs and tows ranged from 28 to 61 feet, with an average air draft of 49 feet. Air drafts are measured from the waterline to the highest part of the vessel.

Recreational sailboats and powerboats typically use the river more frequently from April through October. The sailboats ranged in air draft from 50 to 90 feet, with an average of approximately 70 feet. Powerboat air drafts ranged from 20 to 25 feet and were the only users that reported transiting the Oregon Slough.

Marine contractors generally use the river on an as-needed basis, mostly contract driven, during all months of the year. Air drafts ranged from 20 feet to 143 feet (excluding two of Manson Construction cranes that are not expected to work on the Columbia River). The Port of Portland's *Dredge Oregon* has an air draft of 103 feet.

The Federal Government users include the U.S. Army Corps of Engineers (USACE) Hopper *Dredge Yaquina* with an air draft of 92 feet and Puget Sound Naval Shipyard nuclear transporters that include barges and escorts. The largest transport barge is *Barge 40* with an air draft of 51.25 feet and the largest escort is the *YTT 10 Battle Point* with an air draft of 74 feet.

Marine industries ship products on an as-needed basis all months of the year. The air drafts ranged from 60 feet to 141 feet.

Passenger cruise vessels transit the river year round, but more frequently in the summer months. The upriver motor vessels have air drafts that range from 42 to 65 feet. The Historical Seaport has two sailing vessels with air drafts of 81 and 90 feet that take passengers upstream typically once in May and June, and twice in October.

Most air gap (clearance) requested by users ranged from 1 foot to 10 feet. A few users desired higher air gaps up to 20 feet. These air gaps are in addition to the air draft.

Twenty one ports were interviewed regarding existing conditions and future plans associated with navigation at the Interstate-5 Bridge. Based on the port interviews there are no specific existing or planned uses that have vertical or horizontal clearance needs exceeding those identified from the river users.

Few users identified future plans resulting in vessels or cargo that will be higher than those already reported. The exceptions are Ross Island Sand and Gravel with a new requirement for 80 feet of air draft, Puget Sound Naval Shipyard Nuclear Transporters with a 57-foot air draft requirement, American Cruise Lines with a 65-foot air draft, the USS Ranger with a 123-foot air draft requirement, and Marine Industries, the highest requirement of which is 165 feet. The 165 feet was not for a specific project, but was a stated desired estimated height from the user.

Thirty-four years of river level data were compiled and daily and average maximums and minimums were determined. As observed from the average daily high and daily lows, the Columbia River spring freshet occurs in the May through June period with lower water from August through October. The daily maximums indicate that flood events typically occur from November through February.

Overhead and horizontal clearances along the river were documented. Down river from the exiting Interstate-5 Bridge the lowest clearance is 187 feet at the Lewis & Clark Bridge at river milepost 66. Upriver of the Interstate-5 Bridge up to the Bonneville dam the lowest clearance is 133 feet at a power cable at river milepost 120.

PURPOSE

The purpose of this report is to document the findings of a Columbia River user survey of vessels, equipment, and fabrications that currently transit, and may in the future transit, underneath the Interstate-5 Bridge both along the main channel and Oregon Slough. This data report does not make a bridge height recommendation. The following user types were queried: commercial tugs and tows, recreational sailboats and powerboats, marine contractors, Federal Government, marine industries and passenger cruise. The types of information being collected included navigation characteristics, frequency of transit, and time of the year transiting.

In addition to these users, 21 river ports, the Corps of Engineers, and Federal shippers to the Hanford Nuclear Facility were contacted.

Data on river levels and overhead clearances along the river was also obtained in order to vertical height variations and restrictions along the river's length.

Taken together, the information obtained provides a good indication of the user and vessel navigation requirements on the Columbia River in the area of the Interstate-5 Bridge.

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1. Existing User and Vessel Data

1.1 Introduction

Known existing Columbia River users who transit under the Interstate-5 (I-5) Bridge were contacted and asked about the navigation characteristics of their vessels, equipment, or fabrications. Additional users were sought through placement of announcements in the Coast Guard's Local Notice to Mariners and numerous publications. Of particular interest were the height, breadth, and air gap (clearance) requirements to pass underneath a bridge. This section documents the methodology and findings of the Columbia River system user survey.

1.2 Summary

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Marine industries ship products on an as-needed basis all months of the year. The air drafts ranged from 60 feet to 141 feet.

Passenger cruise vessels transit the river year round, but somewhat more heavily in the summer months. The upriver motor vessels have air drafts that range from 42 to 65 feet. The Historical Seaport has two sailing vessels with air drafts of 81 and 90 feet that take passengers upstream typically once in May and June, and twice in October.

Most air gap (clearance) requested by users ranged from 1 foot to 10 feet. A few users desired higher air gaps up to 20 feet. These air gaps are in addition to the air draft.

Summary tables, sorted by group, listing vessel owner, vessel name, vessel type, LOA, beam, draft, air draft, frequency of passage are included in Appendix A – Summary Tables of User Data.

1.3 Methodology

The Columbia River Crossing (CRC) project team initially obtained navigation information from 34 users (see Table 1-1).

Table 1-1: Initially Identified Users

Advanced American Construction	Marine Resources
American West Steamboat Company	Mark Marine Service, Inc.
Bergerson Construction Inc.	Nuclear transporters (U.S. Navy escorts Puget Sound)
Bernert Barge Lines	Oregon Ironworks, Inc.
Cruise West	Oregon Ports Association
Christensen Shipyards Ltd.	Portland Yacht Club
Diversified Marine, Inc.	Port of Portland
Dutra Group	Riverlines
FarWest Steel	Rose City Yacht Club
Foss Maritime	Schnitzer Steel Industries, Inc.
General Construction Company	Schooner Creek Boat Works
Glacier Bay	Shaver Transportation Company
Hickey Marine Enterprises	Sundial Marine
J.E. McAmis	Thompson Metal Fab Inc.
Kiewit Pacific	Tidewater
Linblad Expeditions, Inc.	U.S. Army Corps of Engineers (USACE)
Manson Construction Group	USI

User contact information was updated from previously supplied data or from telephone book and Internet searches. Users were then called, and face-to-face interviews were scheduled. If the user preferred, a telephone interview was conducted. Users located outside of the Portland and Seattle Metro areas were interviewed by telephone and e-mail.

The following six users from the initial list are no longer in business: Sundial Marine, USI, Riverlines, Glacier Bay, American West Steamboat Company, and Cruise West. Farwest Steel stated that they send their products on barges or ships on the Columbia River or Oregon Slough (North Portland Harbor). The Oregon Ports Association recommended contacting the ports individually (see Section 1.5, River Ports).

Discussions with known users identified other users not included in the initial list. These additional users are listed in Table 1-2.

Table 1-2: Additional Users

American Cruise Lines	Greenberry Industrial
American Safari Cruises/InnerSea Discoveries	JT Marine, Inc.
American Waterways Inc.	Knife River Northwest
CalPortland Company	Legendary Yachts, Inc.
Columbia Grain	Ross Island Sand and Gravel
Crowley Maritime Corporation	SDS Lumber Company
Grays Harbor Historical Seaport	USS Ranger Foundation

Note: The USS Ranger Foundation user was identified as a potential future user and is therefore covered in Section 2, Future Growth.

In addition, mailings requesting navigation user information was requested of owners having vessels greater than 45 feet in length and registered either in Multnomah County (with the Oregon State Marine Board) or Clark and Skamania Counties (with the Washington Department of Licensing). Seventy-one letters were mailed to Oregon-registered vessels and 78 letters were mailed to Washington-registered vessels. A sample copy of the letter is provided in Appendix B. Public notices requesting navigation user information were published in various newspapers and listed in the U.S. Coast Guard (USCG) *Notice to Mariners*. In addition, 54 letters were mailed to members of the Pacific Northwest Steel Fabricators Association and 52 letters were mailed to riverfront industrial property owners in Clark County, Washington, Multnomah County, Oregon located upstream of the Interstate-5 bridges. Appendix C contains the public notice and lists the publications that posted the notice. The CRC website also included the notice. A total of 16 users responded.

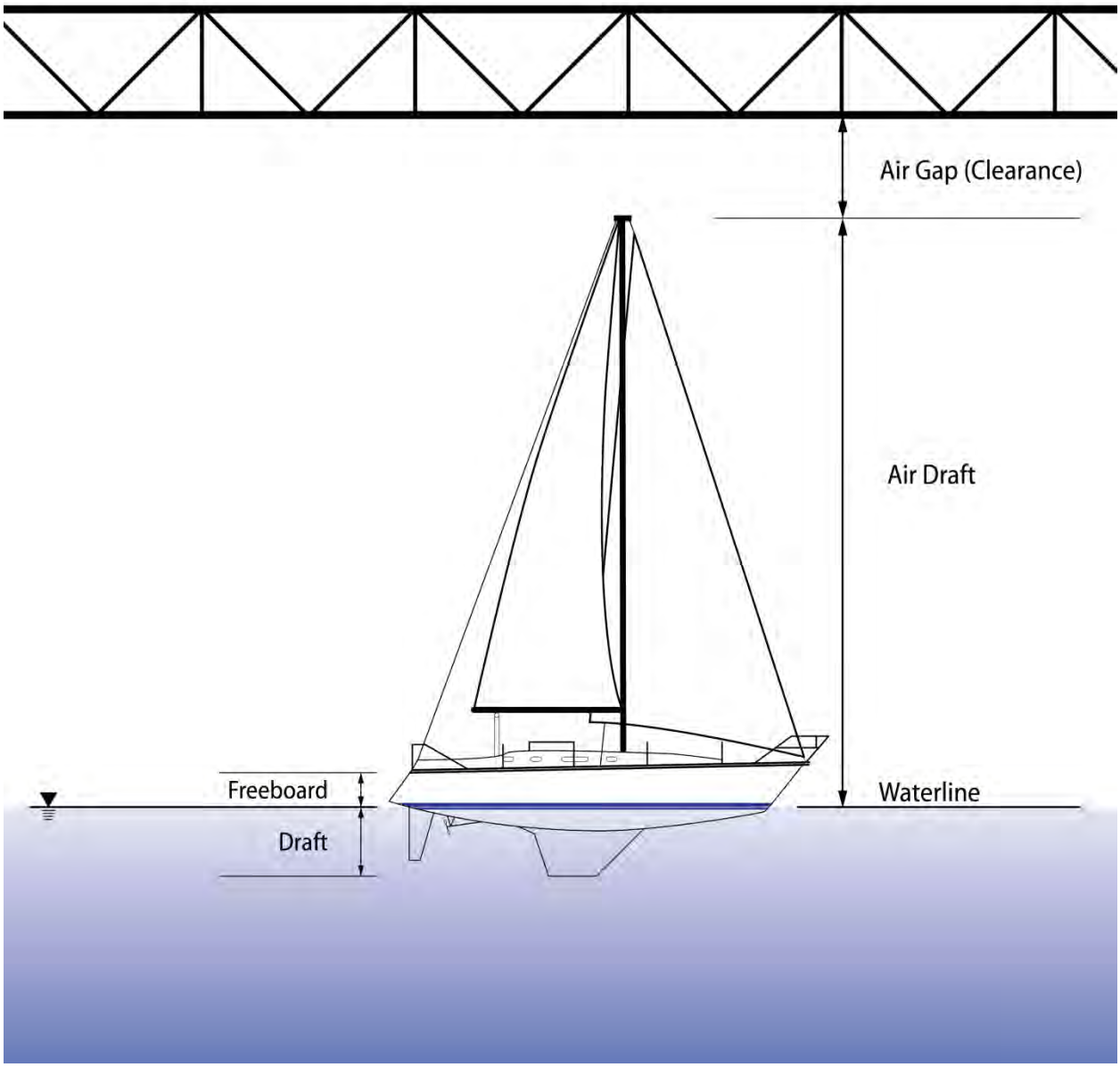
A River User Data Sheet (see Appendix D) was provided to users to solicit the requested information. The following user information was requested:

- Company and/or Owner of Vessel and contact information
- Vessel name
- Vessel type
- U.S. Coast Guard Document Number
- Length overall (LOA) in feet
- Beam (width) in feet
- Draft (depth of hull below waterline, fully laden) in feet
- Air Draft (height of the highest fixed point above the waterline, unladen) in feet
- Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of the bridge) in feet
- Frequency of passage underneath Interstate-5 (I-5) main channel
- Frequency of passage through Oregon Slough

- Time of year of passage
- Business Plan regarding vessels transiting under the Interstate-5 Bridges or into Oregon Slough (e.g., 10-year or 20-year plan)

Figure 1-1 depicts the vertical reference descriptions identified above.

Figure 1-1. Vertical Reference Diagram



Face-to-face interviews were recorded when possible and when permission was granted by the user. Completed user data sheets are included as Appendix E and additional information that was provided by the users is in Appendix F.

1.4 User Data

The users were divided into the following groups:

- Commercial Tugs and Tows
- Recreational Sailboats and Powerboats
- Marine Contractors
- Federal Government
- Marine Industries
- Passenger Cruise

1.4.1 Commercial Tugs and Tows

This group consists of tugboats that tow commercial barges. Most of the barges carry cargo (such as grain from upriver ports) downstream to lower Columbia River ports. Some of the tugs are used to move barges loaded with cargo from fabricators. (The air drafts of the fabricator tows are listed in the Marine Industries group.) The following is a list of users in the Commercial Tug and Tow category:

- Bernert Barge Lines Inc. is a family-owned business that has been on the Columbia River system since the 1870s. It owns three towing vessels named *Mary B*, *Lori B*, and *Kathryn B*. The highest air draft for these vessels is 52 feet. The vessels average about five to six trips per month on the I-5 main channel and do not transit under the Interstate-5 Bridge on the Oregon Slough side; a 5-foot air gap (clearance) is preferred.
- Columbia Grain stated that none of its vessels transit up the Columbia River beyond the Interstate-5 Bridge. Its vessels may anchor in Vancouver, toward Kalama, or stay at Astoria, Oregon.
- Crowley Maritime Corporation stated that its vessels typically do not transit under the Interstate-5 Bridges, so no additional information was provided.
- Foss / Marine Resources Group primarily performs harbor-assist work and does not usually transit upriver of the Interstate-5 Bridges. In the past, it has conducted special project work above the Interstate-5 Bridges into the upper Columbia and Snake Rivers. It has transported barges with equipment—the height of some was no higher than the lowest fixed bridge in the upper river system. It has also transported equipment/fabrications on barges from Vancouver (Columbia) Industrial Park where the full lift of the Interstate-5 Bridges were used.
- Schnitzer Steel owns two vessels—*MAX 111* (flat deck barge with bin walls) and *CHIPPY 002* (flat deck barge with bin walls)—and uses a third—*Inland*

Conveyor (flat deck self-unloading barge with bin walls)—which is owned by Cemex and chartered to Bernert Barge Lines. Schnitzer Steel uses Bernert Barge Lines as its tug company. The information provided by Bernert Barge Lines for air draft and air gap would apply to Schnitzer Steel since none of the Schnitzer Steel vessels are taller than the tugs. The vessels average two trips in March and four trips per month during all other months of the year.

- Shaver has six tug boats that require lifts: *Cascades* (push knee), *Clearwater* (push knee), *Deschutes* (tractor tug), *Lassen* (harbor), *Umatilla* (push knee), and *Willamette* (tractor tug). The vessels typically have an air draft of 51 feet and an air gap of 1 foot is preferred. The tugboats pass under Interstate-5 Bridge approximately 20 times a month all year. Lifts are requested for around 10 percent of the tug boats' trips because they use the high span.

- Tidewater has 16 tug boats. The tallest vessel is the *Outlaw* at 53 feet. A 2-foot air gap clearance is requested. The masts extend beyond the highest fixed point, but are easily lowered. The tug boats make an average 22 round trips per year under the Interstate-5 Bridge main channel with line boats averaging 22 round trips per year. The busiest season for most boats is August to October, which is harvest season. The boats do not pass under the Interstate-5 Bridge to access the Oregon Slough.

1.4.2 Recreational Sailboats and Powerboats

There are numerous recreational and small boat moorages located between I-5 and I-205. Most of the moorages are located on Hayden Island and along the shores of north Portland. The tallest vessels in this group are the sailboats. In addition to mail-in responses from users, two yacht clubs were interviewed to obtain vessel information.

- Portland Yacht Club provided vessel information for 10 of its largest sailboats. The tallest has an air draft of approximately 85 feet. A majority of its members sail during the summer months, usually beginning the first weekend in May. Each boat will typically make 15 to 20 trips under the Interstate-5 Bridge every year. The Portland Yacht Club members do not travel down the Oregon Slough.

- Rose City Yacht Club provided vessel information for four of the club's largest sailboats. The tallest has an air draft of approximately 63 feet. Roughly a third of its members require 50 to 55 feet of air draft. Rose City Yacht Club members typically make around three to four trips under the Interstate-5 Bridge a year.

- Mail-in responses from individuals included vessels whose air drafts ranged from 20 to 72 feet. Most of the recreational craft typically use the river from April through October.

1.4.3 Marine Contractors

Construction contractors have occasional need to transport vessels such as derrick cranes, clamshell dredges, cutter suction pipelines dredges, hopper dredges, or other marine construction type equipment. The work is generally performed on an as-needed basis so it tends to be sporadic

and not entirely predictable. The Port of Portland's cutter suction pipeline dredge *Oregon* is included in this group.

- Advanced American Construction (previously known as Advanced American Diving) provided vessel information for one of its tugs and four crane barges. The spud heights are 90 feet above water level, and a minimum air gap of 10 feet is preferred. The minimum crane gantry height is 65 feet. The vessels travel a couple of times a month up/down the Columbia River all year.

- Bergerson Construction is based in Astoria, Oregon, and has five vessels: three crane barges and two tug boats. Its vessels have air drafts that range from 40 to 150 feet; however, if they lower their cranes to the minimum height their required air draft is only 70 feet. The vessels transit the river as required when contracts are awarded.

- CalPortland Company has a tugboat and a dredge with air drafts of 32 feet and a preferred air gap clearance of 4 feet. The tugboat and dredge transit through the Interstate-5 reach approximately eight times a month all year.

- Diversified Marine has 12 barges and tugs—the tallest of which is a spud barge requiring an 85-foot air draft and a preferred air gap clearance of 10 feet. Traveling frequency varies greatly depending on workflow. Travel on the Columbia River is completely dependent on what jobs they are contracted to work on; consequently, approximately one trip a month all year is estimated.

- Dutra Dredging is based in San Rafael, California. Dutra did not provide specific vessel data, but did state its requirements are similar to Manson and General Construction.

- General Construction is a division of Kiewit that operates the majority of Kiewit's marine vessels and marine equipment. These include floating cranes, dump barges, flat deck barges, spud barges, and sectional barges.

  The largest floating crane owned by General Construction Co. is the *DB General*. The *DB General* has an air draft of 93 feet and was used to take the crane off of the *Davy Crocket* many years ago. It has also had some picks up at Thompson Metal Fabrication. There is no record of any transit up the Oregon Slough. An air gap (clearance) under the bridge of 5 to 10 feet is desired for all equipment. The *DB General* cannot go any farther up the river than the Bonneville Dam. Other marine barges have gone up the river as far as Lewiston, Idaho.

  All floating derrick barges have an optimal angle for the crane boom to be positioned in order to be safely towed. This is for stability purposes, particularly when transiting along the coast. When the crane on the *DB General* is positioned this way, it will fit under all of the bridges necessary to get to the work site. If the crane is too tall, the barges will moor at the shore near the bridge, bring a crew on board to lower the crane (the barge is towed unmanned), take the crew off while

the barge is towed under the bridge, and then reverse the procedure. For the *DB General*, this lowered height is 93 feet above the waterline.

- Hickey Marine Enterprises has four derrick crane barges; the largest is the *Sea Horse*, which has a gantry height of 75 feet and a spud height of 90 feet. A 10-foot air gap clearance above the spuds is preferred and a 100-foot total clearance is typically requested when transiting under a bridge. Depending on the draft, the barges can often "sneak" under the high span of the Interstate-5 Bridges rather than the lift span. The gantry height is fixed and is not adjustable. Spuds are usually not lowered, but can be if the draft is adequate. Lowering the spuds introduces a risk of losing or bending them. Trips primarily occur between October and March during the in-water work window. Most work is in the Willamette River, but there is also work on the Columbia, Willamette, and Snake Rivers. The company is currently working in Longview, Washington and Pasco, Washington and will be taking two of its cranes up to Bonneville Dam in March. The company estimates that its barges go upstream approximately six times per year total.

- J.E. McAmis is a marine construction company based in Chico, CA. J.E. McAmis provided information for three crane barges. The air draft for its crane barges is 70 feet, and a 10-foot air gap is preferred. The company transits the river as required when contracts are awarded.

- J.T. Marine is a marine construction company located in the Columbia Business Center in Vancouver, Washington. Its larger vessels include the crane barge *DB Taylor* with an air draft of 143 feet and the crane barge *DB Astoria* with an air draft of 100 feet. If the *DB Taylors* gantry was modified it could possibly be lowered to approximately 80 feet of air draft, however this modification would be very costly according to the owner.

  The company also owns the tugboat *Stacy T* with an air draft of 55 feet, the *Christy T* with an air draft of 50 feet, and a dry dock with an air draft of approximately 40 feet. They prefer an air gap clearance of 10 feet. Their vessels transit the area approximately ten times a month, all year.

- Knife River has one deck barge with an air draft of 48.5 feet; a 5-foot air gap clearance is preferred. The company transits the area approximately four to eighteen times a month all year.

- Manson Construction is a marine contractor with headquarters in the Seattle, Washington, area. Its largest floating construction crane on the West Coast is the *Derrick No. 24* with an air draft of 99 feet. This rig has not been in the Columbia River system in at least 10 years, however it would if contracted to do so. Larger crane barges include the *E.P. Paup* and *Wotan*; however, these rigs are located in the Gulf of Mexico and Mississippi River, respectively, and have never been in the Columbia River.

- Mark Marine is a family business that has been operating since the 1950s. The company primarily performs pile-driving work on smaller projects. Mark Marine provided data on three crane barges and two towboats. Typically, two boats accompany one crane. Its largest crane barge has a spud height (air draft) of 80 feet, and at least a 10-foot air gap clearance is preferred. Spuds are often lowered (almost always going upstream), and it is not a big effort to do so. The company's busiest season is usually November through February because of the in-water work window; for the Interstate-5 main channel, the company averages one round-trip per month among its three crane barges. It is estimated that each of its vessels makes one round-trip per year to the Oregon Slough, but the vessels go downstream under the Interstate-5 main channel bridges and then up into Oregon Slough (no passage under Interstate-5).

- Port of Portland owns and operates the cutter suction hydraulic pipeline *Dredge Oregon*, which has a minimum air draft of 103 feet with the spuds fully raised. The Dredge Captain desires an air gap of at least 5 feet. If the spuds are lowered 10 feet, the bridge of the dredge requires 93 feet of air draft. The dredge also requires 20 feet of draft if the spuds are lowered 10 feet. The *Dredge Oregon* has traveled upstream approximately six times in the last 30 years.

- Ross Island Sand and Gravel is a marine construction company based in Portland, Oregon. Data was provided for one crane barge dredge and two cutter suction hydraulic pipeline dredges. The floating crane barge currently has an air draft of 45 feet but will be increased to 80 feet. The cutter suction hydraulic pipeline dredges have an air draft of 80 feet. Approximately six passages a year are made under the Interstate-5 Bridge for each of the vessels.

- SDS Lumber Company manufactures lumber, plywood, power, and pulp located in Bingen, Washington. They also have tug and barge services. SDS Lumbers largest vessel is the tugboat *Dauby* with an air draft of 55 feet and a preferred air gap clearance of 10 feet. They transit the area about 10 trips a month, all year.

1.4.4 Federal Government

- Nuclear Transporters – The U.S. Navy Puget Sound Naval Shipyard (U.S. Navy PSNS) and Intermediate Maintenance Facility in Bremerton, Washington, dismantles nuclear reactor compartments from deactivated nuclear submarines and cruisers. The nuclear reactor compartments are shipped by barge from Bremerton, down the Washington coast, and up the Columbia River to the Port of Benton where the nuclear reactor compartments are transferred to a large trailer for permanent disposal at the U.S. Department of Energy Hanford Reservation approximately seven miles from the Port of Benton.

  The U.S. Navy PSNS has been disposing of nuclear reactor compartments from Hanford since 1986. The compartments are welded to barges for transport, and the barges are towed with a commercial tugboat. A backup tug and a Navy or Coast Guard escort vessel accompany each shipment.

The U.S. Navy deploys one of two escort vessels to accompany the shipment of nuclear reactor compartments as they travel from Bremerton to Hanford; an air gap of 15 feet is desired. The primary escort vessel is the YP701 *Liberty Bay* with an air draft of 47 feet. The *Liberty Bay* uses the alternate barge channel under the high span of the existing bridge, or the lift span if the alternate barge channel is unusable or unavailable. The largest escort vessel—the YTT 10 *Battle Point*—has an air draft of 74 feet and uses the lift span.

U.S. Navy PSNS's shipping plan is based on the shipyard's long-range dry-dock schedule and ocean and river conditions. The number of shipments per year can vary. They currently average two per year and will increase to five per year in the near future. The number of shipments per year can range from one to eleven. The time of year can also vary. Shipments typically occur during two seasons: mid-Mar through mid-April and September through October. The frequency of one-way passage under the Interstate-5 Bridges for a barge is currently twice per year laden and twice per year unladen (based upon two shipments per year), at some point during the time indicated above. The barges currently use the alternate barge channel under the high span of the existing bridge. If this span is unusable, the lift span is used instead. U.S. Navy PSNS currently has four barges (*Barge 40*, *Barge 60*, *Beluga*, and *Edgecumbe*).

- USACE, Portland District has annual maintenance dredging from the Interstate-5 Bridge upstream to the Bonneville Dam. In 2011, approximately 100,000 cubic yards were dredged with the hopper dredge *Yaquina* from this reach of the Columbia River. The air draft of the *Yaquina* is 92 feet and an 8-foot air gap clearance is preferred. The *Yaquina* used flowlane (in-water) disposal for the dredged material. The USACE also needs to have the capability to respond to emergency conditions, so the dredging could occur during any time of the year.

1.4.5 Marine Industries

The Columbia Business Center (CBC) located on the Washington side of the river near River Mile 108 has a number of marine industry tenants, such as Greenberry Industrial, Oregon Ironworks, and Thompson Metal Fab. In addition, Christensen Shipyards LTD is located just upstream of CBC. These industries utilize waterfront access to ship construction equipment and large metal-manufactured products for heavy construction and maintenance, such as bridges, oil drilling rigs, and offshore facilities.

- Christensen Shipyards LTD builds luxury yachts and manufactures wind turbine components, which are 30 feet high but are transported via the road system. Christensen's yachts have an air draft of 60 feet, and at least a 5-foot air gap is requested. Christensen delivers approximately two completed yachts per year. During the construction, the yachts make about six round trips to the ocean and back, averaging about 12 passages under the Interstate-5 Bridge per year throughout the year. Christensen does not travel through the Oregon Slough.

- Greenberry Industrial has been located at CBC since November of 2010. It fabricates various modules, structural steel, tanks, vessels, and pipe spools. A drill rig was shipped in 2011 that was also worked on by Thompson Metal Fab (see below). The air draft on that shipment was estimated by Thompson Metal Fab to be 133 to 141 feet.

- Kiewit Pacific does not have anything larger that it fabricates or any equipment larger than the *DB General* (93-foot air draft), which is operated by its subsidiary, General Construction. Kiewit has had various large structures manufactured by Thompson Metal Fab, USI, and Oregon Ironworks in the past, usually around the 40-foot air draft range. Kiewit has other vessels, but the *DB General* is the largest, and all are operated by General Construction (see General Construction in the Marine Contractors section). Kiewit's trips on the Columbia River are infrequent with most occurring during the summer during the in-water work window, and only occasional trips in the winter.

- Legendary Yachts, Inc. is a builder of classic wooden yachts located in Washougal, Washington. Their services include boat building and repair. Currently, *Radiance* is their only sailboat that has a home port of Vancouver, Washington. It is the largest air draft to date that the company has built with an air draft of 86 feet. They transit approximately two times a month from July through September. Typical boats they have built range in air draft from 45 to 63 feet. They prefer an air gap clearance of 3 feet.

- Oregon Ironworks is a heavy industrial fabrication with a facility located in the Columbia Industrial Park in Vancouver, Washington. They occasionally ship products by barge or ship from the site. They did not provide data on historic shipments, but did provide estimates on future shipments (see Future Growth Section 2.7.5, Marine Industries).

- Schooner Creek Boat Works is a boat repair, maintenance, and new construction shipyard. The shipyard is located downstream of the Interstate-5 Bridge on Hayden Island. Some of the shipyards customers transit through the bridge's reach from upstream moorages. In addition, the owner has a sailboat named *Rage* with an air draft of 85 feet. A 5-foot air gap clearance is preferred. The owner reported sailing the vessel through the bridge's reach approximately four times a month from March through September.

- Thompson Metal Fab has been located at CBC site since 1975 and has been servicing the North Slope building drill rigs since 1980. It also services infrastructure for bridges, hydroelectric, and power generation. The company has licenses to build masts, derricks, and such structures. The large bay facilities are some of the largest on the West Coast. A roll-on roll-off barge dock capable of 3,500 tons was completed in 2009. Data was provided on 10 shipments that have occurred since 1985. The shipments are usually placed on an ocean-going barge that has a height above the water line (freeboard) that varies from 20 to 28 feet. The height of the load from the barge deck to the highest point was added to the

barge freeboard. Consequently, the total air drafts provided varied by 8 feet. The largest loads were two that were shipped in 2011. The resulting air draft for these loads was estimated to be between 133 and 141 feet. A 20-foot air gap clearance was suggested. Shipments to the North Slope typically occur in July, but other shipments could occur at any time of the year.

1.4.6 Passenger Cruise

Various cruise lines provide up and down river tours that require frequent transits underneath the Interstate-5 Bridges. The following is a list of the cruise lines contacted:

- American Cruise Lines operates small cruise vessels throughout the United States, including Alaska. Its specialty is smaller vessels operating multi-day (seven) cruises and accommodating less than 150 guests. On the Columbia River system they are operating the *Queen of the West*, which moors at the Red Lion Inn on N. Hayden Drive on Hayden Island just east of the Interstate-5 Bridge. The *Queen of the West* travels from Portland, Oregon, to Astoria, Oregon, then back up the Columbia and Snake Rivers to Clarkston, Washington / Lewiston, Idaho. Once there, existing passengers disembark and new passengers embark for the reverse trip back to Portland. The schedule for 2012 includes week-long cruises from March through November.

- American Safari Cruises/Innersea Discoveries operates two passenger vessels that transit up the Columbia River. The vessel *Safari Legacy* has an air draft of 52 feet, and the *Safari Spirit* has an air draft of 42 feet. An air gap of at least 2 feet is preferred. The vessels make 8 to 21 trips a year, mainly from August through November.

- American Waterways Inc. provides passenger service on the Willamette and Columbia Rivers. The company owns five vessels and provided data for their two largest vessels—the *Portland Spirit* and the *Crystal Dolphin*—both of which are passenger vessels. The air draft is 54 feet for the *Portland Spirit* and 50 feet for the *Crystal Dolphin*. The vessels average about 80 trips on the I-5 main channel and North Harbor from June through October, with fewer trips the rest of the year. A 4-foot air gap is preferred.

- Grays Harbor Historical Seaport has two sailing ships—the *Lady Washington* and the *Hawaiian Chieftain*—both of which sail up and down the Columbia River providing education programs for youth and the general public. The *Hawaiian Chieftain* requires an air draft of 81 feet and an air gap of 15 feet, and the *Lady Washington* has an air draft of 90 feet and an air gap of 15 feet. Both ships travel under the Interstate-5 Bridge main channel approximately four times a year. They sail to The Dalles, Oregon and, on rare occasions, down-rig the ships to provide access to the Tri-Cities area in Washington.

- Linblad Expeditions operates two passenger vessels on the main channel: the *National Geographic Sea Bird* and the *National Geographic Sea Lion*. Both

vessels have an air draft of 59 feet and a 6-foot air gap clearance is preferred. They average about 7 to 8 trips a year in the October and November.

1.5 River Ports

1.5.1 Introduction

Many ports along the Columbia and Snake Rivers rely on navigation access as part of their business. This traffic includes tug and barge traffic carrying bulk commodities such as grain, fuel, wood chips, sand and gravel, etc. as well as containerized and project cargo; excursion vessels; and pleasure crafts. As part of the data gathering effort, 21 ports along the Columbia and Snake Rivers were contacted regarding their existing navigation related activities. Ports located upriver of the Interstate-5 Bridge were asked about their recent dredging and marine construction activities because of the potential of generating contractor related navigation at the Interstate-5 Bridge.

1.5.2 Summary

This summary is provided as a general discussion of the overall information obtained with respect to existing navigation at the Interstate-5 Bridge. Some the information related to overall cargo types was obtained from the latest statistics available online from the USACE, and this was consistent with an earlier synopsis of cargo movements presented by Parsons Brinckerhoff in the *Navigation Baseline Report* for the SR 35 Bridge Feasibility Study prepared for the Southwest Washington Regional Transportation Council in 2003.

Operations

Barges are used to move cargo on the upper Columbia and Snake River system because of geometric constraints at the navigation locks, including drafts of 14 feet, widths of 86 feet, and lengths between 650 feet and 675 feet per information available on the USACE channel condition surveys available through the Portland District (http://www.nwp.usace.army.mil/navigation/home.asp). Of the 8.2 million short tons of cargo navigating between Vancouver, Washington and The Dalles, Oregon on the Columbia River in 2009, wheat was by far the most common commodity at 52 percent, followed by petroleum and petroleum products at 22 percent, forest products (primarily wood chips) at 9 percent, sand and gravel at 8 percent, waste and scrap at 3 percent. and chemicals (fertilizer and ethanol) at 2 percent (USACE [2009] “Water Borne Commerce of the United States, Part 4 – Waterways and Harbors Pacific Coast, Alaska and Hawaii,” IWR-WCUS-09-4, Institute for Water Resources, USACE, Alexandria, Virginia). While the most common bulk commodities are grain, fuels, wood products and aggregate, other project cargo and equipment include dredges; cranes; fabricated structural components such as dam and lock components for the USACE; wind turbine components, including blades, nacelles and steel tube; U.S. Navy shipments of decommissioned reactor cores to the Hanford Nuclear Reservation and modular cargo recently delivered by barge to the Ports of Pasco and Lewiston for oil shale processing sites in Canada.

Container traffic in 2010 reported by the USACE (http://www.ndc.iwr.usace.army.mil//wcsc/by_state10.html) included 26,500 twenty-foot equivalent units (TEUs) overall, with about four out of five inbound loaded while only one of

four outbound were loaded. This traffic is primarily handled by the Ports of Morrow, Umatilla, Pasco, Whitman Co. (Wilma) and Lewiston.

Excursion vessel traffic includes several operators and one or more vessels per operator. Some vessels transit the entire system terminating the extent of their upstream trip at or near the Port of Clarkston. These vessels as well as those that do not transit the entire distance may stop at one or more docks, including the Ports of Skamania County, Cascade Locks, Hood River, City of The Dalles, Klickitat County, Arlington (operator granted permission in the past but never stopped), Umatilla, Walla Walla, Garfield (operator granted permission in the past but never stopped) and Clarkston.

Dredging

Ongoing maintenance dredging needs include channel and/or berth maintenance at several of the ports upriver of the Interstate-5 Bridge, including the Ports of Cascade Locks, Benton County, Walla Walla, Clarkston and Lewiston. In many cases the ports try to contract with the USACE dredging contractor when they are in the area (i.e., private contractors). However, the Port of Cascade Locks contracted with SDS Lumber to conduct their dredging with its equipment (clamshell bucket). Others, such as the Port of Benton, have their facility maintained by the U.S. Navy who uses divers to remove sediment at the low dock.

Marine Construction

To the extent possible, marine construction at the upriver ports is conducted by land-based equipment. Recent examples include the Port of Cascade Locks (recent boarding float replacement); Hood River (groin and riprap slope protection repair); Arlington (piling and boat ramp); Pasco (seawall upgrade); and Whitman County (repaired sheet pile dock and removed rock from a berth). Recent and ongoing work that involved water-based equipment includes City of The Dalles commercial dock project, which is currently under construction using barge-mounted cranes. Pile driving and dolphin construction at Willow Creek for the Port of Arlington was completed several years ago before the project was indefinitely postponed because of regulatory issues. The Port of Morrow had two projects funded under Connect Oregon I and III involving in-water work on docks and barges slips using barge-mounted equipment by West Coast Contractors and Bergerson Construction, respectively.

2. Future Growth

2.1 Environmental/Land Use Issues Related to Columbia River Scenic Gorge

The Columbia River Gorge National Scenic Area (Scenic Area) lies to the east of Portland, Oregon, and Vancouver, Washington. It stretches about 83 miles from the Sandy River on the west to the Deschutes River on the east in Oregon and from Gibbons Creek in Clark County to a line 4 miles east of Wishram in Washington. The Scenic Area covers portions of six counties: Clark, Skamania, and Klickitat Counties in Washington, and Multnomah, Hood River, and Wasco Counties in Oregon.

The Columbia River Gorge Commission was established in 1987 to develop and implement policies and programs that protect and enhance the scenic, natural, cultural, and recreational resources of the Scenic Area, while encouraging growth within existing urban areas of the Scenic Area and allowing development outside urban areas consistent with resource protection.

To achieve the purposes of the Columbia River Gorge National Scenic Area Act, Congress called for preparation of a Management Plan that would treat the two-state, six-county area as a region. Congress established a two-tiered management approach for preparing the Management Plan. It divided responsibility between the U.S. Forest Service and the Columbia River Gorge Commission, a regional commission representing local, state, and national interests. The six Gorge counties were authorized to implement the Management Plan through their land use ordinances.

The Scenic Area is divided into three categories of land: Urban Areas, the Special Management Area (SMA), and the General Management Area (GMA).

Congress designated 13 cities and towns as Urban Areas: North Bonneville, Stevenson, Carson, Home Valley, White Salmon, Bingen, Lyle, Dallesport, and Wishram on the Washington side of the river and Cascade Locks, Hood River, Mosier, and The Dalles on the Oregon side. The Urban Areas are exempt from the Management Plan, but are eligible to receive federal funds authorized to implement it. The Urban Areas will be the primary focus for future growth and economic development. In addition, the Management Plan states that new industrial development shall not be allowed in the Scenic Area outside of Urban Areas.

There are five established ports within the Scenic Area: Skamania and Klickitat on the Washington side of the river and Cascade Locks, Hood River, and The Dalles on the Oregon side. All five of these ports are within the designated Urban Areas.

Land use regulations regarding development and redevelopment of property in the Scenic Area are promulgated through the Columbia River Gorge Commission's Land Use Ordinance (Chapter 350, Division 81). This code defines industrial uses as well as water-dependent uses. Any future expansions or development projects that would use the established ports as a water-dependent use would need to be within a designated Urban Area.

2.2 Port of Portland Plans

The Port of Portland is authorized to dredge upstream (above I-5), but is unaware of any plans for this. The dredge has been up to Sundial for dry docking during a maintenance period of November through May. Sundial is now out of business, but a shipyard is still there. If the shipyard were to become operational, then the dredge would still need access.

Areas below Bonneville Dam may need dredging by the *Yaquina*. However, the *Yaquina* may not be adequate, so there is a possibility the *Dredge Oregon* could be used. There has been some discussion of the *Dredge Oregon* dredging areas near Hood River and White Salmon River. *Dredge Oregon* dredging upstream of Interstate-5 Bridge is not a frequent occurrence, but if fill is needed, the most cost-effective method can be the dredge. A possibility for use of the *Dredge Oregon* upstream includes using the dredge for placing fill at the Troutdale/Reynolds property. The southwest quad of the airport property may also need more fill material. Placement of a few million cubic yards would be more efficient and cost effective for the *Dredge Oregon* to mine sand and pump in the material than with a smaller dredge. For certain applications, the *Dredge Oregon* is the right piece of equipment.

The Port of Portland suggested that future conditions such as more extreme weather events and high water, or changes resulting from a new Columbia River Treaty could affect diked areas below the Sandy River delta. Reinforcement of the dikes with more material to widen and strengthen the dikes would warrant bringing a dredge upstream.

The Port of Portland does not have any other operations upstream and is not anticipating marine construction upstream. The Port of Portland is currently conducting a rail plan. There is no upstream marine construction plans in the Public Transportation Improvement Plan (PTIP).

Other marine construction—such as building a bridge span in the harbor and then floating it upstream—has occurred over the years. Regional industrial property is likely to stay below the bridge, but it is likely that construction material will be floated up through Interstate-5 Bridge. This is more likely to occur with the Interstate-5 Bridge than the Willamette River bridges because of a larger hinterland upstream on the Columbia River.

The Port of Portland is predicting more frequent movement of potash, coal, and grain. The additional volume probably does not affect vertical requirements, but horizontal clearance is critical.

2.3 Other River Ports

2.3.1 Introduction

Many ports along the Columbia and Snake Rivers rely on navigation access as part of their business. This traffic includes tug and barge traffic carrying bulk commodities such as grain, fuel, wood chips, sand and gravel, etc. as well as containerized and project cargo; excursion vessels and pleasure craft. As part of the data-gathering effort, 21 ports along the Columbia and Snake River system were contacted regarding their future navigation-related activities and plans. Ports located upriver of the proposed CRC were asked about their recent and future plans for

dredging and marine construction because of the possibility of generating contractor-related navigation past the existing Interstate-5 Bridge and proposed CRC Bridge.

The information obtained from each port is summarized below. Detailed information for each port is included in Appendix G Port Interviews.

2.3.2 Summary

This summary is provided as a general discussion of the overall information obtained with respect to potential future conditions and associated navigation related impacts at the existing Interstate-5 Bridge and proposed CRC Bridge. Some the information related to overall cargo types was obtained from the latest statistics available online from the USACE, and this was consistent with an earlier synopsis of cargo movements presented by Parsons Brinckerhoff in the *Navigation Baseline Report* for the SR 35 Bridge Feasibility Study prepared for the Southwest Washington Regional Transportation Council in 2003.

Operations

Depending on regulatory and market trends, there is a possibility of modular cargo for oil-sand processing and/or hydraulic fracturing operations for natural gas production. The coal industry has been in the market for West Coast export terminal facilities. Recent and ongoing examples include the Port of Longview and the Port of St. Helens. One of the proposals for the Port of St. Helens involves barging coal from the Port of Morrow to the Port of St. Helens in specialty barges. The U.S. Navy may ship a larger class of decommissioned reactor cores in the future from the Ohio Class Submarines to the Port of Benton by barge, but that is likely several years away. Other than those possible cargo modifications, the other plans all include existing cargo types and barges such as grain, fuels, wood products, aggregate, and containers. The frequency of this bulk cargo may increase modestly (typically a few percent per year, on average, based on trends illustrated in most of the ports business plans). Container cargo is more volatile and is subject to the factors such as international container service at Port of Portland's Terminal 6.

Cruise industry–related business was down significantly during the recent economic recession with some operators going out of business. However, service appears to be recovering somewhat, though not yet to the levels seen several years ago.

Dredging and Marine Construction

Ongoing maintenance dredging will include those ports and facilities noted under existing conditions. New projects that are either planned or still under consideration are discussed below. These projects will require dredging, marine construction, or some combination thereof. Future projects were mentioned by several ports, including the following:

- Ports of Cascade Locks (beach expansion project including jetty extension work, two new groins and two mobile floating docks, and a new marina at Government Rock and a new Cruise Boat Dock)
- Hood River (currently securing permits to re-sculpt Hood River delta materials, i.e., dredging/excavation)

- Arlington (development of partially completed facility to allow barge-based export of aggregate from Willow Creek quarry and riprap repair at the grain terminal, which will likely require a barge-mounted crane to reach the areas to be repaired)
- Morrow (possible barge-slip dredging, but this is several years out at the earliest)
- Umatilla (400-foot dock extension at the container terminal and a new G dock in the marina)
- Whitman County (enlargement of a sheet pile dock at the TGM facility at the Wilma site. This dock expansion will require water-based construction equipment and is currently in the permitting process.)
- Lewiston (150-foot dock extension at the container terminal but this would likely be constructed with land-based equipment)

2.4 USACE Plans for Locks and Maintenance Needs

The USACE, Portland District, stated that recent gates fabricated for dam-lock repair were laid out horizontally and barged out so they did not require a very tall shipment. Most other materials used for the repair were trucked rather than barged. Thompson Metal Fab in Vancouver, Washington, constructed some of the gate materials. Thompson Metal Fab initially placed the gate on a submersible barge, floated it downstream of the Interstate-5 Bridge, transferred it to another barge, and then transported it upstream. The USACE stated that usually they have the ability to break the parts into smaller pieces. They are not anticipating any construction in the near future for the dams. In addition, the Walla Walla District does not anticipate any construction that would involve larger vessels transported through the I-5 reach of the Columbia River.

2.5 USACE Dredging Maintenance Plans

The USACE larger hopper dredge, the *Essayons*, has never gone upstream of the Interstate-5 Bridge. In the future, the USACE dredges could be retired; however, they are well maintained. The *Essayons* and the *Yaquina* were recently repowered and have many years of life remaining.

The USACE is in the process of removing rock with a contractor (J.E. McAmis) using a clamshell dredge below the spillway on Bonneville Dam. The Portland District has the potential for dredging up to John Day Dam, if necessary.

The 2014/2024 Columbia River Treaty and Biological Opinion conditions could change river spill practices. A treaty proposal has to be in place by 2014. If spill practices change, the dredging requirements could change. There is also a possibility that the in-water work window period could change and effect maintenance and construction activities.

The upstream channel has an authorized depth of -27 feet Columbia River Datum (CRD), but is currently maintained at -17 feet CRD. If funding were provided, the USACE could potentially deepen the channel by dredging another 10 feet to maintain the authorized depth of -27 feet

CRD. The deepening would probably utilize a larger and/or different dredge than the *Yaquina*, which is a hopper dredge. The hopper dredge is normally used for maintenance dredging. Clamshell dredges are not generally used for maintenance dredging upstream of Interstate-5, since utilizing the *Yaquina* with in-water disposal is more efficient. The Port of Portland's hydraulic pipeline *Dredge Oregon* could be used for emergency work.

The Walla Walla District has jurisdiction over McNary Dam and the Snake River dams. There are no plans with the Walla Walla District for dredging that would involve larger vessels transported through the I-5 reach of the Columbia River.

2.6 Nuclear Shipments

Shipments into and out of Hanford fall into two categories:

- Shipment of naval nuclear reactor compartments to Hanford Reservation via the Columbia River for ultimate disposal (see separate discussion under Puget Sound Naval Shipyard).
- Shipment of transuranic waste from Hanford Reservation by truck either directly to the Waste Isolation Pilot Plant (WIPP) in New Mexico or to the Idaho National Laboratory and then to WIPP.

All other waste generated at Hanford Reservation is stored or disposed of within Hanford at one of five disposal facilities:

- Canister Storage Building and Interim Storage Area
- Environmental Restoration Disposal Facility
- Integrated Disposal Facility
- Waste Encapsulation and Storage Facility
- Waste Receiving and Processing Facility

These disposal facilities accept low-level wastes generated as part of cleanup activities at the Hanford Reservation. The Environmental Restoration Disposal Facility accepts low-level radioactive, hazardous, and mixed wastes. It does not accept any non-Hanford waste. The Environmental Restoration Disposal Facility has a total capacity of 16.4 million tons. The Integrated Disposal Facility does not yet accept waste, but may accept the treated, low-level waste that will have gone through the vitrification process at Hanford's Waste Treatment Plant.

Much of the transuranic waste (high-level radioactive waste) such as spent nuclear fuel is being stored at Hanford until a National Repository is designed and constructed. The previous location for the National Repository—Yucca Mountain in Nevada—was cancelled in 2009. Shipments from Hanford to WIPP are performed by trucks and are restricted to Interstates 82 and 84 in Northeastern Oregon. No wastes are currently or proposed to be shipped from Hanford by vessel

down the Columbia River. Between July 2000 and January 2011, WIPP accepted 492 shipments from Hanford.

In 1999, the U.S. Department of Energy (DOE) chose Hanford as a primary disposal site for significant amounts of the nation's low-level and mixed low-level nuclear waste. Because of this, Hanford could have received thousands of shipment for many years but litigation prevented DOE from allowing this to happen. A separate litigation settlement extends the moratorium on most waste shipments to Hanford through 2022.

2.7 Plans for Existing Businesses and Potential New Users

The following businesses provided information on future plans.

2.7.1 Commercial Tugs and Tows

- Bernert Barge Lines has no plans of adding a vessel that is higher than its current air gap since it is restricted upstream.
- Columbia Grain provided no future plans.
- Crowley Maritime Corporation provided no future plans.
- Foss / Marine Resources Group provided no future plans.
- Schnitzer Steel expects an increase in traffic based on volume growth at Pasco facility. Shipping an auto-shredder by project via inland waterway has been examined, but it currently moves by truck and rail. In 1+ years, the company expects to make three trips/month per barge, and at that point, a new barge may be bought.
- Shaver will never have taller vessels because of fixed spans on the Snake River. The company is building two grain barges and one ship docking vessel and will probably build more boats but not for going above the Interstate-5 Bridge. It has no expectations of relocating or adding a new facility.
- Tidewater is looking for ways to grow its business, so its frequencies could increase; however, if another vessel is built, it would be similar in size to either the existing *Defiance* or *Sundial* vessels.

2.7.2 Recreational Sailboats and Powerboats

No future plans were provided. The Portland Yacht Club and Rose City Yacht Clubs have no present plans of expanding membership.

2.7.3 Marine Contractors

- Advanced American Construction provided no future plans.

- Bergerson Construction's business plan does not address vessel traffic in this specific area and has no plans to expand.
- CalPortland Company provided no future plans.
- Diversified Marine provided no future plans.
- Dutra Dredging provided no future plans.
- General Construction has no plans for any larger pieces of floating marine equipment.
- Hickey Marine Enterprises does not have any plans for larger equipment. It has lengthened its spuds when needed and could do that if necessary for projects. When spuds are lengthened, they are pulled out, so no additional height is required.
- J.E. McAmis provided no future plans.
- J.T. Marine has no plans for any larger pieces of floating marine equipment.
- Knife River provided no formalized future plans. As the economy recovers, the frequency of the trips under the bridge will increase—possibly doubling.
- Manson Construction does not anticipate acquiring any equipment larger than what it currently owns because of the current economic climate and the high cost of moving equipment from other locations into the Columbia River. It does not anticipate moving any equipment into the river, which could change if project opportunities present themselves.
- Mark Marine does not have a business plan, and it does not have any plans for larger equipment.
- Port of Portland's future plans are discussed in Section 2.2, Port of Portland Plans.
- Ross Island Sand and Gravel plans to modify *Ross Island Dredge No. 9* floating crane. The vessel will be modified to a 60-foot beam and an 80-foot air draft.
- SDS Lumber Company provided no future plans.

2.7.4 Federal Government

- Nuclear Transporters – Beginning in 2023, the U.S. Navy foresees needing larger barges for transporting the larger and heavier compartments from the *Ohio* class submarines. U.S. Navy PSNS has identified the need to acquire two new barges (Future Barges 1 and 2) to handle these bigger compartments. The air draft for these vessels is anticipated to be 57 feet. The new barges would be operated in the same manner as the existing barges.

- USACE – Future plans are discussed in Sections 2.4, USACE Plans for Locks and Maintenance Needs and 2.5, USACE Dredging Maintenance Plans.

2.7.5 Marine Industries

- Christensen Shipyards LTD is working on developing a joint venture with Oregon Iron Works to construct larger yachts with an additional deck, which would result in an air draft of 77 to 80 feet. In addition to the joint venture with Oregon Iron Works, Christensen is also pursuing construction of military vessels; these boats would be wider (42-foot beam), but be significantly shorter than its yachts.

- Greenberry Industrial estimated future shipments with a total air draft of 165 feet. They were recently awarded a contract to fabricate a large ship unloader and ship it to the Port of Portland. No specific air draft data was available.

- Kiewit Pacific provided no future plans for larger equipment.

- Legendary Yachts provided no future plans, but stated they routinely have projects in the 45-foot air draft range with occasional projects in the 65-foot air draft range.

- Oregon Ironworks currently has a project that will ship 110-foot-tall sections to the Puget Sound area. With dunnage and barge freeboard the air draft is estimated to be 125 feet. They prefer a 10-foot air gap clearance. Other future work estimates a bridge clearance of at least 150 feet.

- Schooner Creek Boat Works provided no future plans.

- Thompson Metal Fab could be shipping two more drill rigs in near future. Manufacturing for oil sands machinery also could be built. Future work in the bridge market is anticipated.

2.7.6 Passenger Cruise

- American Cruise Lines' future plans include adding the *American Spirit* to its Columbia River cruise itinerary in 2013. Its length is 214 feet 6 inches and air draft is 45 feet. The company also desires to add another vessel. This vessel's length would be 284 feet and air draft would be 65 feet.

- American Safari Cruises/Innersea Discoveries plan on operating on this reach of the river for the foreseeable future.

- American Waterways Inc. has no plans of adding a larger vessel in the future.

- Grays Harbor Historical Seaport does not foresee any growth at this time.

- Linblad Expeditions has no plans for larger vessels in the future.

2.7.7 Other

USS Ranger – The USS Ranger Foundation is working to secure the donation of the aircrarft supercarrier *USS Ranger* from the U.S. Navy. The foundation's plan is to moor the *USS Ranger* just upstream of Chinook Landing Marine Park, on the Columbia River in Fairview, Oregon. The U.S. Navy schedule requires the *USS Ranger* to be moved out of Bremerton by the end of 2014. The plan is to ballast the vessel heavy at the stern for towing to Swan Island. At Swan Island, the vessel is to be re-ballasted to a more even keel. The resulting draft would be 29 feet 8 inches. Additional work would be done on the carrier to reduce the overall width, such as removing the "portable flight deck" and other protuberances from the sides of the carrier, in addition to fitting so the vessel would be accessible for disabled. The resulting extreme width would be 250 feet. The carrier does not have props or rudders, so it would require a lead tug and additional tugs for assistance. The vessel could then be moved upriver during the spring freshet in 2015 (May – June). This would be subject to change, however, as the U.S. Navy may set extra time. The USS Ranger Foundation is submitting the complete application to the U.S. Navy this summer. Then they will pursue environmental, USCG, and USACE permits.

Once the mast, radar antenna, and other appurtenances are removed, the resulting air draft would be 123 feet. An additional air gap of 3 feet was estimated for clearance. In addition, a 13- to 15-foot stage would be required to provide adequate underkeel clearance given the 29-foot 8-inch draft of the vessel. This would result in a required vertical bridge opening of 139 to 141 feet (123-foot air draft + 3-foot air gap + 13- to 15-foot river stage). Since the vessel would be too wide to pass through the Burlington Northern (BN) Railroad bridge swing span, the span would be temporarily removed just south of the swing span. The foundation is in discussion with BN concerning the proposed operation.

The U.S. Navy requires an "Exit Plan," which would entail removing the vessel if the proposed tourist attraction fails or the vessel starts leaking and needs to be repaired. If the venture failed and no other organization was available to take over, the vessel would be scrapped. There is a possibility that the island superstructure (the bridge above the flight deck) could be removed. The superstructure is approximately 20 feet wide and maybe 70 feet or so long. The resulting flight deck is 67.5 feet above the waterline.

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3. River Clearances

3.1 Introduction

Navigation clearances—from the Mouth of the Columbia River to Richland, Washington, and from the mouth of the Snake River to Lewiston, Idaho—are summarized in Table 3-1. Horizontal and vertical clearances are provided for bridges, horizontal clearances for navigation locks, and vertical clearances for overhead power lines. Most of the information provided in the tables was obtained from the most recent National Oceanographic and Atmospheric Administration (NOAA) navigation chart available online (NOAA, 2012). Some of the bridge names (e.g., most of the railroad bridges upstream of The Dalles Dam) were obtained from the USCG bridge inspection logs available through the internet (USCG, 2011). In addition, USACE channel condition surveys were reviewed for additional information and for cross comparison with the information on the NOAA navigation charts.

3.2 Summary

Table 3-1 provides all the data available from the three sources cited above. This information is provided by river mile beginning at the mouth of the Columbia River and progressing upstream. Horizontal and vertical clearances are shown for each facility as applicable (e.g., power lines do not provide any horizontal constraint to navigation other than the fact that the lines may be lower in the main stem of the river than, for example, at the side of the river where a navigation lock is located). Information differing materially between the NOAA charts and either the USACE charts or USCG bridge inspection logs is indicated in the notes. In some cases, the reported river mile may be slightly different. The river miles provided in the tables were estimated to the nearest 1/10 statute mile based on river miles provided in the NOAA charts. In addition, the horizontal and vertical clearances were taken from the NOAA navigation charts. The datum for each reach of the river is controlled by the pool elevation of the various dams above Bonneville Dam. Below Bonneville Dam, the CRD is used except near the coast at the Astoria-Megler Bridge where Mean Lower Low Water (MLLW) is used.

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Table 3-1: Columbia and Snake River Navigation Clearances

Bridge	River Mile	Horiz. Clr. (ft)	Vert. Clr. (ft)	Vert. Clr. at Center (ft)	Vert. Clr. w/Span Open (ft)	Location	NOAA Chart #	NOAA Chart (date)	Carries	Datum
Columbia River										
Astoria-Megler Bridge	13.5	1070	193	205	--	Astoria	18521	Aug-09	US 101	Mean Lower Low Water (MLLW)
Power Cable	40.0	--	230	--	--	Puget Island	18523	May-10	Power	Columbia River Datum (CRD)
Power Cable	62.4	--	216	--	--	Longview	18524	Jun-11	Power	CRD
Lewis & Clark Bridge	66.0	1120	187	--	--	Longview	18524		SR 433	CRD
Power Cable (main channel)	104.2	--	220	--	--	Vancouver-Portland	18525	Apr-09	Power	CRD
(North Portland Harbor)	1.6	--	160			Vancouver-Portland	18525		Power	CRD
BNSF Rail Bridge	105.6	200	39	--	Unlimited	Vancouver-Portland	18525		BNSF Rail Road (RR)	CRD
(North Portland Harbor)	3.2	125	39	--	Unlimited	Vancouver-Portland	18525			CRD
Interstate Bridge (lift bridge)	106.5	263	39	--	178	Vancouver-Portland	18525		I-5	CRD
(barge channel)		511	46	58	--	Vancouver-Portland	18525			CRD
(alt. barge channel)		260	72	--	--	Vancouver-Portland	18525			CRD
(North Portland Harbor)	4.5	215	35	--	--		18525			CRD
Power Cable (North Portland Harbor)	4.5	--	54	--	--	Vancouver-Portland	18525		Power	CRD
Glenn L. Jackson Memorial Bridge	112.7	469	136	144	--	Vancouver-Portland	18531	Sep-05	I-205	CRD
Power Cable	120.0	--	133	--	--	Camas-Troutdale	18531		Power	CRD
Bonneville Dam - Navigation Lock	145.1	86	--	--	--		18531			
Power Cable	145.1	--	210	--	--	Bonneville	18531		Power	CRD
Power Cable	146.6	--	190	--	--	Bonneville	18531		Power	Normal Pool (NP) (72 ft above Mean Sea Level (MSL))
Bridge of the Gods	148.3	655	135	--	--	Cascade Locks	18532	May-06	Pacific Crest Trail	NP (72 ft above MSL)
Hood River Bridge	169.8	246	67	--	148	Hood River	18532		SR 35	NP (72 ft above MSL)
Power Cable	171.1	--	155	--	--	Bingen	18532		Power	NP (72 ft above MSL)
Power Cable	173.8	--	159	--	--	Eighteen Mile Island	18532		Power	NP (72 ft above MSL)
Power Cable	186.2	--	155	--	--	The Dalles	18532		Power	NP (72 ft above MSL)
The Dalles Bridge (nav. lock approach)	191.6	250	100	--	--	The Dalles	18532		US 197	NP (72 ft above MSL)
(main span)		551	81	--	--	The Dalles	18532			
The Dalles Dam - Navigation Lock	191.8	86	--	--	--		18532			
Power Cable	191.9	--	125	--	--	The Dalles	18533	Sep-04	Power	NP (160 ft above MSL)
Power Cable	201.0	--	123	--	--	Wishram	18533		Power	NP (160 ft above MSL)
Celilo Bridge	201.2	300	20	--	79	Wishram	18533		BNSF RR	NP (160 ft above MSL)
Power Cable	204.5	--	115	--	--	Miller Island	18533		Power	NP (160 ft above MSL)
Sam Hill Memorial Bridge	209.1	300	88	--	--	Biggs	18533		US 97	NP (160 ft above MSL)
Power Cable	215.8	--	93	--	--	Biggs	18535	Aug-04	Power	NP (160 ft above MSL)
John Day Dam - Navigation Lock	216.6	86	--	--	--		18535			
Power Cable	263.3	--	95	--	--	Crowe Butte	18537	Jul-99	Power	NP (265 ft above MSL)
SR-82 Bridge, SB	291.0	335	85	--	--	Umatilla	18539	Mar-04	I-82, SR 395	NP (265 ft above MSL)
SR-82 Bridge, NB		400	71	--	--		18539			
Power Cable	291.2	--	82	--	--	Umatilla	18539		Power	NP (265 ft above MSL)
McNary Dam - Navigation Lock	292.6	86	--	--	--		18541	Mar-02		
McNary Dam Locks Bridge	292.6	86	15				18541		--	NP (340 ft above MSL)
Kalan Bridge	323.5	378	11	--	72	Burbank	18542	Jan-00	Union Pacific RR	NP (340 ft above MSL)
Power Cable	325.6	--	85	--	--	Kennewick-Pasco	18542		Power	NP (340 ft above MSL)
BNSF Rail Bridge	328.1	290	18		70	Kennewick-Pasco	18542		BNSF RR	NP (340 ft above MSL)
Benton-Franklin Intercounty Bridge	328.5	578	56	--	--	Kennewick-Pasco	18542		SR 397	NP (340 ft above MSL)
Power Cable	328.7	--	54	--	--	Kennewick-Pasco	18542		Power	NP (340 ft above MSL)
Pioneer Memorial Bridge	330.1	500	61		--	Kennewick-Pasco	18542		US 395	NP (340 ft above MSL)
Lee-Volpentest Bridges	336.1	400	73	--	--	Kennewick-Pasco	18542		I-182, US 12	NP (340 ft above MSL)

Bridge	River Mile	Horiz. Clr. (ft)	Vert. Clr. (ft)	Vert. Clr. at Center (ft)	Vert. Clr. w/Span Open (ft)	Location	NOAA Chart #	NOAA Chart (date)	Carries	Datum
Snake River										
BNSF Rail Bridge	1.5	380	14	--	60	Pasco-Burbank	18545	Sep-03	BNSF RR	NP (340 ft above MSL)
Vaughn Hubbard Bridge	2.2	400	61	--	--	Pasco-Burbank	18545		US 12	NP (340 ft above MSL)
Power Cable	4.0	--	68	--	--	Pasco-Burbank	18545		Power	NP (340 ft above MSL)
Power Cable	8.7	--	65	--	--	Ice Harbor Lock & Dam	18545		Power	NP (340 ft above MSL)
Power Cable	9.5	--	90	--	--	Ice Harbor Lock & Dam	18545		Power	NP (340 ft above MSL)
Ice Harbor Dam - Navigation Lock	9.7	86	--	--	--		18545			
Power Cable	16.0	--	80	--	--	1 mi. upstream of Dalton Lake	18545		Power	NP (440 ft above MSL)
Power Cable	40.1	--	148	--	--	Lower Monumental Dam	18545		Power	NP (440 ft above MSL)
Power Cable	41.0	--	94	--	--	Lower Monumental Dam	18545		Power	NP (440 ft above MSL)
Lower Monumental Dam - Navigation Lock	41.6	86	--	--	--		18546	Jan-04		
Joso Bridge	58.7	238	144	--	--	Lyons Ferry	18546		Union Pacific RR	NP (540 ft above MSL)
Lyons Ferry Bridge	59.2	200	74	--	--	Lyons Ferry	18546		SR 261	NP (540 ft above MSL)
Power Cable	59.6	--	178	--	--	Lyons Ferry	18546		Power	NP (540 ft above MSL)
Power Cable	60.6	--	178	--	--	Lyons Ferry	18546		Power	NP (540 ft above MSL)
Sargent Bridge	61.7	400	60	--	--	Tucannon	18546		Union Pacific RR	NP (540 ft above MSL)
Power Cable	69.1	--	95	--	--	Little Goose Lock & Dam	18546		Power	NP (540 ft above MSL)
Power Cable	69.3	--	90	--	--	Little Goose Lock & Dam	18546		Power	NP (540 ft above MSL)
Power Cable	70.0	--	93	--	--	Little Goose Lock & Dam	18546		Power	NP (540 ft above MSL)
Little Goose Dam - Navigation Lock	70.2	86	--	--	--		18547	Jul-99		
Elmer C. Huntley Bridge	83.2	520	60	--	--	Central Ferry	18547		SR 127	NP (638 ft above MSL)
Power Cable	83.3	--	80	--	--	Central Ferry	18547		Power	NP (638 ft above MSL)
Power Cable	85.3	--	95	--	--	2 mi. upstream of Central Ferry	18547		Power	NP (638 ft above MSL)
Power Cable	103.3	--	81	--	--	Almota	18547		Power	NP (638 ft above MSL)
Power Cable	104.3	--	75	--	--	Almota	18547		Power	NP (638 ft above MSL)
Lower Granite Dam - Navigation Lock	107.4	86	--	--	--		18548	Dec-02		
Power Cable	108.7	--	80	--	--	Lower Granite Dam	18548		Power	NP (738 ft above MSL)
Power Cable	110.2	--	101	--	--	Wawawai	18548		Power	NP (738 ft above MSL)
Power Cable	130.3	--	80	--	--	Near Silcott Island	18548		Power	NP (738 ft above MSL)
Power Cable	135.5	--	80	--	--	Wilma	18548		Power	NP (738 ft above MSL)
Red Wolf Crossing	137.3	400	60	--	--	Clarkston	18548		SR 128	NP (738 ft above MSL)
SR 12 Interstate Bridge	139.6	160	10	--	42	Clarkston-Lewiston	18548		US 12	NP (738 ft above MSL)
Lewiston/Clarkston Bridge	141.3	250	--	60	--	Clarkston-Lewiston	18548		Fleshman Way – Bryden Canyon Rd.	NP (738 ft above MSL)
Power Cable	141.4	--	80	--	--	Clarkston-Lewiston	18548		Power	NP (738 ft above MSL)
Power Cable	145.0	--	80	--	--	Asotin	18548		Power	NP (738 ft above MSL)
Clearwater River										
Power Cable	0.6	--	81	--	--	Lewiston-North Lewiston	18548		Power	NP (738 ft above MSL)
Camas Prairie Railroad Bridge	0.6	232	7	--	60	Lewiston-North Lewiston	18548		Camas Prairie RR	NP (738 ft above MSL)

3.3 References

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Columbia River

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Columbia and Snake Rivers

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Snake River

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4. River Levels

River level data for the Columbia River at the Interstate – 5 Bridge is presented in Appendix H. The data is plotted for the entire record (1977 through 2011), the last 20 years (1989 through 2011) and the last 10 years (2001 through 2011). Included on the graphs are daily maximum, daily minimum, average monthly maximum, average monthly minimum, average daily high, and average daily low.

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APPENDICES

Appendix A – Summary Tables of User Data

Appendix B – Request for River User Data

Appendix C – Public Notice and List of Publications

Appendix D – River User Data Sheet

Appendix E – Completed User Data Sheets

Appendix F – Additional User Information

Appendix G – Port Interviews

Appendix H – River Levels

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Appendix A – Summary Tables of User Data

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Company and/or Owner of Vessel	Vessel Name	Vessel Type	Length Overall (LOA), Feet	Beam, Feet	Draft, Feet	Air Draft, Feet	Frequency of Passage Underneath Interstate-5 Bridges
Commercial Tugs and Tows							
Bernert Barge Lines	Kathryn B	Towing	99.2	22.1	7.9	52	Four to eight times a month, all months of the year.
Bernert Barge Lines	Lori B	Towing	57.3	31	10.7	52	Four to seven times a month, all months of the year.
Bernert Barge Lines	Mary B	Towing	61.4	21.3	8	42	One to four times a month, all months of the year.
Foss	PJ Brix	Push boat twin screw tractor	87	32.75	13.7	58.3	Sporatic historic use. Used to tranport large lifts.
Foss	Halle Foss	Twin screw conventional	86	27.75	12.4	42	Sporatic historic use. Used to tranport large lifts.
Foss	Pacific Escort	Harbor assist vessel	100	36.4	16	47.7	Sporatic historic use. Used to tranport large lifts.
Foss	Pacific Explorer	ASD tractor harbor assist	98.8	36	17	61	Sporatic historic use. Used to tranport large lifts.
Foss	Betsy-L	Twin screw conventional	72.6	26.4	10	28.4	Sporatic historic use. Used to tranport large lifts.
Foss	Daniel Foss	ASD tractor harbor assist	95.2	36	14		Sporatic historic use. Used to tranport large lifts.
Schnitzer Steel	Inland Conveyor	Flat deck self-unloading barge	300	84	14		Twice in March, four times a month all other months of the year.
Schnitzer Steel	MAX 111	Flat deck barge (w/ bin walls)	230	60	13		Twice in March, four times a month all other months of the year.
Schnitzer Steel	CHIPPY 002	Flat deck barge (w/ bin walls)	230	60	13		Twice in March, four times a month all other months of the year.
Shaver	Cascades	Push knee	93	30	14	51	Combined average for six vessels is twenty times a month, all months of the year.
Shaver	Clearwater	Push knee	89	28		51	Combined average for six vessels is twenty times a month, all months of the year.
Shaver	Deschutes	Tractor tug	91	36		51	Combined average for six vessels is twenty times a month, all months of the year.
Shaver	Lassen	Harbor	70	24		51	Combined average for six vessels is twenty times a month, all months of the year.
Shaver	Umatilla	Push knee	65	24		51	Combined average for six vessels is twenty times a month, all months of the year.
Shaver	Willamette	Tractor tug	91	36		51	Combined average for six vessels is twenty times a month, all months of the year.

Company and/or Owner of Vessel	Vessel Name	Vessel Type	Length Overall (LOA), Feet	Beam, Feet	Draft, Feet	Air Draft, Feet	Frequency of Passage Underneath Interstate-5 Bridges
Tidewater	Betty Lou	Tug	70	40	9	50	Four round-trips per year between October through January.
Tidewater	Captain Bob	Tug	110	34	12	51	Eight round-trips per year with six of those between August and October.
Tidewater	Challenger	Tug	112	34	14	49	Eight round-trips per year with six of those between August and October.
Tidewater	Clarkston	Tug	75	29	11	49	Ten round-trips per year, year-round.
Tidewater	Defiance	Tug	95	31	12	49	Twenty-two round-trips per year with more trips between August and October.
Tidewater	Hurricane	Tug	109	32	11	49	Twenty-two round-trips per year with more trips between August and October.
Tidewater	Invader	Tug	95	26	10	48	Four round-trips per year between April and July.
Tidewater	Legend	Tug	127	34	12	51	Twenty-two round-trips per year with more trips between August and October.
Tidewater	Mary Gail	Tug	76	24	10	42	Four round-trips per year between April and July.
Tidewater	Liberty	Tug	108	34	10	44	Two round-trips per year, year-round.
Tidewater	Maverick	Tug	82	27	8	52	Ten round-trips per year, year-round.
Tidewater	Outlaw	Tug	104	32	10	53	Twenty round-trips per year, with ten of those between August and October.
Tidewater	Rebel	Tug	87	30	12	48	Twenty-two round-trips per year with more trips between August and October.
Tidewater	Sundial	Tug	95	32	13	48	Twenty-two round-trips per year with more trips between August and October.
Tidewater	The Chief	Tug	122	40	11	50	Twenty-two round-trips per year with more trips between August and October.
Tidewater	Tidewater	Tug	127	34	12	50	Twenty-two round-trips per year with more trips between August and October.
Recreational Sailboats and Powerboats							
Portland Yacht Club	Whisper	Sailboat	57	12 to 17	5 to 12	65 to 85	Fifteen to twenty trips per year.

Company and/or Owner of Vessel	Vessel Name	Vessel Type	Length Overall (LOA), Feet	Beam, Feet	Draft, Feet	Air Draft, Feet	Frequency of Passage Underneath Interstate-5 Bridges
Portland Yacht Club	Sargasso	Sailboat	54	12 to 17	5 to 12	65 to 85	Fifteen to twenty trips per year.
Portland Yacht Club	Luscious	Sailboat	54	12 to 17	5 to 12	65 to 85	Fifteen to twenty trips per year.
Portland Yacht Club	Galatea	Sailboat	54	13	5 to 12	65 to 85	Fifteen to twenty trips per year.
Portland Yacht Club	Camelot	Sailboat	54	11.5	5 to 12	65 to 85	Fifteen to twenty trips per year.
Portland Yacht Club	Runaway	Sailboat	51	12 to 17	5 to 12	65 to 85	Fifteen to twenty trips per year.
Portland Yacht Club	Moondance	Sailboat	50	14	5 to 12	65 to 85	Fifteen to twenty trips per year.
Portland Yacht Club	Halsey	Sailboat	53	14	5 to 12	65 to 85	Fifteen to twenty trips per year.
Portland Yacht Club	Sovereign	Sailboat	53	12 to 17	5 to 12	65 to 85	Fifteen to twenty trips per year.
Portland Yacht Club	Rya	Sailboat	49	14	5 to 12	65 to 85	Fifteen to twenty trips per year.
Rose City Yacht Club	Crystal Swan	Sailboat	40	14	6	63	Three to four round trips per year.
Rose City Yacht Club	Draco	Sailboat	38	13	6.5	60	Three to four round trips per year.
Rose City Yacht Club	Morgan Le Fay	Sailboat	50		6.5	58	Three to four round trips per year.
Rose City Yacht Club	Down Wind Drift	Sailboat	42	8	6.5	59	Three to four round trips per year.
Angel Khalsa	Victory	NW Trawler Cruiser	52	15	8	20	
Diane Robbins-Luce	Benicia	Sailboat	37.7	13	6.24	50	Twice a month, April through October.
Greg Luce	Mistral	Sailboat	49.5	14.7	6.9	65	Twice a month April through October.
Hardiman Family Trust	Autumn Wind	Sailboat	45	14	6.7	72	Twice in May, and once a month in August and September.
John Kohl	Stella Polare	Sailboat	46	14	6	67	Once or twice a month May through September.
Jon K. Clemens	Moonstruck	Sailboat	45	12.9	6.3	63	Once in April and once in September.

Company and/or Owner of Vessel	Vessel Name	Vessel Type	Length Overall (LOA), Feet	Beam, Feet	Draft, Feet	Air Draft, Feet	Frequency of Passage Underneath Interstate-5 Bridges
Kim Schmutzler	Magic Pearl	Sailboat used as research	60	16	6.8	56	Sporadic
McClure Loving Trust	Nancy Riley	Sailboat	50	15	7	69	One trip a month from June through September.
Michael House	Tamaroa	Motor Yacht	55	15	5	25	Once to six times a month, all months of the year.
Michael Trodoux	Southern Cross	Motor Yacht	53	15.8	4.5	24.2	Two to twelve times a month April through October.
Scott Campbell	Riva	Sailboat	46	13.5	7.5	64.5	Once in April and once in September.
Todd Hilbelink	Wakadui	Sailboat	49.5	14.8	7	70	Two times a month, May through September.
Wind Dancing LLC	Wind Dancing	Sailboat	47	13.9	9.6	66	Two to four times a month, June through September.
Marine Contractors							
Advanced American Construction	Linde Marie	Tug boat	58.4	16.5	5.5	35	Once to twice a month, all months of the year.
Advanced American Construction		Crane barge				90	Once to twice a month, all months of the year.
Advanced American Construction		Crane barge				90	Once to twice a month, all months of the year.
Advanced American Construction		Crane barge				90	Once to twice a month, all months of the year.
Advanced American Construction		Crane barge				90	Once to twice a month, all months of the year.
Bergerson Construction Inc.	Betsy Ross	Crane barge	120	63	5	70	Sporadic
Bergerson Construction Inc.	Carr Barge	Crane barge	104	40	6	70	Sporadic
Bergerson Construction Inc.	Olaf J	Tugboat	48.6	16.1	5.7	35	Sporadic
Bergerson Construction Inc.	Darryl B	Tugboat	52	14.1	5.6	20	Sporadic
Bergerson Construction Inc.	Sectional Barge	Crane barge	100 +/-	60	3	70	Sporadic

Company and/or Owner of Vessel	Vessel Name	Vessel Type	Length Overall (LOA), Feet	Beam, Feet	Draft, Feet	Air Draft, Feet	Frequency of Passage Underneath Interstate-5 Bridges
CalPortland Co	Johnny Peterson	Tug	52	18.5	6.6	32	Eight times a month, all months of the year.
CalPortland Co	Sanderling	Dredge	220.1	40	11.6	32	Eight times a month, all months of the year.
Diversified Marine	DB Freedom	Derrick Barge - Tall spuds	155	60	5	85	Varies depending upon work. Once a month, all months of the year.
Diversified Marine	DB Vulcan	Derrick Barge	101	45	5	58	Varies depending upon work. Once a month, all months of the year.
Diversified Marine	DB Lucy	Derrick Barge - Tall spuds	125	35		85	Varies depending upon work. Once a month, all months of the year.
Diversified Marine	DMI 60	Ramp Barge	80	26		85	Varies depending upon work. Once a month, all months of the year.
Diversified Marine	BMC 44	Spud Barge	208	36		80	Varies depending upon work. Once a month, all months of the year.
Diversified Marine	DMI 100	Spud Barge	100	60		60	Varies depending upon work. Once a month, all months of the year.
Diversified Marine	DMI 40	Work Barge	40	12			Varies depending upon work. Once a month, all months of the year.
Diversified Marine	DMI 50	Ramp Barge	60	26		60	Varies depending upon work. Once a month, all months of the year.
Diversified Marine	Tiger	Tugboat	65	18	6	38	Varies depending upon work. Once a month, all months of the year.
Diversified Marine	Cougar	Tugboat	65	22	6	50	Varies depending upon work. Once a month, all months of the year.
Diversified Marine	Mariner	Tugboat	75	25	10	45	Varies depending upon work. Once a month, all months of the year.
Diversified Marine	MV Sandwick	Utility Landing Craft	78	25	5		Varies depending upon work. Once a month, all months of the year.
General Construction	D.B. General	Floating Crane/Derrick Barge	300	105.8	8	93	Varies depending upon work. Can be any month in the year.
General Construction	D.B. Los Angeles	Floating Crane/Derrick Barge	210	71	7.5	67.2	Varies depending upon work. Can be any month in the year.
General Construction	D.B. Oakland	Floating Crane/Derrick Barge	140	70	6	84.9	Varies depending upon work. Can be any month in the year.
General Construction	D.B. Pacific	Floating Crane/Derrick Barge	250	72	7	86.5	Varies depending upon work. Can be any month in the year.
General Construction	D.B. Seattle	Floating Crane/Derrick Barge	152	76	7.5	90	Varies depending upon work. Can be any month in the year.

Company and/or Owner of Vessel	Vessel Name	Vessel Type	Length Overall (LOA), Feet	Beam, Feet	Draft, Feet	Air Draft, Feet	Frequency of Passage Underneath Interstate-5 Bridges
General Construction	D.B. Vancouver	Floating Crane/Derrick Barge	210	66	5.8	62	Varies depending upon work. Can be any month in the year.
General Construction	D.B. Columbia	Floating Crane/Derrick Barge	142	61.7	5	64	Varies depending upon work. Can be any month in the year.
General Construction	D.B. Alameda	Floating Crane/Derrick Barge	142	61.5	6	71	Varies depending upon work. Can be any month in the year.
General Construction	D.B. Olympia	Floating Crane/Derrick Barge	150	63	4	70.1	Varies depending upon work. Can be any month in the year.
Hickey Marine Enterprises	Sea Horse	Derrick Barge & Crane	142	60	6.5	90	Average 6 round-trips per year for all vessels combined
Hickey Marine Enterprises	Sea Vulture	Derrick Barge & Crane	112	60		86	Average 6 round-trips per year for all vessels combined
Hickey Marine Enterprises	Sea Hawk	Derrick Barge & Crane	110	44		75	Average 6 round-trips per year for all vessels combined
Hickey Marine Enterprises	Sea Lion	Derrick Barge & Crane	103	50	5	75	Average 6 round-trips per year for all vessels combined
J.E. McAmis	Sand Island	Barge	174.7	44.3	15	70	Sporatic, once a month. All months of the year.
J.E. McAmis	Swan Island	Barge	174.7	44.3	15	70	Sporatic, once a month. All months of the year.
J.E. McAmis	Heidi Renee	Barge	211.2	60	12	70	Sporatic, once a month. All months of the year.
JT Marine	Stacy T	Tugboat	99.3	24	10	55	Ten times a month, all months of the year.
JT Marine	Cristy T	Tugboat	61	18	8	50	Ten times a month, all months of the year.
JT Marine	DB Taylor	Crane barge	148	50	5	143	Ten times a month, all months of the year.
JT Marine	DB Astoria	Crane barge	118	33	4	100	Ten times a month, all months of the year.
Knife River	KR-1	Deck Barge	282	78	13.5	48.5	Four to eighteen times a month, all months of the year.
Manson Construction	E.P Paup	Floating Crane/Derrick Barge	380	105	15	132	Has never transited. Barge is working in the Gulf of Mexico and they do not foresee ever bringing this equipment into the Columbia River.
Manson Construction	Wotan	Floating Crane/Derrick Barge	299	96	8	109.5	Barge is working in the Mississippi River and they do not foresee ever bringing this equipment into the Columbia River.
Manson Construction	Derrick No. 24	Floating Crane/Derrick Barge	200	90	6	99	Not in past 10 years

Company and/or Owner of Vessel	Vessel Name	Vessel Type	Length Overall (LOA), Feet	Beam, Feet	Draft, Feet	Air Draft, Feet	Frequency of Passage Underneath Interstate-5 Bridges
Manson Construction	Haakon	Floating Crane/Derrick Barge	280	68	9	84	
Mark Marine Service	DB Columbia	Derrick Barge	140	34	12	75	All three crane barges combined average a round trip per month.
Mark Marine Service	DB Camas	Derrick Barge	90	34	12	75	All three crane barges combined average a round trip per month.
Mark Marine Service	Barge #7	Crane barge	100	40	4	80	All three crane barges combined average a round trip per month.
Mark Marine Service	Patricia	Towboat with tower	84	22	7	48	Once or twice a month, all months of the year.
Mark Marine Service	Umatilla	Towboat with tower	82.5	20	7.5	50	Once or twice a month, all months of the year.
Port of Portland	Dredge Oregon	Cutter Suction Dredge	268	52	15.5	103	Sporatic historic use. Six times in last 30 years. Could lower spuds by 10 ft if 20 ft of draft is available.
Ross Island Sand and Gravel	RI Dredge no.9	Floating Crane	120	40	5	45	Six trips per year, January through June.
Ross Island Sand and Gravel	RI Dredge no.8	Cutter Suction Dredge	158	35	5	80	Six trips per year, January through June.
Ross Island Sand and Gravel	RI Dredge no.7	Cutter Suction Dredge	185	35	5.5	80	Six trips per year, January through June.
SDS Lumber Company	Dauby	Tug	86	28	8	55	Ten times a month, all months of the year.
Federal Government							
Puget Sound Naval Shipyard	Barge 40	Freight Barge	250	68	14.75	51.25	Currently shipping two reactors per year (one in March-April and one in September-October) but will increase to five a year in the foreseeable future.
Puget Sound Naval Shipyard	Barge 60	Freight Barge	230	60	14.75	42.5	Currently shipping two reactors per year (one in March-April and one in September-October) but will increase to five a year in the foreseeable future.
Puget Sound Naval Shipyard	Beluga	Freight Barge	240	60	14.75	42.6	Currently shipping two reactors per year (one in March-April and one in September-October) but will increase to five a year in the foreseeable future.
Puget Sound Naval Shipyard	Edgecumbe	Freight Barge	240	60	14.75	42.6	Currently shipping two reactors per year (one in March-April and one in September-October) but will increase to five a year in the foreseeable future.
Puget Sound Naval Shipyard	Future Barge 1	Freight Barge	400	80	15.75	57	Future shipments beginning in 2023. This vessel is not currently in use. Anticipate six shipments per year.

Company and/or Owner of Vessel	Vessel Name	Vessel Type	Length Overall (LOA), Feet	Beam, Feet	Draft, Feet	Air Draft, Feet	Frequency of Passage Underneath Interstate-5 Bridges
Puget Sound Naval Shipyard	Future Barge 2	Freight Barge	460	80	15.75	57	Future shipments beginning in 2023. This vessel is not currently in use. Anticipate four shipments per year.
Puget Sound Naval Shipyard	YP 701 Liberty Bay	USNV Service Craft/Escort Ship	108	24.25	6.5	47	Currently shipping two reactors per year (one in March and one in September) but will increase to five a year in the foreseeable future; could be up to ten shipments per year.
Puget Sound Naval Shipyard	YTT 10 Battle Point	USNV Service Craft/Escort Ship	186	40	11	74	Currently shipping two reactors per year (one in March and one in September) but will increase to five a year in the foreseeable future; could be up to ten shipments per year.
US Army Corps of Engineers	Yaquina	Hopper Dredge	200	58	16	92	Twice a month October through July, 4 times a month August and September.
Marine Industries							
Christensen Shipyards LTD	Various	Yachts	164	30	8.5	60	Once a month, all months of the year. Planning for future yatchs with 77 ft air draft.
Greenberry Industrial	Future possible shipment	To be shipped by tug and barge				165	Shipments typically occur June, July, or August.
Legendary Yachts, Inc	Radiance	Sail	84	16	7.75	86	Two times a month, June through September
Oregon Ironworks	Future possible shipment	To be shipped by tug and barge				125	Anticipated Project
Schooner Creek Boat Works	Rage	Sailboat	70	13	11	85	Approx. 4 times a month from March through September.
Thompson Metal Fab Inc	ARCO/Housing Expansion	Shipped by tug and barge	400	100	8	85 to 93	Once in 1985
Thompson Metal Fab Inc	Parker Drilling/Rig 245	Shipped by tug and barge	400	100	8	98 to 106	Once in 1990
Thompson Metal Fab Inc	Powell River Paper CO/Chlorine Dioxide Module	Shipped by tug and barge	400	100	8	96 to 104	Once in 1991
Thompson Metal Fab Inc	Nordic-Calista/Rig 3	Shipped by tug and barge	400	100	8	98 to 106	Once in 1997
Thompson Metal Fab Inc	USACE/Lower Granite RSW	Shipped by tug and barge	400	100	8	81 to 89	Once in 2001
Thompson Metal Fab Inc	USACE/Ice Harbor RSW	Shipped by tug and barge	400	100	8	88 to 96	Once in 2005
Thompson Metal Fab Inc	BP/Liberty Rig	Shipped by tug and barges	400	100	8	120 to 128	On 6/23/2009

Company and/or Owner of Vessel	Vessel Name	Vessel Type	Length Overall (LOA), Feet	Beam, Feet	Draft, Feet	Air Draft, Feet	Frequency of Passage Underneath Interstate-5 Bridges
Thompson Metal Fab Inc	Parker Drilling/Rig 272	Shipped by tug and barge	400	100	8	133 to 141	Once in 2011
Thompson Metal Fab Inc	Parker Drilling/Rig 273	Shipped by tug and barge	400	100	8	133 to 141	Once in 2011
Thompson Metal Fab Inc	Doyon Drilling / Rig 25	Shipped by tug and barges	400	100	8	72 to 80	Once in 2010
Passenger Cruise							
American Cruise Lines	Queen of the West	Overnight Passenger Cruise	230	50	5.7	64.3	Eight to twelve times a month, March through December.
American Cruise Lines	American Spirit	Overnight Passenger Cruise	214.5	45.7	6.25	45	Future vessel.
American Cruise Lines	Future Vessel - Unnamed	Overnight Passenger Cruise	284	60	8.5	65	Future vessel.
American Safari Cruises/InnerSea Discoveries	Safari Legacy	Motor Yacht	192	40	9	52	One trip in August, eight trips in September and October, and four trips in November.
American Safari Cruises/InnerSea Discoveries	Safari Spirit	Motor Yacht	110	24.5	6	42	Six trips in October and two trips in November.
American Waterways Inc.	Portland Spirit	Passenger	150	36	8	54	Over 200 trips per year.
American Waterways Inc.	Crystal Dolphin	Passenger	84	32	7	50	Over 200 trips per year.
Grays Harbor Historical Seaport	The Lady Washington	Sailboat	112	22	11	90	One trip in May and June and two trips in October
Grays Harbor Historical Seaport	Hawaiian Chieftain	Sailboat	103.75	22	5.5	81	One trip in May and June and two trips in October
Linblad Expeditions, Inc	National Geographic Sea Bird	Small Passenger	152	35	9.5	59	Three trips in September, 4 in October and 1 in November.
Linblad Expeditions, Inc	National Geographic Sea Lion	Small Passenger	152	35	9.5	59	Three trips in September and one in October.

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Appendix B – Request for River User Data

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Columbia River CROSSING

700 WASHINGTON STREET
SUITE 300
VANCOUVER, WA 98660
360-737-2726 | 503-256-2726

March 27, 2012

XXXXXXXXXX
XXXXXXXX
XXXXXXXXXXX

RE: Columbia River Crossing Project
River User Data

Parcel Number(s): XXXXXXXXX

Dear XXXXXXXXX:

The states of Washington and Oregon are planning to replace the Interstate 5 bridge over the Columbia River. As part of the CRC project, river user information is being collected for inclusion in a bridge permit application to the U.S. Coast Guard. Of interest are the navigation requirements for larger vessels or the shipment of large products traveling under the current I-5 bridge and transiting the Columbia River and Oregon Slough (North Portland Harbor).

Your name or company, parcel number/s and address were found through a search for industrial river front properties between the I-5 Columbia River Bridge and the Bonneville Dam, in addition to the Columbia Industrial Park in Vancouver, Wash. As a property owner with potential river access, you have been identified as a potential river user and may have requested a lift of the Interstate Bridge in the past.

Enclosed is a River User Data Sheet form. We request that as much information as possible be provided, especially your vessel's air draft or shipment, and transiting frequency. A separate sheet is requested for each vessel or large product shipment. The completed form can be faxed to (360) 737-0294 or scanned and returned via e-mail to feedback@columbiarivercrossing.org. Alternatively, you may provide the information by telephone by calling the CRC project office at (866) 396-2726. Please reference "navigation user data collection" when you email or telephone. A response by April 3, 2012, would be appreciated.

For more information about the Columbia River Crossing Project please visit www.columbiarivercrossing.org.

Sincerely,

Mike Niemi
Project Delivery Director

Encl: River User Data Sheet
Cc: Project Control

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Appendix C – Public Notice and List of Publications

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Interstate 5 Columbia River Crossing Project: Data sought on navigation clearance needs under Interstate 5 bridges of Columbia River and Oregon Slough of the Columbia River (North Portland Harbor)

The Interstate 5 Columbia River Crossing Project is collecting marine navigation user data for the Columbia River and Oregon Slough (or North Portland Harbor). This information will be provided to the U.S. Coast Guard as part of an application to receive a bridge permit. Individuals interested in answering questions related to needed clearances and frequencies of trips should email feedback@columbiarivercrossing.org or telephone 866-396-2726. Reference "navigation user data collection" when you email or telephone.

Reply by Feb. 21, 2012

Washington TTY
1-800-833-6384

Oregon TTY
1-800-735-2900

For more information about the Columbia River Crossing Project: www.columbiarivercrossing.org

Title VI Statement to Public
WSDOT and ODOT ensure full compliance with Title VI of the Civil Rights Act of 1964 by prohibiting discrimination against any person on the basis of race, color, national origin or sex in the provision of benefits and services resulting from its federally assisted programs and activities. For questions regarding WSDOT's Title VI Program, you may contact the Department's Title VI Coordinator at (360) 705-7098. For questions regarding ODOT's Title VI Program, you may contact the Department's Civil Rights Office at (503) 986-4350.

List of Publications

1) Oregonian (published on Feb. 8, 2012)
2) Columbian (published on Feb. 8, 2012)
3) DJC Oregon (published on Feb. 8, 2012)
4) DJC Seattle (published on Feb. 8, 2012)
5) Daily Astorian (published on Feb. 8, 2012)
6) Longview Daily News (published on Feb. 8, 2012)
7) St. Helens Chronicle (published on Feb. 8, 2012)
8) Camas-Washougal Post-Record (published on Feb. 8, 2012)
9) The Dalles Chronicle (published on Feb. 8, 2012)
10) Hermiston Herald (published on Feb. 8, 2012)
11) Tri-City Herald (published on Feb. 8, 2012)
12) Walla Walla Union Bulletin (published on Feb. 8, 2012)
13) Lewiston Morning Tribune (published on Feb. 8, 2012)

14) Pacific Northwest Waterways Association (online Feb. 8, 2012)
http://www.pnwa.net/new/aboutPNWA.aspx
15) Merchants Exchange newsletter (published Feb. 14, 2012)
http://www.pdxmex.com/media/MEX/Newsletter/Fall2011Newsletter.pdf
16) Columbia River Crossing Website (started Feb. 3, 2012)
http://www.columbiarivercrossing.com/ProjectInformation/CurrentWork/Fieldwork.aspx

Appendix D – River User Data Sheet

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Columbia River CROSSING

River User Data Sheet

By:_____ **Date:** _____

1. Company name and/or owner of vessel and contact information

Name of company: _____

Name of contact: _____

Phone number (Office): _____ (Cell): _____

Email: _____

Address: _____

City: _____ State: _____ Zip code: _____

3a. Vessel name: _____ **3b. Vessel type:** _____

3c. U.S. Coast Guard Document Number: _____

4a. Length Overall (LOA)**, feet:** _____ **4b. Beam** (width)**, feet:** _____

5. Draft (depth of hull below waterline, fully laden)**, feet:** _____

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen)**, feet:** _____

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge)**:** _____

8. Frequency of one-way passage underneath I-5 main channel (typical per month)**:**

Jan ____ **Feb** ____ **Mar**____ **Apr**____ **May**____ **Jun**____ **Jul**____ **Aug**____ **Sep**____ **Oct**____ **Nov**____ **Dec**____

9. Frequency of one-way passage underneath I-5 main channel (other historic events)**:** _____

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month)**:**

Jan ____ **Feb** ____ **Mar**____ **Apr**____ **May**____ **Jun**____ **Jul**____ **Aug**____ **Sep**____ **Oct**____ **Nov**____ **Dec**____

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events)**:** _____

12. Do you have a business plan (e.g. 10 or 20 year plan)**?** _____

What does it say related to vessels traveling under the I-5 Bridge or into North Portland Harbor (Oregon Slough)**?** _____

May we have a copy? _____

13. Other (additional sheets may be attached.) _____

_____

_____

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Appendix E – Completed User Data Sheets

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Appendix E – Completed User Data Sheets

User data sheets were provided by river users or completed during interviews with the following river users:

Commercial Tugs and Tows

1. Bernert Barge Lines
2. Foss Maritime
3. Schnitzer Steel Industries, Inc.
4. Shaver Transportation Company
5. Tidewater

Recreational Sailboats and Powerboats

1. Portland Yacht Club
2. Rose City Yacht Club
3. Mail-in Responses from Individuals (listed in the order received)
    a. Joel McClure, McClure Living Trust
    b. Scott Campbell
    c. John Kohl
    d. Kim Schmutzler
    e. Michael Tredoux
    f. Diane Robbins-Luce
    g. Greg Luce
    h. John Hardiman, Hardiman Family Trust
    i. Michael House
    j. Angel Khalsa
    k. John Holden, Wind Dancing LLC
    l. Jon Clemens
    m. Kerry Marshall
    n. Todd Hilbelink

Marine Contractors

1. Advanced American Construction
2. Bergerson Construction, Inc.
3. Cal Portland Company
4. Diversified Marine, Inc.
5. Dutra Group
6. General Construction Company
7. Hickey Marine Enterprises
8. J.E. McAmis, Inc.
9. JT Marine, Inc.
10. Knife River Northwest

11. Manson Construction Company
12. Mark Marine Service, Inc.
13. Port of Portland
14. Ross Island Sand and Gravel
15. SDS Lumber Company

Federal Government

1. Nuclear Transporters (Puget Sound Naval Shipyard)
2. U.S. Army Corps of Engineers

Marine Industries

1. Christensen Shipyards LTD
2. Greenberry Industrial
3. Kiewit
4. Legendary Yachts, Inc.
5. Oregon Ironworks, Inc.
6. Schooner Creek Boat Works
7. Thompson Metal Fab
8. Mail-In Responses from Pacific Northwest Steel Fabricators Association (listed in the order received)
    a. Taylor Groth, ArcelorMittal
    b. Dan Graham, Northwest College of Construction

Passenger Cruise

1. American Cruise Lines
2. American Safari Cruises/InnerSea Discoveries
3. American Waterways, Inc. (Portland Spirit)
4. Grays Harbor Historical Seaport
5. Linblad Expeditions, Inc.

River User Data Sheet By: RON DEL ROSARIO Date: 2/22/2012

1. Company Name and/or Owner of Vessel and contact information

   a. Name of company: Bernert Barge Lines, Inc.

   b. Name of contact: Gerald Grossnickle (503-289-3046)

   c. Phone number (Office): 503-656-8288 d. (Cell): 503-816-1324

   e. Email: jerrygbw@aol.com or bblbob@aol.com

   f. Address: 170 Harding Blvd

   g. City: Oregon City

   h. State: OR i. Zip code: 97045

3a. Vessel Name: Mary B 3b. Vessel Type: Towing

3c. US Coast Guard Document Number: 516063

4a. Length Overall (LOA), feet: 61.4 4b. Beam (width), feet: 21.3

5. Draft (depth of hull below waterline, fully laden), feet: 8.0

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: 42

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 5 ft

8. Frequency of one-way passage underneath I-5 main channel (typical per month):

   Jan - 2 Feb - 3 Mar - 2 Apr - 2 May - 1 Jun - 1 Jul - 4 Aug - 3 Sep - 2 Oct-2 Nov - 2 Dec - 2

9. Frequency of one-way passage underneath I-5 main channel (other historic events): NA

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month): NA

    Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): NA

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy? No Plan

13. Other miscellaneous

River User Data Sheet By: RON DEL ROSARIO Date: 2/22/2012

1. Company Name and/or Owner of Vessel and contact information

   a. Name of company: Bernert Barge Lines, Inc.

   b. Name of contact: Gerald Grossnickle (503-289-3046)

   c. Phone number (Office): 503-656-8288 d. (Cell): 503-816-1324

   e. Email: jerrygbw@aol.com or bblbob@aol.com

   f. Address: 170 Harding Blvd

   g. City: Oregon City

   h. State: OR i. Zip code: 97045

3a. Vessel Name: Lori B 3b. Vessel Type: Towing

3c. US Coast Guard Document Number: 273466

4a. Length Overall (LOA), feet: 57.3 4b. Beam (width), feet: 31

5. Draft (depth of hull below waterline, fully laden), feet: 10.7

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: 52

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 5 ft

8. Frequency of one-way passage underneath I-5 main channel (typical per month):

   Jan - 6 Feb - 5 Mar - 4 Apr - 7 May - 7 Jun - 5 Jul - 6 Aug - 4 Sep - 5 Oct-4 Nov - 4 Dec - 5

9. Frequency of one-way passage underneath I-5 main channel (other historic events): NA

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month): NA

    Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): NA

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy? No Plan

13. Other miscellaneous

River User Data Sheet By: RON DEL ROSARIO Date: 2/22/2017

1. Company Name and/or Owner of Vessel and contact information

   a. Name of company: Bernert Barge Lines, Inc.

   b. Name of contact: Gerald Grossnickle (503-289-3046)

   c. Phone number (Office): 503-656-8288 d. (Cell): 503-816-1324

   e. Email: jerrygbw@aol.com or bblbob@aol.com

   f. Address: 170 Harding Blvd

   g. City: Oregon City

   h. State: OR i. Zip code: 97045

3a. Vessel Name: Kathryn B 3b. Vessel Type: Towing

3c. US Coast Guard Document Number: 568336

4a. Length Overall (LOA), feet: 99.2 4b. Beam (width), feet: 22.1

5. Draft (depth of hull below waterline, fully laden), feet: 7.9

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: 52

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 5 ft

8. Frequency of one-way passage underneath I-5 main channel (typical per month):

   Jan - 6 Feb - 6 Mar - 4 Apr - 5 May - 6 Jun - 8 Jul - 5 Aug - 6 Sep - 5 Oct-5 Nov - 4 Dec - 6

9. Frequency of one-way passage underneath I-5 main channel (other historic events): NA

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month): NA

    Jan 0 Feb 0 Mar___ Apr___ May___ Jun___ Jul___ Aug___ Sep___ Oct___ Nov___ Dec___

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): NA

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy? No Plan NO BIG VESSEL

13. Other miscellaneous

River User Data Sheet By: Mike Walker Date: 3/9/2012

1. Company Name and/or Owner of Vessel and contact information
   a. Name of company: Foss Maritime
   b. Name of contact: Mike Walker
   c. Phone number (Office): 503-978-6242 d. (Cell):
   e. Email: walter@foss.com
   f. Address: 9030 NW ST. Helens Rd
   g. City: Portland
   h. State: OR i. Zip code: 97231

3a. Vessel Name: P.J. Brix 3b. Vessel Type: Push Boat Twin Screw Tractor

3c. US Coast Guard Document Number: 649705

4a. Length Overall (LOA), feet: 87'1" 4b. Beam (width), feet: 32'9"

5. Draft (depth of hull below waterline, fully laden), feet: 13'8

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: 58'4"

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): —

8. Frequency of one-way passage underneath I-5 main channel (typical per month): Ø

   Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___

9. Frequency of one-way passage underneath I-5 main channel (other historic events): Ø

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month): Ø

    Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): Ø

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy? NO —

13. Other miscellaneous

River User Data Sheet By:_____ Date:_____

1. Company Name and/or Owner of Vessel and contact information

   a. Name of company: Foss Maritime

   b. Name of contact: _____

   c. Phone number (Office):_____ d. (Cell):_____

   e. Email:_____

   f. Address:_____

   g. City: _____

   h. State:_____ i. Zip code:_____

3a. Vessel Name: BETSY-L 3b. Vessel Type: Twin Screw CONVENTIONAL

3c. US Coast Guard Document Number: 518581

4a. Length Overall (LOA), feet: 72' 2" 4b. Beam (width), feet: 26'5"

5. Draft (depth of hull below waterline, fully laden), feet: 10.00'

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: 28'5"

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge):_____

8. Frequency of one-way passage underneath I-5 main channel (typical per month): 0

   Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___

9. Frequency of one-way passage underneath I-5 main channel (other historic events): 0

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month): 0

    Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): 0

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy? No —

13. Other miscellaneous

River User Data Sheet By:_____ Date:_____

1. Company Name and/or Owner of Vessel and contact information

   a. Name of company: Foss Maritime

   b. Name of contact: _____

   c. Phone number (Office):_____ d. (Cell):_____

   e. Email:_____

   f. Address:_____

   g. City: _____

   h. State:_____ i. Zip code:_____

3a. Vessel Name: DANIEL FOX 3b. Vessel Type: ASD TRACTOR HARBOR ASSIST

3c. US Coast Guard Document Number: 581354

4a. Length Overall (LOA), feet: 95'2" 4b. Beam (width), feet: 36'

5. Draft (depth of hull below waterline, fully laden), feet: 14'

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet:—

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge):—

8. Frequency of one-way passage underneath I-5 main channel (typical per month): 0

   Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___

9. Frequency of one-way passage underneath I-5 main channel (other historic events): 0

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month): 0

    Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): 0

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy? NO PLAN.

13. Other miscellaneous

River User Data Sheet By:_____ Date:_____

1. Company Name and/or Owner of Vessel and contact information

   a. Name of company: Foss Maritime

   b. Name of contact: _____

   c. Phone number (Office):_____ d. (Cell):_____

   e. Email:_____

   f. Address:_____

   g. City: _____

   h. State:_____ i. Zip code:_____

3a. Vessel Name: HAHL FOSS 3b. Vessel Type: Twin Screw CONVENTIONAL

3c. US Coast Guard Document Number: 529323

4a. Length Overall (LOA), feet: 260' 4b. Beam (width), feet: 27'9"

5. Draft (depth of hull below waterline, fully laden), feet: 12'5"

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: 42'

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge):_____

8. Frequency of one-way passage underneath I-5 main channel (typical per month): 0

   Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___

9. Frequency of one-way passage underneath I-5 main channel (other historic events): 0

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month): 0

    Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): 0

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy? NO —

13. Other miscellaneous

River User Data Sheet By:_____Date:_____

1. Company Name and/or Owner of Vessel and contact information

   a. Name of company: Foss Maritime

   b. Name of contact: _____

   c. Phone number (Office):_____ d. (Cell):_____

   e. Email:_____

   f. Address:_____

   g. City: _____

   h. State:_____ i. Zip code:_____

3a. Vessel Name: Pacific Escort 3b. Vessel Type: Voith Harbor Assist Vessel

3c. US Coast Guard Document Number: 650276

4a. Length Overall (LOA), feet: 100'2" 4b. Beam (width), feet: 36'5"

5. Draft (depth of hull below waterline, fully laden), feet: 16'

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: 47'8"

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge):_____

8. Frequency of one-way passage underneath I-5 main channel (typical per month): 0

   Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___

9. Frequency of one-way passage underneath I-5 main channel (other historic events): 0

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month): 0

    Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): 0

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy? NO –
13. Other miscellaneous

River User Data Sheet By:_____Date:_____

1. Company Name and/or Owner of Vessel and contact information

   a. Name of company: Foss Maritime

   b. Name of contact: _____

   c. Phone number (Office):_____ d. (Cell):_____

   e. Email:_____

   f. Address:_____

   g. City: _____

   h. State:_____ i. Zip code:_____

3a. Vessel Name: Pacific Explorer 3b. Vessel Type: ASD TRACTOR HARBOR ASSIST

3c. US Coast Guard Document Number: 1026012

4a. Length Overall (LOA), feet: 98'9" 4b. Beam (width), feet: 36'

5. Draft (depth of hull below waterline, fully laden), feet: 17'

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: 61'

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge):_____

8. Frequency of one-way passage underneath I-5 main channel (typical per month): 0

   Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___

9. Frequency of one-way passage underneath I-5 main channel (other historic events): 0

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month): 0

    Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): 0

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy? NO

13. Other miscellaneous

River User Data Sheet By: Scott Polzin Date: 2/24/12 10:00 am

1. Company Name and/or Owner of Vessel and contact information
   a. Name of company: Schnitzer Steel Industries, Inc.
   b. Name of contact: Jeff Swanson
   c. Phone number (Office): 503-286-6919 d. (Cell): 503-519-5868
   e. Email: jswanson@schn.com
   f. Address: PO Box 10047
   g. City: Portland
   h. State: OR i. Zip code: 97296

3a. Vessel Name: _____ 3b. Vessel Type: _____

3c. US Coast Guard Document Number: _____

4a. Length Overall (LOA), feet: _____ 4b. Beam (width), feet: _____

5. Draft (depth of hull below waterline, fully laden), feet: _____
6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: ____
7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): _____
8. Frequency of one-way passage underneath I-5 main channel (typical per month): _____

   Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___
9. Frequency of one-way passage underneath I-5 main channel (other historic events): 0
10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month): 0

    Jan 0 Feb 0 Mar 0 Apr 0 May 0 Jun 0 Jul 0 Aug 0 Sep 0 Oct 0 Nov 0 Dec 0
11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): 0

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy? No. Expect increases in traffic based on volume growth at Pasco Facility.

13. Other miscellaneous

Have looked at shipping auto-shredder by-product via inland waterway. Currently moves by truck and rail.

Scott Polzin 2/23/12

River User Data Sheet By: Ken Ritter Date: 2-23-12

1. Company Name and/or Owner of Vessel and contact information

a. Name of company: Shaver Transportation Co.

b. Name of contact: Ken Ritter

c. Phone number (Office): (503) 228-8850 d. (Cell): (971) 563-8886

e. Email: kritter@shavertransportation.com

f. Address: 4900 N.W. Front Ave.

g. City: Portland

h. State: OR. i. Zip code: 97210

3a. Vessel Name: 6 vessels 3b. Vessel Type: Comercial

3c. US Coast Guard Document Number: _____

4a. Length Overall (LOA), feet: 65' → 100' 4b. Beam (width), feet: 28' → 40'

5. Draft (depth of hull below waterline, fully laden), feet: 14'

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: 51'

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 1'

8. Frequency of one-way passage underneath I-5 main channel (typical per month): 20 average for all 6

Jan 20 Feb 20 Mar 20 Apr 20 May 20 Jun 20 Jul 20 Aug 20 Sep 20 Oct 20 Nov 20 Dec 20

9. Frequency of one-way passage underneath I-5 main channel (other historic events): 240

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

Jan 4 Feb 4 Mar 4 Apr 4 May 4 Jun 4 Jul 4 Aug 4 Sep 4 Oct 4 Nov 4 Dec 4

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): 48

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy?

13. Other miscellaneous

never will get taller
→ b/c of Snake River

→ will build more
but probably not
for going above I-5 bridge

→ replace
ceo's 70's boats but keep same #

→ choose to stay put instead put in at Vanc.

building grain barges - 2
and ship docking boat - 1

shipyard on NP Harbor

→ soon to have 4+1
that do not require lift

no ship docking above bridge.

only 10% of time
→ most of the time use high span

except when high fast water

have 10 now to that require lift.

River User Data Sheet By: Jennifer Rabby Date: Feb. 29, 2012 9am

1. Company Name and/or Owner of Vessel and contact information
   a. Name of company: Tidewater
   b. Name of contact: Geoff Doerfler
   c. Phone number (Office): 360.759.0301 d. (Cell): 503.679.0027
   e. Email: geoff.doerfler@tidewater.com
   f. Address: 16305 NW Old Lower River Road
   g. City: Vancouver
   h. State: WA i. Zip code: 98660

16 vessels total

3a. Vessel Name: _____ 3b. Vessel Type: _____

3c. US Coast Guard Document Number: _____

See spec sheets

4a. Length Overall (LOA), feet: _____ 4b. Beam (width), feet: _____

5. Draft (depth of hull below waterline, fully laden), feet: _____

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: ____ Tallest = 53'* Outlaw (See Fixed Height on spec sheets)

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 2 ft (Geoff will confirm)

8. Frequency of one-way passage underneath I-5 main channel (typical per month): _____
   Year round; max trips Aug-Oct during harvest season
   Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___ Aug___ Sep___ Oct___ Nov___ Dec___

See notes on spec sheets

9. Frequency of one-way passage underneath I-5 main channel (other historic events): ____

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month): None - they do not travel in N. Portland Harbor
    Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___ Aug___ Sep___ Oct___ Nov___ Dec___

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): _____ N/A

* Geoff will confirm height of tallest vessel
Also, masts extend beyond the fixed height but are easily lowered

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy?

13. Other miscellaneous

- Dead weight tonnage – see "gross tons" on spec sheets
- Future plans:
  - If they build another vessel, it would be similar in size to the Defiance or the Sundial
  - No plans for larger equipment
  - Passage could become more frequent as business opportunities arise
  - They are looking to grow their business

River User Data Sheet By: MEGAN NELSON Date: 2/29 4pm

1. Company Name and/or Owner of Vessel and contact information

SAME FOR ALL

a. Name of company: PORTLAND YACHT CLUB

b. Name of contact: GARY CAMPBELL

c. Phone number (Office): 503-285-1922 d. (Cell): _____

e. Email: manager@portlandyc.com

f. Address: 1241 N Marine Dr.

g. City: PORTLAND

h. State: OR i. Zip code: 97211

3a. Vessel Name: (SEE ATTACHED LIST) 3b. Vessel Type: _____

3c. US Coast Guard Document Number: _____

4a. Length Overall (LOA), feet: _____ 4b. Beam (width), feet: _____

5. Draft (depth of hull below waterline, fully laden), feet: _____

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: ____

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): _____

8. Frequency of one-way passage underneath I-5 main channel (typical per month): _____

Open May 5 → Fall with down to Source

Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___ Aug___ Sep___ Oct___ Nov___ Dec___

9. Frequency of one-way passage underneath I-5 main channel (other historic events): ____ ≈ 15-20 Avg. Members

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___ Aug___ Sep___ Oct___ Nov___ Dec___

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): _____

Ø

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy?

13. Other miscellaneous

No Plans to expand.

River User Data Sheet By: M. NELSON Date: 2/28 9AM

1. Company Name and/or Owner of Vessel and contact information

Applies to All Vessels

a. Name of company: ROSE CITY YACHT CLUB

b. Name of contact: BILL KRAMER

c. Phone number (Office): 503-290-6781 d. (Cell): _____

e. Email: bkramer6@yahoo.com

f. Address: 3737 NE Marine Dr.

g. City: Portland

h. State: OR i. Zip code: 97211

3a. Vessel Name: ~~Modified~~ Crystal Swan 3b. Vessel Type: Modified Standfast 40 Sailboat

3c. US Coast Guard Document Number: _____

4a. Length Overall (LOA), feet: 40' 4b. Beam (width), feet: ~12'-14'

5. Draft (depth of hull below waterline, fully laden), feet: 6'

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: 63'

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): ~5'

Applies to all vessels (for all)

8. Frequency of one-way passage underneath I-5 main channel (typical per month): 3-4 Round trip/season

Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___ Aug___ Sep___ Oct___ Nov___ Dec___

9. Frequency of one-way passage underneath I-5 main channel (other historic events): ____

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month): ∅

Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___ Aug___ Sep___ Oct___ Nov___ Dec___

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): _____

Passion Yachts - Sailboat Broker - Buying trends

GOOD CONTACT FOR MARKET

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy? NO PLANS TO EXPAND.

13. Other miscellaneous

1/3 OF CLUB ~~HAS AN~~
AIR DRAFT 50'-55'
& 35'-40' LENGTH.

Bill Kramer TRCYC
Cell#: 503-290-6781
3737 NE Marine Drive

River User Data Sheet By:_____ Date:_____

1. Company Name and/or Owner of Vessel and contact information
   a. Name of company: Rose City Yacht Club
   b. Name of contact: _____
   c. Phone number (Office):_____ d. (Cell):_____
   e. Email:_____
   f. Address:_____
   g. City: _____
   h. State:_____ i. Zip code:_____

3a. Vessel Name: Draco 3b. Vessel Type: Sailboat

3c. US Coast Guard Document Number: _____

4a. Length Overall (LOA), feet: 38' 4b. Beam (width), feet: 12'-13'

5. Draft (depth of hull below waterline, fully laden), feet: 6.5'
6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: 60'
7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): ~5'
8. Frequency of one-way passage underneath I-5 main channel (typical per month): _____

   Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___
9. Frequency of one-way passage underneath I-5 main channel (other historic events): ____
10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

    Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___
11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events):_____

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy?
13. Other miscellaneous

River User Data Sheet By:_____ Date:_____

1. Company Name and/or Owner of Vessel and contact information
   a. Name of company: Rose City Yacht Club
   b. Name of contact: _____
   c. Phone number (Office):_____ d. (Cell):_____
   e. Email:_____
   f. Address:_____
   g. City: _____
   h. State:_____ i. Zip code:_____

3a. Vessel Name: Morgan LaFay 3b. Vessel Type: Golf Star 50'

3c. US Coast Guard Document Number: _____

4a. Length Overall (LOA), feet: 50' 4b. Beam (width), feet:_____

5. Draft (depth of hull below waterline, fully laden), feet: 6.5'
6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: 58'
7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge):_____
8. Frequency of one-way passage underneath I-5 main channel (typical per month): _____

   Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___ Aug___ Sep___ Oct___ Nov___ Dec___
9. Frequency of one-way passage underneath I-5 main channel (other historic events): ____
10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

    Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___ Aug___ Sep___ Oct___ Nov___ Dec___
11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events):_____

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy?

13. Other miscellaneous

River User Data Sheet By:_____ Date:_____

1. Company Name and/or Owner of Vessel and contact information
   a. Name of company: Rose City Yacht Club
   b. Name of contact: _____
   c. Phone number (Office):_____ d. (Cell):_____
   e. Email:_____
   f. Address:_____
   g. City: _____
   h. State:_____ i. Zip code:_____

3a. Vessel Name: Down Wind Drift 3b. Vessel Type: Catalina 42

3c. US Coast Guard Document Number: _____

4a. Length Overall (LOA), feet: 42' 4b. Beam (width), feet: 8'

5. Draft (depth of hull below waterline, fully laden), feet: ~ 6.5'
6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: 59'
7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge):_____
8. Frequency of one-way passage underneath I-5 main channel (typical per month): _____

   Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___
9. Frequency of one-way passage underneath I-5 main channel (other historic events): ____
10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

    Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___
11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events):_____

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy?

13. Other miscellaneous

Columbia River CROSSING

River User Data Sheet

By: J.W. McClure Date: 2-23-2012

1. Company name and/or owner of vessel and contact information

Name of company: McCLURE LOVING TRUST ATD 3 27 1991

Name of contact: JOEL W. McCLURE

Phone number (Office): 541 343-0566 (Cell): 541 359-4043

Email: joel_m@qfn.org

Address: 2570 CRESTA DR RUFA

City: EUGENE State: OR Zip code: 97403

3a. Vessel name: NANCY RILEY **3b. Vessel type:** S/V

3c. U.S. Coast Guard Document Number: 1209708

4a. Length Overall (LOA), **feet:** 49' 11" **4b. Beam** (width), **feet:** 14' 9"

5. Draft (depth of hull below waterline, fully laden), **feet:** 7

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), **feet:** 69

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 1 ft

8. Frequency of one-way passage underneath I-5 main channel (typical per month):

Jan 0 Feb 0 Mar 0 Apr 0 May 0 Jun 1 Jul 1 Aug 1 Sep 1 Oct 0 Nov 0 Dec 0

9. Frequency of one-way passage underneath I-5 main channel (other historic events): 4 per yr.

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

Jan 0 Feb 0 Mar 0 Apr 0 May 0 Jun 0 Jul 0 Aug 0 Sep 0 Oct 0 Nov 0 Dec 0

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): 0

12. Do you have a business plan (e.g. 10 or 20 year plan)? NO

What does it say related to vessels traveling under the I-5 Bridge or into North Portland Harbor (Oregon Slough)?

May we have a copy?

13. Other (additional sheets may be attached.)

RECEIVED
FEB 23 2012
Columbia River Crossing

Columbia River CROSSING

River User Data Sheet

By: _____ Date: _____

RECEIVED
FEB 23 2012

1. Company name and/or owner of vessel and contact information

Name of company: Columbia River Crossing

Name of contact: Scott Campbell

Phone number (Office): _____ (Cell): _____

Email: campbellscott@comcast.net

Address: 130 18 SE 24TH Circle

City: Vancouver State: WA Zip code: 98683

3a. Vessel name: RIVA **3b. Vessel type:** Sailboat

3c. U.S. Coast Guard Document Number: _____

4a. Length Overall (LOA), **feet:** 46 **4b. Beam** (width), **feet:** 13.5

5. Draft (depth of hull below waterline, fully laden), **feet:** 7.5

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), **feet:** 64.5 ft

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 2 ft

8. Frequency of one-way passage underneath I-5 main channel (typical per month):

Jan ____ Feb ____ Mar____ Apr 1 May____ Jun____ Jul____ Aug____ Sep 1 Oct____ Nov____ Dec____

9. Frequency of one-way passage underneath I-5 main channel (other historic events): _____

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month): 6

Jan ____ Feb ____ Mar____ Apr____ May____ Jun____ Jul____ Aug____ Sep____ Oct____ Nov____ Dec____

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): _____

12. Do you have a business plan (e.g. 10 or 20 year plan)? _____

What does it say related to vessels traveling under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? _____

May we have a copy? _____

13. Other (additional sheets may be attached.) _____

As is hopefully understood by CRC, 65 feet is the national standard for bridge height minimums, consistent with the intercoastal waterway on the east coast. Sailboats normally are designed with this in mind. I'd be happy (Danger) to discuss 360 600 1500

Columbia River CROSSING

River User Data Sheet

By: _____ Date: 2/24/12

1. **Company name and/or owner of vessel and contact information**

Name of company: John Kohl

Name of contact: _____

Phone number (Offical): _____ (Cell): 503-730-1158

Email: RKohl5@comcast.Net

Address: 620 12th St

City: Oregon City State: OR Zip code: 97045

3a. **Vessel name:** Stella Polare 3b. **Vessel type:** Sail

3c. **U.S. Coast Guard Document Number:** 968765

4a. **Length Overall** (LOA), **feet:** 46' 4b. **Beam** (width), **feet:** 14'

5. **Draft** (depth of hull below waterline, fully laden), **feet:** 6'

6. **Air Draft** (Height of the highest fixed point of the vessel above the waterline, unladen), **feet:** 67'

7. **Air gap for vessel** (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 68'

8. **Frequency of one-way passage underneath I-5 main channel** (typical per month):

Jan ___ Feb ___ Mar ___ Apr ___ May 1 Jun 1 Jul 2 Aug 2 Sep 1 Oct ___ Nov ___ Dec ___

9. **Frequency of one-way passage underneath I-5 main channel** (other historic events): _____

10. **Frequency of one-way passage through North Portland Harbor** (Oregon Slough) (typical per month):

Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___

11. **Frequency of one-way passage through North Portland Harbor** (Oregon Slough) (other historic events): _____

12. **Do you have a business plan** (e.g. 10 or 20 year plan)? _____

What does it say related to vessels traveling under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? _____

May we have a copy? _____

13. **Other** (additional sheets may be attached.) _____

Columbia River CROSSING

River User Data Sheet

By: Phone Call Lynn Rust Date: 2-24-12

1. Company name and/or owner of vessel and contact information

Name of company: N/A

Name of contact: Kim Schmutzler

Phone number (Office): 541.294.1856 (Cell): _____

Email: _____

Address: 64118 Seven Devils Rd

City: Charelston State: OR Zip code: 97420-6624

3a. Vessel name: Magic Pearl **3b. Vessel type:** sailboat - use as research vessel

3c. U.S. Coast Guard Document Number: _____

4a. Length Overall (LOA), **feet:** 60 **4b. Beam** (width), **feet:** 16

5. Draft (depth of hull below waterline, fully laden), **feet:** 6.8

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), **feet:** 56

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): N/A see below

8. Frequency of one-way passage underneath I-5 main channel (typical per month): Sporadic

Jan ____ **Feb** ____ **Mar**____ **Apr**____ **May**____ **Jun**____ **Jul**____ **Aug**____ **Sep**____ **Oct**____ **Nov**____ **Dec**____

9. Frequency of one-way passage underneath I-5 main channel (other historic events): not frequent

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

Jan ____ **Feb** ____ **Mar**____ **Apr**____ **May**____ **Jun**____ **Jul**____ **Aug**____ **Sep**____ **Oct**____ **Nov**____ **Dec**____

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): Don't use

12. Do you have a business plan (e.g. 10 or 20 year plan)? N/A - private boat - pleasure

What does it say related to vessels traveling under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? N/A

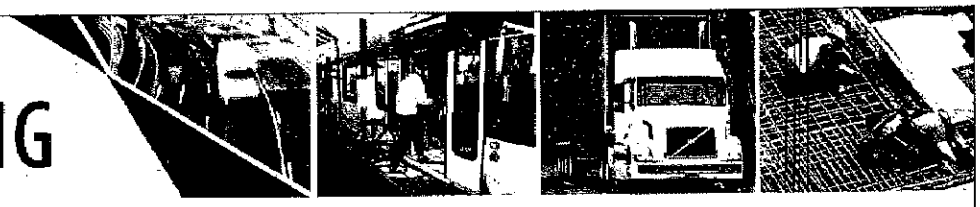
May we have a copy? N/A

13. Other (additional sheets may be attached.) Tabernacle lays down for 9½' need-vertical clearance. It is a europeen boat. The bridges dont move in Europe, unlike US.

Response to Oregon side mailout. - sailboat >45'

Lynn Rust

Columbia River CROSSING



River User Data Sheet

By: _____ Date: _____

1. Company name and/or owner of vessel and contact information

Name of company: Michael Tredoux (T2 Construction Inc)

Name of contact: Mike

Phone number (Office): 505-286-1956 (Cell): 505-379-5847

Email: T2MOUNTAIN@MSN.COM

Address: PO BOX 2721

City: Edgewood State: NM Zip code: 87015

3a. Vessel name: Southern Cross **3b. Vessel type:** motor yacht

3c. U.S. Coast Guard Document Number: 587248

4a. Length Overall (LOA), **feet:** 53 **4b. Beam** (width), **feet:** 15 8

5. Draft (depth of hull below waterline, fully laden), **feet:** 4 5'

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), **feet:** 24 2

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 4'

8. Frequency of one-way passage underneath I-5 main channel (typical per month):

Jan ___ Feb ___ Mar ___ Apr 2 May 6 Jun 12 Jul 12 Aug 12 Sep 6 Oct 4 Nov ___ Dec ___

9. Frequency of one-way passage underneath I-5 main channel (other historic events): _____

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

Jan ___ Feb ___ Mar ___ Apr 1 May 2 Jun 4 Jul 4 Aug 4 Sep 2 Oct 1 Nov ___ Dec ___

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): 5-6

12. Do you have a business plan (e.g. 10 or 20 year plan)? NO

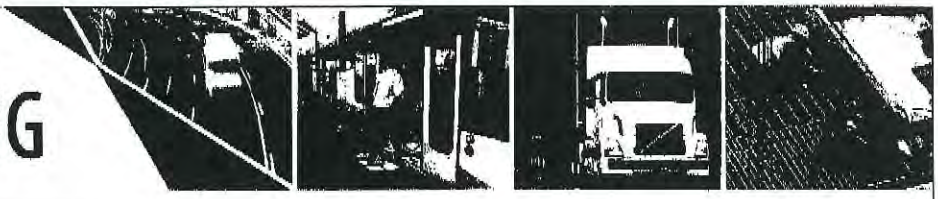
What does it say related to vessels traveling under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? ✓

May we have a copy? ✓

13. Other (additional sheets may be attached.) _____

Feb 26 12 01:04p

Columbia River CROSSING



River User Data Sheet

By: Diane Robbins-Lile Date: 2/28/12

1. Company name and/or owner of vessel and contact information

Name of company: Diane Robbins-Lile

Name of contact: "

Phone number (Office): 503 622 3494 (Cell): _____

Email: eyeskidoc@aol.com

Address: PO Box 938

City: Welches State: OR Zip code: 97067

3a. Vessel name: Benacia **3b. Vessel type:** SAIL

3c. U.S. Coast Guard Document Number: 1217521

4a. Length Overall (LOA), **feet:** 37.66 **4b. Beam** (width), **feet:** 12-86

5. Draft (depth of hull below waterline, fully laden), **feet:** 6.24

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), **feet:** 50

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 5

8. Frequency of one-way passage underneath I-5 main channel (typical per month):

Jan ___ Feb ___ Mar ___ Apr 2 May 2 Jun 2 Jul 2 Aug 2 Sep 2 Oct 2 Nov ___ Dec ___

9. Frequency of one-way passage underneath I-5 main channel (other historic events): _____

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): _____

12. Do you have a business plan (e.g. 10 or 20 year plan)? NO

What does it say related to vessels traveling under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? _____

May we have a copy? _____

13. Other (additional sheets may be attached.) _____

RECEIVED
FEB 28 2012
Columbia River Crossing

Columbia River CROSSING

River User Data Sheet

By: Greg Luce Date: 2/28/12

1. Company name and/or owner of vessel and contact information

Name of company: Greg Luce

Name of contact:

Phone number (Office): 503 622 3494 (Cell): 503 348 7052

Email: eyeskidoc@aol.com

Address: PO Box 938

City: Welches State: OR Zip code: 97067

3a. Vessel name: Mistral **3b. Vessel type:** SAIL

3c. U.S. Coast Guard Document Number: 1206699

4a. Length Overall (LOA), **feet:** 49.54 **4b. Beam** (width), **feet:** 14.73

5. Draft (depth of hull below waterline, fully laden), **feet:** 6.89

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), **feet:** 65

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 5

8. Frequency of one-way passage underneath I-5 main channel (typical per month):

Jan ___ Feb ___ Mar ___ Apr 2 May 2 Jun 2 Jul 2 Aug 2 Sep 2 Oct 2 Nov ___ Dec ___

9. Frequency of one-way passage underneath I-5 main channel (other historic events):

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events):

12. Do you have a business plan (e.g. 10 or 20 year plan)? NO

What does it say related to vessels traveling under the I-5 Bridge or into North Portland Harbor (Oregon Slough)?

May we have a copy?

13. Other (additional sheets may be attached.)

RECEIVED
FEB 28 2012
Columbia River Crossing

Columbia River CROSSING

River User Data Sheet

By: _____ Date: 2-28-12

RECEIVED
FEB 29 2012
Columbia River Crossing

1. Company name and/or owner of vessel and contact information

Name of company: Hardiman Family Trust

Name of contact: John B. Hardiman

Phone number (Office): 503-652-1117 (Cell): 503-704-9212

Email: Johncarol2@comcast.net

Address: 810 SE River Forest Ct

City: Oak Grove State: OR Zip code: 97267

3a. Vessel name: Autumn Wind **3b. Vessel type:** Sail

3c. U.S. Coast Guard Document Number: _____

4a. Length Overall (LOA), **feet:** 45 **4b. Beam** (width), **feet:** 14

5. Draft (depth of hull below waterline, fully laden), **feet:** 6'8"

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), **feet:** 72'

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 5'

8. Frequency of one-way passage underneath I-5 main channel (typical per month):

Jan ___ Feb ___ Mar ___ Apr ___ May 2 Jun ___ Jul ___ Aug 1 Sep 1 Oct ___ Nov ___ Dec ___

9. Frequency of one-way passage underneath I-5 main channel (other historic events): _____

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): _____

12. Do you have a business plan (e.g. 10 or 20 year plan)? No

What does it say related to vessels traveling under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? _____

May we have a copy? _____

13. Other (additional sheets may be attached.) I Think a height + clearance Similar to The 205 Bridge would be Ideal

Columbia River CROSSING

River User Data Sheet

By: Michael House Date: 2-29-12

1. Company name and/or owner of vessel and contact information

Name of company: Private vessel

Name of contact: Michael D House

Phone number (Office): _____ (Cell): 503-310-3189

Email: mycows@comcast.net

Address: 13920 SW Otter Ln.

City: Beaverton State: OR Zip code: 97008

3a. Vessel name: Tamaroa **3b. Vessel type:** motor boat

3c. U.S. Coast Guard Document Number: 1077150

4a. Length Overall (LOA)**, feet:** 55 **4b. Beam** (width)**, feet:** 15

5. Draft (depth of hull below waterline, fully laden)**, feet:** 5

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen)**, feet:** 25

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 30

8. Frequency of one-way passage underneath I-5 main channel (typical per month):

Jan 1 **Feb** 1 **Mar** 1 **Apr** 4 **May** 4 **Jun** 6 **Jul** 2 **Aug** 1 **Sep** 2 **Oct** 2 **Nov** 1 **Dec** 1

9. Frequency of one-way passage underneath I-5 main channel (other historic events): _____

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

Jan 1 **Feb** 1 **Mar** 1 **Apr** 4 **May** 4 **Jun** 6 **Jul** 2 **Aug** 1 **Sep** 2 **Oct** 2 **Nov** 1 **Dec** 1

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): _____

12. Do you have a business plan (e.g. 10 or 20 year plan)? _____

What does it say related to vessels traveling under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? _____

May we have a copy? _____

13. Other (additional sheets may be attached.) _____

Columbia River CROSSING

River User Data Sheet

By: Angel Khalsa Date: 3/2/12

1. Company name and/or owner of vessel and contact information

Name of company: _____

Name of contact: Angel Khalsa

Phone number (Office): _____ (Cell): _____

Email: cortezangel@earthlink.net

Address: 7327 SW Barnes Rd #106

City: Portland State: OR Zip code: 97225

3a. Vessel name: Victory **3b. Vessel type:** NW Trawler Cruiser

3c. U.S. Coast Guard Document Number: 1111340 HQ2000843B898

4a. Length Overall (LOA)**, feet:** 52ft **4b. Beam** (width)**, feet:** 15ft

5. Draft (depth of hull below waterline, fully laden)**, feet:** 8ft

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen)**, feet:** 20ft.

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 1ft

8. Frequency of one-way passage underneath I-5 main channel (typical per month)**:**

Jan ____ **Feb** ____ **Mar**____ **Apr**____ **May**____ **Jun**____ **Jul**____ **Aug**____ **Sep**____ **Oct**____ **Nov**____ **Dec**____

9. Frequency of one-way passage underneath I-5 main channel (other historic events)**:** _____

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month)**:**

Jan ____ **Feb** ____ **Mar**____ **Apr**____ **May**____ **Jun**____ **Jul**____ **Aug**____ **Sep**____ **Oct**____ **Nov**____ **Dec**____

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events)**:** _____

12. Do you have a business plan (e.g. 10 or 20 year plan)**?** _____

What does it say related to vessels traveling under the I-5 Bridge or into North Portland Harbor (Oregon Slough)**?** _____

May we have a copy? _____

13. Other (additional sheets may be attached.) _____

Columbia River CROSSING

River User Data Sheet

By: J. HOLDEN Date: 2-MAR-12

1. **Company name and/or owner of vessel and contact information**

Name of company: WIND DANCING LLC

Name of contact: JOHN HOLDEN - CAPT.

Phone number (Office): _____ (Cell): 360-901-2816

Email: JRI HOLDEN @ ACL.COM

Address: 130 W. FIRST AVE

City: ALBANY, ~~OR~~ State: OR Zip code: 97321

3a. Vessel name: WIND DANCING **3b. Vessel type:** SAIL

3c. U.S. Coast Guard Document Number: 1222834

4a. Length Overall (LOA), **feet:** 47 **4b. Beam** (width), **feet:** 13.4

5. **Draft** (depth of hull below waterline, fully laden), **feet:** 9.6

6. **Air Draft** (Height of the highest fixed point of the vessel above the waterline, unladen), **feet:** 66

7. **Air gap for vessel** (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 70

8. **Frequency of one-way passage underneath I-5 main channel** (typical per month):

Jan Ø Feb Ø Mar Ø Apr Ø May Ø Jun 2 Jul 2 Aug 4 Sep 2 Oct Ø Nov Ø Dec Ø

9. **Frequency of one-way passage underneath I-5 main channel** (other historic events): _____

10. **Frequency of one-way passage through North Portland Harbor** (Oregon Slough) (typical per month):

Jan Ø Feb Ø Mar Ø Apr Ø May Ø Jun Ø Jul Ø Aug Ø Sep Ø Oct Ø Nov Ø Dec ____

11. **Frequency of one-way passage through North Portland Harbor** (Oregon Slough) (other historic events): _____

12. **Do you have a business plan** (e.g. 10 or 20 year plan)? NO

What does it say related to vessels traveling under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? _____

May we have a copy? _____

13. **Other** (additional sheets may be attached.) _____

RECEIVED
MAR 05 2012
Columbia River Crossing

FAX TO: 737-0294

Columbia River CROSSING

River User Data Sheet

By: Jon K. Clemens Date: 3/8/12

1. Company name and/or owner of vessel and contact information

Name of company: Jon K. Clemens

Name of contact:

Phone number (Office): 360-834-9059 (Cell): 360-798-0328

Email: clemens@sharplabs.com

Address: ~~Car~~ 2437 NW Lacamas Dr.

City: Camas State: WA Zip code: 98607

3a. Vessel name: Moonstruck **3b. Vessel type:** Sailboat

3c. U.S. Coast Guard Document Number: 600270

4a. Length Overall (LOA), **feet:** 45 **4b. Beam** (width), **feet:** 12.9

5. Draft (depth of hull below waterline, fully laden), **feet:** 6.3

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), **feet:** 63

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 5

8. Frequency of one-way passage underneath I-5 main channel (typical per month):

Jan 0 Feb 0 Mar 0 Apr 1 May 0 Jun 0 Jul 0 Aug 0 Sep 1 Oct 0 Nov 0 Dec 0

9. Frequency of one-way passage underneath I-5 main channel (other historic events): 2

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

Jan ____ Feb ____ Mar____ Apr____ May____ Jun____ Jul____ Aug____ Sep____ Oct____ Nov____ Dec____

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): 0

12. Do you have a business plan (e.g. 10 or 20 year plan)? No

What does it say related to vessels traveling under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? —

May we have a copy? —

13. Other (additional sheets may be attached.)

March 10, 2012

Columbia River Crossing
700 Washington St.
Suite 300
Vancouver, WA 98660

Attn.: Mike Niemi

Mr. Niemi,

I received a letter and River User Data Sheet, unfortunately the information you have regarding my "vessel" is incorrect. I own a 20-foot **Northriver sport fishing** boat; it is for personal use only and is **not a vessel over 45 feet in length**. I have never needed or requested a "bridge opening"; this information is incorrect as well.

Feel free to contact me by phone if you have further questions concerning my use of the Columbia River with regard to the boat I currently own, I would be happy to answer them. I am returning your letter and data sheet for your files.

Sincerely,

Kerry Marshall

Kerry Marshall
2701 SE 370th Ave.
Washougal, WA 98671
360-835-7698

Columbia River CROSSING

River User Data Sheet

By: _____ Date: _____

1. **Company name and/or owner of vessel and contact information**

Name of company: Todd Hilbelink

Name of contact: _____

Phone number (Office): 503-235-5509 (Cell): 503-780-2789

Email: Hilbelink1@yahoo.com

Address: 1579 N Skidmore St

City: Portland State: OR Zip code: 97217

3a. Vessel name: Wakadu **3b. Vessel type:** Sail

3c. U.S. Coast Guard Document Number: 1219395

4a. Length Overall (LOA), **feet:** 49.5 **4b. Beam** (width), **feet:** 14.8

5. Draft (depth of hull below waterline, fully laden), **feet:** 7

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), **feet:** 70

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 10 Feet

8. Frequency of one-way passage underneath I-5 main channel (typical per month):

Jan ____ **Feb** ____ **Mar**____ **Apr**____ **May** 2 **Jun** 2 **Jul** 2 **Aug** 2 **Sep** 2 **Oct**____ **Nov**____ **Dec**____

9. Frequency of one-way passage underneath I-5 main channel (other historic events): _____

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

Jan ____ **Feb** ____ **Mar**____ **Apr**____ **May**____ **Jun**____ **Jul**____ **Aug**____ **Sep**____ **Oct**____ **Nov**____ **Dec**____

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): _____

12. Do you have a business plan (e.g. 10 or 20 year plan)? _____

What does it say related to vessels traveling under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? _____

May we have a copy? _____

13. Other (additional sheets may be attached.) _____

River User Data Sheet By:_____ Date: 3-8-12

1. Company Name and/or Owner of Vessel and contact information
   a. Name of company: ADVANCED AMERICAN CONSTRUCTION
   b. Name of contact: Mike Johns
   c. Phone number (Office): 503-445-9000 d. (Cell): 503-720-1108
   e. Email: MIKEJ@CAMAAC.com
   f. Address: P.O. Box 83599
   g. City: PORTLAND OR
   h. State: ORE i. Zip code: 97283

3a. Vessel Name: LINDE MARIE 3b. Vessel Type: TUG

3c. US Coast Guard Document Number: 265180

4a. Length Overall (LOA), feet: 58.4 4b. Beam (width), feet: 16.5

5. Draft (depth of hull below waterline, fully laden), feet: 5.5

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: 35'

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 40 NOTE ITEM 13"

8. Frequency of one-way passage underneath I-5 main channel (typical per month): 1-2

   Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___ Aug___ Sep___ Oct___ Nov___ Dec___

9. Frequency of one-way passage underneath I-5 main channel (other historic events):____

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

    Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___ Aug___ Sep___ Oct___ Nov___ Dec___

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): 0 5

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy? N/A

13. Other miscellaneous

AAC IS A MARINE CONSTRUCTION CO. HEIGHT OF VESSEL IS MAINLY DETERMINED BY A TYPICAL CRANE BARGE BEING PUSHED.

HEIGHT OF SPUDS 90' ABOVE W/L "MIN" (AIR GAP 100')

"MIN" CRANE GANTRY HEIGHT 65'

"AT THIS TIME" ABOVE W/L (AIR GAP 75')

AAC PUSHES AAC OWNED EQUIPMENT ONLY (TYPICALLY) SHORT HAUL OR JOB TUGGING. LONG HAUL WE CONTRACT OUT

Mike John

Ask for Tonnage? ✓ HAS ^ FOR TUGS ONLY

5 TOTAL BARGES/VESSEL

River User Data Sheet By:_____ Date:_____

1. Company Name and/or Owner of Vessel and contact information

3 cranes 2 Tugs

a. Name of company: Bergerson Construction, Inc.

b. Name of contact: Gregory Morrill

c. Phone number (Office): 503-325-7130 d. (Cell): 503-440-7342

e. Email: gmorrill@bergerson-const.com

f. Address: 55 Portway (P.O. Box 387)

g. City: Astoria

h. State: OR i. Zip code: 97103

3a. Vessel Name: Betsy Ross 3b. Vessel Type: Crane Barge

3c. US Coast Guard Document Number: N/A

4a. Length Overall (LOA), feet: 120' 4b. Beam (width), feet: 63'

5. Draft (depth of hull below waterline, fully laden), feet: 5'

Clarify ↓

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: 40-150'

Typ. lower for travel Typ. to 70'

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 10'

8. Frequency of one-way passage underneath I-5 main channel (typical per month): Varies

Jan___ Feb___ Mar___ Apr___ May___ Jun___ Jul___ Aug___ Sep___ Oct___ Nov___ Dec___

PHONE CONV. 2/29 w/ G. MORRILL

9. Frequency of one-way passage underneath I-5 main channel (other historic events): Varies

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month): Varies

Jan___ Feb___ Mar___ Apr___ May___ Jun___ Jul___ Aug___ Sep___ Oct___ Nov___ Dec___

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): Varies

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy? Yes. It does not address vessel traffic in this specific area.

13. Other miscellaneous

As a construction company predicting vessel traffic in a specific area is quite difficult as it is directly related to which contracts we are awarded.

River User Data Sheet By:_____ Date:_____

1. Company Name and/or Owner of Vessel and contact information
   a. Name of company: Bergerson Construction, Inc.
   b. Name of contact: Gregory Morrill
   c. Phone number (Office): 503-325-7130 d. (Cell): 503-440-7342
   e. Email: gmorrill@bergerson-const.com
   f. Address: 55 Portway (P.O. Box 387)
   g. City: Astoria
   h. State: OR i. Zip code: 97103

3a. Vessel Name: Carr Barge 3b. Vessel Type: Crane Barge

3c. US Coast Guard Document Number: N/A

4a. Length Overall (LOA), feet: 104' 4b. Beam (width), feet: 40'

5. Draft (depth of hull below waterline, fully laden), feet: 6'

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: ~~40~~ ~~120'~~ 70' 2/29

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 10'

8. Frequency of one-way passage underneath I-5 main channel (typical per month): Varies

   Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___

9. Frequency of one-way passage underneath I-5 main channel (other historic events): Varies

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month): Varies

    Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): Varies

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy? Yes. It does not address vessel traffic in this specific area.

13. Other miscellaneous

As a construction company predicting vessel traffic in a specific area is quite difficult as it is directly related to which contracts we are awarded.

TONNAGE = 40 TONS

River User Data Sheet By:_____ Date:_____

1. Company Name and/or Owner of Vessel and contact information
   a. Name of company: Bergerson Construction, Inc.
   b. Name of contact: Gregory Morrill
   c. Phone number (Office): 503-325-7130 d. (Cell): 503-440-7342
   e. Email: gmorrill@bergerson-const.com
   f. Address: 55 Portway (P.O. Box 387)
   g. City: Astoria
   h. State: OR i. Zip code: 97103

3a. Vessel Name: Olaf J 3b. Vessel Type: Tug

3c. US Coast Guard Document Number: N/A

4a. Length Overall (LOA), feet: 48.6' 4b. Beam (width), feet: 16.1'

5. Draft (depth of hull below waterline, fully laden), feet: 5.7'

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: 35'

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 10'

8. Frequency of one-way passage underneath I-5 main channel (typical per month): Varies

   Jan___ Feb___ Mar___ Apr___ May___ Jun___ Jul___ Aug___ Sep___ Oct___ Nov___ Dec___

9. Frequency of one-way passage underneath I-5 main channel (other historic events): Varies

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month): Varies

    Jan___ Feb___ Mar___ Apr___ May___ Jun___ Jul___ Aug___ Sep___ Oct___ Nov___ Dec___

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): Varies

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy? Yes. It does not address vessel traffic in this specific area.

13. Other miscellaneous

As a construction company predicting vessel traffic in a specific area is quite difficult as it is directly related to which contracts we are awarded.

TONNAGE = 38 TONS

River User Data Sheet By:_____ Date:_____

1. Company Name and/or Owner of Vessel and contact information
   a. Name of company: Bergerson Construction, Inc.
   b. Name of contact: Gregory Morrill
   c. Phone number (Office): 503-325-7130 d. (Cell): 503-440-7342
   e. Email: gmorrill@bergerson-const.com
   f. Address: 55 Portway (P.O. Box 387)
   g. City: Astoria
   h. State: OR i. Zip code: 97103

3a. Vessel Name: Darryl B. 3b. Vessel Type: Tug

3c. US Coast Guard Document Number: N/A

4a. Length Overall (LOA), feet: 52' 4b. Beam (width), feet: 14.1'

5. Draft (depth of hull below waterline, fully laden), feet: 5.6'

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: 20'

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 10'

8. Frequency of one-way passage underneath I-5 main channel (typical per month): Varies

   Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___

9. Frequency of one-way passage underneath I-5 main channel (other historic events): Varies

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month): Varies

    Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): Varies

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy? Yes. It does not address vessel traffic in this specific area.

13. Other miscellaneous

As a construction company predicting vessel traffic in a specific area is quite difficult as it is directly related to which contracts we are awarded.

River User Data Sheet By:_____ Date:_____

1. Company Name and/or Owner of Vessel and contact information
   a. Name of company: Bergerson Construction, Inc.
   b. Name of contact: Gregory Morrill
   c. Phone number (Office): 503-325-7130 d. (Cell): 503-440-7342
   e. Email: gmorrill@bergerson-const.com
   f. Address: 55 Portway (P.O. Box 387)
   g. City: Astoria
   h. State: OR i. Zip code: 97103

3a. Vessel Name: Sectional Barge 3b. Vessel Type: Crane Barge

3c. US Coast Guard Document Number: N/A

4a. Length Overall (LOA), feet: 100' (Varies) 4b. Beam (width), feet: 60' (Varies)

5. Draft (depth of hull below waterline, fully laden), feet: 3'

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: ~~40~~ ~~150'~~ 70'

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 10' 2/29

8. Frequency of one-way passage underneath I-5 main channel (typical per month): Varies

   Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___

9. Frequency of one-way passage underneath I-5 main channel (other historic events): Varies

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month): Varies

    Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): Varies

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy? Yes. It does not address vessel traffic in this specific area.

13. Other miscellaneous

As a construction company predicting vessel traffic in a specific area is quite difficult as it is directly related to which contracts we are awarded.

River User Data Sheet By: TONY CARNERA Date: 3-7-2012

1. Company Name and/or Owner of Vessel and contact information
   a. Name of company: CALPORTLAND CO.
   b. Name of contact: TONY CARNERA
   c. Phone number (Office): 360-694-1627 d. (Cell): 971-235-2527
   e. Email: TCARNERA@CALPORTLAND.COM
   f. Address: 3101 NW GATEWAY AVE
   g. City: VANCOUVER
   h. State: WASHINGTON i. Zip code: 98660

3a. Vessel Name: JOHNNY PETERSON 3b. Vessel Type: TUG

3c. US Coast Guard Document Number: 296618

4a. Length Overall (LOA), feet: 52.0 4b. Beam (width), feet: 18.5

5. Draft (depth of hull below waterline, fully laden), feet: 6.6

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: 32

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 3-4 FEET ABOVE

8. Frequency of one-way passage underneath I-5 main channel (typical per month): 8

   Jan 8 Feb 8 Mar 8 Apr 8 May 8 Jun 8 Jul 8 Aug 8 Sep 8 Oct 8 Nov 8 Dec 8

9. Frequency of one-way passage underneath I-5 main channel (other historic events):

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

    Jan 0 Feb 0 Mar 0 Apr 0 May 0 Jun 0 Jul 0 Aug 0 Sep 0 Oct 0 Nov 0 Dec 0

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): 0

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy? We do plan on keeping vessels for continued operations.
13. Other miscellaneous

River User Data Sheet By: Tony Carnera Date: 3-7-2012

1. Company Name and/or Owner of Vessel and contact information
   a. Name of company: CalPortland Co.
   b. Name of contact: Tony Carnera
   c. Phone number (Office): 360-694-1627 d. (Cell): 971-235-2527
   e. Email: TCarnera@CalPortland.com
   f. Address: 3101 NW Gateway Ave
   g. City: Vancouver
   h. State: Washington i. Zip code: 98660

3a. Vessel Name: Sunderling 3b. Vessel Type: Dredge

3c. US Coast Guard Document Number: 521611

4a. Length Overall (LOA), feet: 220.1 4b. Beam (width), feet: 40.0

5. Draft (depth of hull below waterline, fully laden), feet: 11.6
6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: 32
7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 3-4 Feet
8. Frequency of one-way passage underneath I-5 main channel (typical per month): 8

   Jan 8 Feb 8 Mar 8 Apr 8 May 8 Jun 8 Jul 8 Aug 8 Sep 8 Oct 8 Nov 8 Dec 8
9. Frequency of one-way passage underneath I-5 main channel (other historic events): ____
10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

    Jan 0 Feb 0 Mar 0 Apr 0 May 0 Jun 0 Jul 0 Aug 0 Sep 0 Oct 0 Nov 0 Dec 0
11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): 0

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy? We plan on keeping vessels for future

13. Other miscellaneous
Continued operations.

River User Data Sheet By:_____ Date: 2/17/12

1. Company Name and/or Owner of Vessel and contact information
   a. Name of company: DIVERSIFIED MARINE INC
   b. Name of contact: KURT REED
   c. Phone number (Office): 503-289-2669 d. (Cell):_____
   e. Email: KURT@DMIPDX.COM
   f. Address: PO BOX 83723 (1801 N MARINE DR)
   g. City: PDX
   h. State: OR i. Zip code: 97283

3a. Vessel Name: SEE ATTACHED 3b. Vessel Type:_____

3c. US Coast Guard Document Number: _____

4a. Length Overall (LOA), feet:_____ 4b. Beam (width), feet:_____

5. Draft (depth of hull below waterline, fully laden), feet:_____
6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: 85
7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 95' OR 10' ABOVE HIGHEST POINT
8. Frequency of one-way passage underneath I-5 main channel (typical per month):_____

   Jan 1 Feb 4 Mar 2 Apr 1 May 1 Jun 1 Jul 1 Aug 1 Sep 1 Oct 1 Nov 1 Dec 1
9. Frequency of one-way passage underneath I-5 main channel (other historic events):____
10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

    Jan 15 Feb 15 Mar 15 Apr 15 May 15 Jun 15 Jul 15 Aug 15 Sep 15 Oct 15 Nov 15 Dec 15
11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): OFTEN WE USE BRIDGE DAILY DEPENDING ON WORK FLOW. IT VARIES

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy?

13. Other miscellaneous

NORTH PORTLAND HARBOR BRIDGE IS "CRITICAL" TO OUR BUSINESS!

Columbia River CROSSING

River User Data Sheet

By: Ralph Petereit Date: 2/23/2012

1. Company Name and/or Owner of Vessel and contact information

Name of company: Dutra Group

Name of contact: Chris Peterson

Phone number (Office): 510-703-4554 (Cell): _____

Email: cpeterson@dutragroup.com

Address: 2350 Kerner Blvd., Suite 200

City: San Rafael State: CA Zip code: 94901

3a. Vessel Name: Paula Lee **3b. Vessel Type:** floating crane

3c. US Coast Guard Document Number: 649607

4a. Length Overall (LOA), **feet:** 250 **4b. Beam** (width), **feet:** 68

5. Draft (depth of hull below waterline, fully laden), **feet:** _____

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), **feet:** _____

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): _____

8. Frequency of one-way passage underneath I-5 main channel (typical per month): N/A

Jan ____ **Feb** ____ **Mar**____ **Apr**____ **May**____ **Jun**____ **Jul**____ **Aug**____ **Sep**____ **Oct**____ **Nov**____ **Dec**____

9. Frequency of one-way passage underneath I-5 main channel (other historic events): _____

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month): N/A

Jan ____ **Feb** ____ **Mar**____ **Apr**____ **May**____ **Jun**____ **Jul**____ **Aug**____ **Sep**____ **Oct**____ **Nov**____ **Dec**____

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): _____

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? _____

What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? _____

May we have a copy? _____

13. Other miscellaneous Chris stated that if we have information on General Const. Co or Manson Construction Co, that the Paula Lee would have similar navigation requirements The Paula Lee participated in the 2010 Columbia River Dredging Project downriver of the I-5 Bridge

Columbia River CROSSING

River User Data Sheet

By: RALPH PETEREIT Date: 2/27/2012

1. Company Name and/or Owner of Vessel and contact information

Name of company: GENERAL CONSTRUCTION CO.

Name of contact: PAT BOYD - EQUIPMENT MANAGER

Phone number (Office): 206-938-6750 (Cell): 206-498-8815

Email: pat.boyd@kiewit.com

Address: 3838 W. MARGINAL WAY SW

City: SEATTLE State: WA Zip code: 98106

3a. Vessel Name: D.B. GENERAL **3b. Vessel Type:** FLOATING CRANE/ DERRICK BARGE

3c. US Coast Guard Document Number:

4a. Length Overall (LOA), **feet:** 300 **4b. Beam** (width), **feet:** 105.8

5. Draft (depth of hull below waterline, fully laden), **feet:** 8

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), **feet:** 93

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 5-10

8. Frequency of one-way passage underneath I-5 main channel (typical per month):

Jan ____ Feb ____ Mar____ Apr____ May____ Jun____ Jul____ Aug____ Sep____ Oct____ Nov____ Dec____

9. Frequency of one-way passage underneath I-5 main channel (other historic events):

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month): NONE

Jan ____ Feb ____ Mar____ Apr____ May____ Jun____ Jul____ Aug____ Sep____ Oct____ Nov____ Dec____

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events):

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? NOT AVAILABLE

What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? NOTHING IN THE WORKS FOR ANYTHING LARGER THAN THIS BARGE.

May we have a copy?

13. Other miscellaneous THIS IS GENERAL'S/KIEWIT'S LARGEST CRANE BARGE. IT HAS GONE UNDER THE BRIDGE TO TAKE THE CRANE OFF THE DAVY CROCKET MANY YEARS AGO, AS WELL AS SOME PICKS UP AT THOMSEN METAL FAB. - BUT CAN'T REMEMBER WHEN

Columbia River CROSSING

River User Data Sheet

By: RALPH PETEREIT Date: 2/27/2012

1. Company Name and/or Owner of Vessel and contact information

Name of company: GENERAL CONSTRUCTION CO.

Name of contact: PAT BOYD - EQUIPMENT MANAGER

Phone number (Office): 206-938-6750 (Cell): 206-498-8815

Email: pat.boyd@kiewit.com

Address: 3838 W. MARGINAL WAY SW

City: SEATTLE State: WA Zip code: 98106

3a. Vessel Name: D.B. LOS ANGELES **3b. Vessel Type:** FLOATING CRANE / DERRICK BARGE

3c. US Coast Guard Document Number: _____

4a. Length Overall (LOA), **feet:** 210 **4b. Beam** (width), **feet:** 71

5. Draft (depth of hull below waterline, fully laden), **feet:** 7.5

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), **feet:** 67.2

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 5-10

8. Frequency of one-way passage underneath I-5 main channel (typical per month):

Jan ____ **Feb** ____ **Mar**____ **Apr**____ **May**____ **Jun**____ **Jul**____ **Aug**____ **Sep**____ **Oct**____ **Nov**____ **Dec**____

9. Frequency of one-way passage underneath I-5 main channel (other historic events): _____

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

Jan ____ **Feb** ____ **Mar**____ **Apr**____ **May**____ **Jun**____ **Jul**____ **Aug**____ **Sep**____ **Oct**____ **Nov**____ **Dec**____

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): _____

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? NOT AVAILABLE

What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? _____

May we have a copy? _____

13. Other miscellaneous _____

Columbia River CROSSING

River User Data Sheet

By: RALPH PETEREIT Date: 2/27/2012

1. Company Name and/or Owner of Vessel and contact information

Name of company: GENERAL CONSTRUCTION CO.

Name of contact: PAT BOYD - EQUIPMENT MANAGER

Phone number (Office): 206-938-6750 (Cell): 206-498-8815

Email: pat.boyd@kiewit.com

Address: 3838 W. MARGINAL WAY SW

City: SEATTLE State: WA Zip code: 98106

3a. Vessel Name: D.B. OAKLAND **3b. Vessel Type:** FLOATING CRANE/ DERRICK BARGE

3c. US Coast Guard Document Number:

4a. Length Overall (LOA), **feet:** 140 **4b. Beam** (width), **feet:** 70

5. Draft (depth of hull below waterline, fully laden), **feet:** 6

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), **feet:** 84.9

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 5-16

8. Frequency of one-way passage underneath I-5 main channel (typical per month):

Jan ____ **Feb** ____ **Mar**____ **Apr**____ **May**____ **Jun**____ **Jul**____ **Aug**____ **Sep**____ **Oct**____ **Nov**____ **Dec**____

9. Frequency of one-way passage underneath I-5 main channel (other historic events):

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

Jan ____ **Feb** ____ **Mar**____ **Apr**____ **May**____ **Jun**____ **Jul**____ **Aug**____ **Sep**____ **Oct**____ **Nov**____ **Dec**____

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events):

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? NOT AVAILABLE

What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)?

May we have a copy?

13. Other miscellaneous

Columbia River CROSSING

River User Data Sheet

By: RALPH PETEREIT Date: 2/27/2012

1. Company Name and/or Owner of Vessel and contact information

Name of company: GENERAL CONSTRUCTION CO.

Name of contact: PAT BOYD - EQUIPMENT MANAGER

Phone number (Office): 206-938-6750 (Cell): 206-498-8815

Email: pat.boyd@kiewit.com

Address: 3838 W. MARGINAL WAY SW

City: SEATTLE State: WA Zip code: 98106

3a. Vessel Name: D.B. PACIFIC **3b. Vessel Type:** FLOATING CRANE / DERRICK BARGE

3c. US Coast Guard Document Number:

4a. Length Overall (LOA), **feet:** 250 **4b. Beam** (width), **feet:** 72

5. Draft (depth of hull below waterline, fully laden), **feet:** 7

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), **feet:** 86.5

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 5-10

8. Frequency of one-way passage underneath I-5 main channel (typical per month):

Jan ____ **Feb** ____ **Mar**____ **Apr**____ **May**____ **Jun**____ **Jul**____ **Aug**____ **Sep**____ **Oct**____ **Nov**____ **Dec**____

9. Frequency of one-way passage underneath I-5 main channel (other historic events):

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

Jan ____ **Feb** ____ **Mar**____ **Apr**____ **May**____ **Jun**____ **Jul**____ **Aug**____ **Sep**____ **Oct**____ **Nov**____ **Dec**____

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events):

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? NOT AVAILABLE

What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)?

May we have a copy?

13. Other miscellaneous

Columbia River CROSSING

River User Data Sheet

By: RALPH PETEREIT Date: 2/27/2012

1. Company Name and/or Owner of Vessel and contact information

Name of company: GENERAL CONSTRUCTION CO.

Name of contact: PAT BOYD - EQUIPMENT MANAGER

Phone number (Office): 206-938-6750 (Cell): 206-498-8815

Email: pat.boyd@kiewit.com

Address: 3838 W. MARGINAL WAY SW

City: SEATTLE State: WA Zip code: 98106

3a. Vessel Name: D.B. SEATTLE **3b. Vessel Type:** FLOATING CRANE / DERRICK BARGE

3c. US Coast Guard Document Number:

4a. Length Overall (LOA), **feet:** 152 **4b. Beam** (width), **feet:** 76

5. Draft (depth of hull below waterline, fully laden), **feet:** 7.5

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), **feet:** 90

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 5 - 10

8. Frequency of one-way passage underneath I-5 main channel (typical per month):

Jan ____ **Feb** ____ **Mar**____ **Apr**____ **May**____ **Jun**____ **Jul**____ **Aug**____ **Sep**____ **Oct**____ **Nov**____ **Dec**____

9. Frequency of one-way passage underneath I-5 main channel (other historic events):

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

Jan ____ **Feb** ____ **Mar**____ **Apr**____ **May**____ **Jun**____ **Jul**____ **Aug**____ **Sep**____ **Oct**____ **Nov**____ **Dec**____

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events):

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? NOT AVAILABLE

What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)?

May we have a copy?

13. Other miscellaneous

Columbia River CROSSING

River User Data Sheet

By: RALPH PETEREIT Date: 2/27/2012

1. Company Name and/or Owner of Vessel and contact information

Name of company: GENERAL CONSTRUCTION CO.

Name of contact: PAT BOYD - EQUIPMENT MANAGER

Phone number (Office): 206-938-6750 (Cell): 206-498-8815

Email: pat.boyd@kiewit.com

Address: 3838 W. MARGINAL WAY SW

City: SEATTLE State: WA Zip code: 98106

3a. Vessel Name: D.B. VANCOUVER **3b. Vessel Type:** FLOATING CRANE / DERRICK BARGE

3c. US Coast Guard Document Number: _____

4a. Length Overall (LOA), **feet:** 210 **4b. Beam** (width), **feet:** 66

5. Draft (depth of hull below waterline, fully laden), **feet:** 5.8

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), **feet:** 62

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 5-10

8. Frequency of one-way passage underneath I-5 main channel (typical per month):

Jan ____ **Feb** ____ **Mar**____ **Apr**____ **May**____ **Jun**____ **Jul**____ **Aug**____ **Sep**____ **Oct**____ **Nov**____ **Dec**____

9. Frequency of one-way passage underneath I-5 main channel (other historic events): _____

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

Jan ____ **Feb** ____ **Mar**____ **Apr**____ **May**____ **Jun**____ **Jul**____ **Aug**____ **Sep**____ **Oct**____ **Nov**____ **Dec**____

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): _____

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? NOT AVAILABLE

What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? _____

May we have a copy? _____

13. Other miscellaneous _____

Columbia River CROSSING

River User Data Sheet

By: RALPH PETEREIT Date: 2/27/2012

1. Company Name and/or Owner of Vessel and contact information

Name of company: GENERAL CONSTRUCTION CO.

Name of contact: PAT BOYD - EQUIPMENT MANAGER

Phone number (Office): 206-938-6750 (Cell): 206-498-8815

Email: pat.boyd@kiewit.com

Address: 3838 W. MARGINAL WAY SW

City: SEATTLE State: WA Zip code: 98106

3a. Vessel Name: D. B. COLUMBIA **3b. Vessel Type:** FLOATING CRANE/ DERRICK BARGE

3c. US Coast Guard Document Number:

4a. Length Overall (LOA), **feet:** 142 **4b. Beam** (width), **feet:** 61.7

5. Draft (depth of hull below waterline, fully laden), **feet:** 5

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), **feet:** 64

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 5-10

8. Frequency of one-way passage underneath I-5 main channel (typical per month):

Jan ____ **Feb** ____ **Mar**____ **Apr**____ **May**____ **Jun**____ **Jul**____ **Aug**____ **Sep**____ **Oct**____ **Nov**____ **Dec**____

9. Frequency of one-way passage underneath I-5 main channel (other historic events):

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

Jan ____ **Feb** ____ **Mar**____ **Apr**____ **May**____ **Jun**____ **Jul**____ **Aug**____ **Sep**____ **Oct**____ **Nov**____ **Dec**____

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events):

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? NOT AVAILABLE

What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)?

May we have a copy?

13. Other miscellaneous

Columbia River CROSSING

River User Data Sheet

By: RALPH PETEREIT Date: 2/27/2012

1. Company Name and/or Owner of Vessel and contact information

Name of company: GENERAL CONSTRUCTION CO.

Name of contact: PAT BOYD - EQUIPMENT MANAGER

Phone number (Office): 206-938-6750 (Cell): 206-498-8815

Email: pat.boyd@kiewit.com

Address: 3838 W. MARGINAL WAY SW

City: SEATTLE State: WA Zip code: 98106

3a. Vessel Name: D.B. ALAMEDA **3b. Vessel Type:** FLOATING CRANE/ DERRICK BARGE

3c. US Coast Guard Document Number: _____

4a. Length Overall (LOA), **feet:** 142 **4b. Beam** (width), **feet:** 61.5

5. Draft (depth of hull below waterline, fully laden), **feet:** 6

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), **feet:** 71

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 5-10

8. Frequency of one-way passage underneath I-5 main channel (typical per month):

Jan ____ **Feb** ____ **Mar**____ **Apr**____ **May**____ **Jun**____ **Jul**____ **Aug**____ **Sep**____ **Oct**____ **Nov**____ **Dec**____

9. Frequency of one-way passage underneath I-5 main channel (other historic events): _____

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

Jan ____ **Feb** ____ **Mar**____ **Apr**____ **May**____ **Jun**____ **Jul**____ **Aug**____ **Sep**____ **Oct**____ **Nov**____ **Dec**____

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): _____

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? NOT AVAILABLE

What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? _____

May we have a copy? _____

13. Other miscellaneous _____

Columbia River CROSSING

River User Data Sheet

By: RALPH PETEREIT Date: 2/27/2012

1. Company Name and/or Owner of Vessel and contact information

Name of company: GENERAL CONSTRUCTION CO.

Name of contact: PAT BOYD - EQUIPMENT MANAGER

Phone number (Office): 206-938-6750 (Cell): 206-498-8815

Email: pat.boyd@kiewit.com

Address: 3838 W. MARGINAL WAY SW

City: SEATTLE State: WA Zip code: 98106

3a. Vessel Name: D.B. OLYMPIA **3b. Vessel Type:** FLOATING CRANE / DERRICK BARGE

3c. US Coast Guard Document Number:

4a. Length Overall (LOA), **feet:** 150 **4b. Beam** (width), **feet:** 63

5. Draft (depth of hull below waterline, fully laden), **feet:** 4

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), **feet:** 70.1

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 5-10

8. Frequency of one-way passage underneath I-5 main channel (typical per month):

Jan ____ **Feb** ____ **Mar**____ **Apr**____ **May**____ **Jun**____ **Jul**____ **Aug**____ **Sep**____ **Oct**____ **Nov**____ **Dec**____

9. Frequency of one-way passage underneath I-5 main channel (other historic events):

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

Jan ____ **Feb** ____ **Mar**____ **Apr**____ **May**____ **Jun**____ **Jul**____ **Aug**____ **Sep**____ **Oct**____ **Nov**____ **Dec**____

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events):

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? NOT AVAILABLE

What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)?

May we have a copy?

13. Other miscellaneous

River User Data Sheet By: Jennifer Rabby Date: 2/23/2012 10:00am

1. Company Name and/or Owner of Vessel and contact information

   a. Name of company: AME Hickey Marine Enterprises

   b. Name of contact: Greg Speyer & Darrell Jamieson

   c. Phone number (Office): 360.695.4553 d. (Cell): 360.772.4068

   e. Email: gregs@hickeymarine.com

   f. Address: 6801 NW Old Lower River Rd.

   g. City: Vancouver

   h. State: WA i. Zip code: 98660

3a. Vessel Name: Seahorse (Largest of 4) 3b. Vessel Type: Derrick Barge & Crane

3c. US Coast Guard Document Number: _____

4a. Length Overall (LOA), feet: 142 4b. Beam (width), feet: 60

5. Draft (depth of hull below waterline, fully laden), feet: 6.5'

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: 90' with spuds 75' gantry

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 10' They request 100' clearance when they go through bridges

8. Frequency of one-way passage underneath I-5 main channel (typical per month): Approx. 6x/yr. for all 4 vessels

   Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___ Oct - March

9. Frequency of one-way passage underneath I-5 main channel (other historic events):____

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month): None

    Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events):_____ Rarely have a need to go through because they can get to either side without going through

Diversified Marine is in N. Portland Harbor but doesn't go above the I-5 bridge.

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy?

13. Other miscellaneous

They don't see a need for larger equipment. They have lengthened their spuds in the past. When they do that, they pull them out and barge them upstream.

- The gantry height (75') is the limiting factor. It is not adjustable. Other companies could have higher gantries.
- Bridge height of 125' at O'CRD would accomodate most users.
- Most of their work is in the Willamette Harbor. Also go up to Bonneville Dam (taking Seahorse + Sea Vulture there in March). Currently working in Longview & Pasco Dams and other facilities (grain elevators, petroleum docks) upstream for maint. Work on Columbia, Willamette, and Snake Rivers
- They can often "sneak" through the bridge high span rather than the lift span, depends on draft.
- They don't usually lower spuds, but can if the draft is good. Risk of losing spuds / bending them.
- March each year there is a shut down of the locks, so several barges (HME + others) going there

River User Data Sheet By: Patty Gilleth Date: 2-27-12

1. Company Name and/or Owner of Vessel and contact information

   a. Name of company: J.E. McAmis, Inc.

   b. Name of contact: Patty Gilleth

   c. Phone number (Office): 530-891-5061 d. (Cell): _____

   e. Email: jemcamis@jemcamis.com

   f. Address: 2485 Notre Dame Blvd.

   g. City: Chico

   h. State: CA i. Zip code: 95928

3a. Vessel Name: Sand Island 3b. Vessel Type: Barge

3c. US Coast Guard Document Number: 1091812

4a. Length Overall (LOA), feet: 174.7 4b. Beam (width), feet: 44.3

5. Draft (depth of hull below waterline, fully laden), feet: 15

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: ____

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): _____

8. Frequency of one-way passage underneath I-5 main channel (typical per month): 1

   Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___

9. Frequency of one-way passage underneath I-5 main channel (other historic events): ____

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month): N/A

    Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): _____ N/A

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy? no

13. Other miscellaneous

River User Data Sheet By: Patty Gillett Date: 2-27-12

1. Company Name and/or Owner of Vessel and contact information
   a. Name of company: J.E. McAmis, Inc.
   b. Name of contact: Patty Gillett
   c. Phone number (Office): 530-891-5061 d. (Cell): _____
   e. Email: jemcamis@jemcamis.com
   f. Address: 2485 Notre Dame Blvd.
   g. City: Chico
   h. State: CA i. Zip code: 95928

3a. Vessel Name: Swan Island 3b. Vessel Type: Barge

3c. US Coast Guard Document Number: 1122064

4a. Length Overall (LOA), feet: 174.7 4b. Beam (width), feet: 44.3

5. Draft (depth of hull below waterline, fully laden), feet: 15
6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: ____
7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): _____
8. Frequency of one-way passage underneath I-5 main channel (typical per month): 1

   Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___
9. Frequency of one-way passage underneath I-5 main channel (other historic events): ____
10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month): NA

    Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___
11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): _____ N/A

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy? no

13. Other miscellaneous

River User Data Sheet By: Patty Gillett Date: 2-27-12

1. Company Name and/or Owner of Vessel and contact information
   a. Name of company: J.E. McAmis, Inc.
   b. Name of contact: Patty Gillett
   c. Phone number (Office): 530-891-5061 d. (Cell): _____
   e. Email: jemcamis@jemcamis.com
   f. Address: 2485 Notre Dame Blvd.
   g. City: Chico
   h. State: CA i. Zip code: 95928

3a. Vessel Name: Heid, Renee 3b. Vessel Type: Barge

3c. US Coast Guard Document Number: 1232925

4a. Length Overall (LOA), feet: 211.2 4b. Beam (width), feet: 60

5. Draft (depth of hull below waterline, fully laden), feet: 12
6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: ____
7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): _____
8. Frequency of one-way passage underneath I-5 main channel (typical per month): 1

   Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___
9. Frequency of one-way passage underneath I-5 main channel (other historic events): 1
10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month): N/A

    Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___
11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): _____ N/A

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy? no

13. Other miscellaneous

Columbia River CROSSING

River User Data Sheet

By: Irene T. Date: 3-22-2012

1. Company name and/or owner of vessel and contact information

Name of company: JT marine Inc.

Name of contact: Irene Toristoja

Phone number (Office): 360-750-1300 (Cell): _____

Email: irene@jtmarineinc

Address: 2301 SE Hidden Way, Suite 100

City: Vancouver State: WA Zip code: 98661

3a. Vessel name: Stacy T **3b. Vessel type:** Tugboat

3c. U.S. Coast Guard Document Number: 231849

4a. Length Overall (LOA), **feet:** 99.3' **4b. Beam** (width), **feet:** 24'

5. Draft (depth of hull below waterline, fully laden), **feet:** 10'

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), **feet:** 55'

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 10'

8. Frequency of one-way passage underneath I-5 main channel (typical per month):

Jan 10 **Feb** 10 **Mar** 10 **Apr** 10 **May** 10 **Jun** 10 **Jul** 10 **Aug** 10 **Sep** 10 **Oct** 10 **Nov** 10 **Dec** 10

9. Frequency of one-way passage underneath I-5 main channel (other historic events): _____

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

Jan 1 **Feb** 1 **Mar** 1 **Apr** 1 **May** 1 **Jun** 1 **Jul** 1 **Aug** 1 **Sep** 1 **Oct** 1 **Nov** 1 **Dec** 1

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): _____

12. Do you have a business plan (e.g. 10 or 20 year plan)? NO

What does it say related to vessels traveling under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? _____

May we have a copy? _____

13. Other (additional sheets may be attached.) NA

Columbia River CROSSING

River User Data Sheet

By: Irene T Date: 3-22-2012

1. **Company name and/or owner of vessel and contact information**

Name of company: JT Marine Inc.

Name of contact: Irene Toristoja

Phone number (Office): 360-750-1300 (Cell): _____

Email: irene@jtmarineinc.com

Address: 2301 SE Hidden Way, Suite 100

City: Vancouver State: WA Zip code: 98661

3a. **Vessel name:** Cristy T 3b. **Vessel type:** Tugboat

3c. **U.S. Coast Guard Document Number:** 262343

4a. **Length Overall** (LOA), **feet:** 61' 4b. **Beam** (width), **feet:** 18'

5. **Draft** (depth of hull below waterline, fully laden), **feet:** 8'

6. **Air Draft** (Height of the highest fixed point of the vessel above the waterline, unladen), **feet:** 50'

7. **Air gap for vessel** (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 10'

8. **Frequency of one-way passage underneath I-5 main channel** (typical per month):

Jan 10 **Feb** 10 **Mar** 10 **Apr** 10 **May** 10 **Jun** 10 **Jul** 10 **Aug** 10 **Sep** 10 **Oct** 10 **Nov** 10 **Dec** 10

9. **Frequency of one-way passage underneath I-5 main channel** (other historic events): _____

10. **Frequency of one-way passage through North Portland Harbor** (Oregon Slough) (typical per month):

Jan 1 **Feb** 1 **Mar** 1 **Apr** 1 **May** 1 **Jun** 1 **Jul** 1 **Aug** 1 **Sep** 1 **Oct** 1 **Nov** 1 **Dec** 1

11. **Frequency of one-way passage through North Portland Harbor** (Oregon Slough) (other historic events): _____

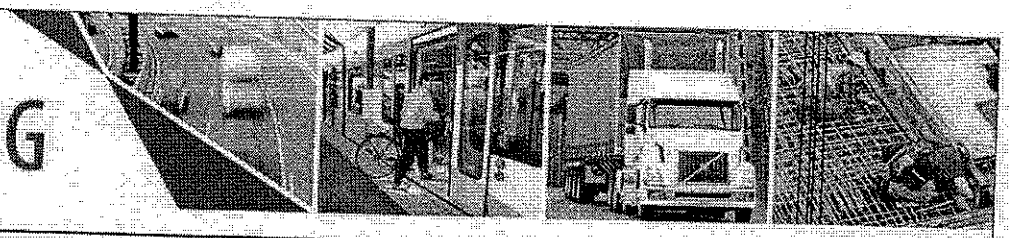
12. **Do you have a business plan** (e.g. 10 or 20 year plan)? NO

What does it say related to vessels traveling under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? _____

May we have a copy? N/A

13. **Other** (additional sheets may be attached.) _____

Columbia River CROSSING



River User Data Sheet

By: Irene T Date: 3-22-2012

1. Company name and/or owner of vessel and contact information

Name of company: JT Marine Inc

Name of contact: Irene Toristoja

Phone number (Office): 360 750-1300 (Cell): _____

Email: irene@jtmarineinc

Address: 2301 SE Hidden town, Suite 100

City: Vancouver State: WA Zip code: 98661

3a. Vessel name: DB Taylor **3b. Vessel type:** Crane barge

3c. U.S. Coast Guard Document Number: 514786

4a. Length Overall (LOA), **feet:** 148' **4b. Beam** (width), **feet:** 50'

5. Draft (depth of hull below waterline, fully laden), **feet:** 5'

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), **feet:** ~~150~~ 143' as per Irene Toristoja 3/27/12

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 10'

8. Frequency of one-way passage underneath I-5 main channel (typical per month):

Jan 10 Feb 10 Mar 10 Apr 10 May 10 Jun 10 Jul 10 Aug 10 Sep 10 Oct 10 Nov 10 Dec 10

9. Frequency of one-way passage underneath I-5 main channel (other historic events): _____

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

Jan 1 Feb 1 Mar 1 Apr 1 May 1 Jun 1 Jul 1 Aug 1 Sep 1 Oct 1 Nov 1 Dec 1

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): _____

12. Do you have a business plan (e.g. 10 or 20 year plan)? NO

What does it say related to vessels traveling under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? _____

May we have a copy? _____

13. Other (additional sheets may be attached.) NA

Columbia River CROSSING

River User Data Sheet

By: Irene T Date: 3-22-2012

1. Company name and/or owner of vessel and contact information

Name of company: JT Marine Inc.

Name of contact: Irene Toristaja

Phone number (Office): 360-750-1300 (Cell): _____

Email: irene@jtmarineinc.com

Address: 2301 SE Hidden Way, Suite 100

City: Vancouver State: WA Zip code: 98661

3a. Vessel name: DB Astoria **3b. Vessel type:** crane barge

3c. U.S. Coast Guard Document Number: N/A

4a. Length Overall (LOA), **feet:** 118' **4b. Beam** (width), **feet:** 33'

5. Draft (depth of hull below waterline, fully laden), **feet:** 4'

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), **feet:** 100'

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 10'

8. Frequency of one-way passage underneath I-5 main channel (typical per month):

Jan 10 Feb 10 Mar 10 Apr 10 May 10 Jun 10 Jul 10 Aug 10 Sep 10 Oct 10 Nov 10 Dec 10

9. Frequency of one-way passage underneath I-5 main channel (other historic events): _____

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

Jan 1 Feb 1 Mar 1 Apr 1 May 1 Jun 1 Jul 1 Aug 1 Sep 1 Oct 1 Nov 1 Dec 1

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): _____

12. Do you have a business plan (e.g. 10 or 20 year plan)? (NO)

What does it say related to vessels traveling under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? _____

May we have a copy? _____

13. Other (additional sheets may be attached.) NA

River User Data Sheet By: _____ Date: 3-6-12

1. Company Name and/or Owner of Vessel and contact information

a. Name of company: **Knife River Northwest**

b. Name of contact: Dave Jensen

c. Phone number (Office): 503-944-3500 d. (Cell): 503-706-5117

e. Email: dave.jensen@kniferiver.com

f. Address: 12222 NW Marina Way

g. City: Portland

h. State: OR i. Zip code: 97231-2300

3a. Vessel Name: KR-1 3b. Vessel Type: Deck Barge

3c. US Coast Guard Document Number: 590980

4a. Length Overall (LOA), feet: 282' 4b. Beam (width), feet: 78'

5. Draft (depth of hull below waterline, fully laden), feet: 13.5'

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: 48.5'

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 5'

8. Frequency of one-way passage underneath I-5 main channel (typical per month):
Jan _4_ Feb _4_ Mar_6_ Apr_6_ May_8_ Jun_12_ Jul_16_Aug_18_Sep_18_Oct_12_Nov_4_Dec_4_

9. Frequency of one-way passage underneath I-5 main channel (other historic events):

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month): N/A
Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): N/A

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy? Nothing formalized at this time. As the economy recovers, the frequency of trips under the bridge will increase – possibly twice as much.

13. Other miscellaneous

Columbia River CROSSING

River User Data Sheet

By: RALPH PETEREIT Date: 2/27/2012

1. Company Name and/or Owner of Vessel and contact information

Name of company: MANSON CONSTRUCTION CO.

Name of contact: RANDY THORSEN

Phone number (Office): 206-762-0850 (Cell): 206-793-2630

Email: rthorsen@mansonconstruction.com

Address: 5209 E. MARGINAL WAY S.

City: SEATTLE State: WA Zip code: 98134

3a. Vessel Name: E.P. PAUP **3b. Vessel Type:** FLOATING CRANE/ DERRICK BARGE

3c. US Coast Guard Document Number:

4a. Length Overall (LOA), **feet:** 380 **4b. Beam** (width), **feet:** 105

5. Draft (depth of hull below waterline, fully laden), **feet:** 15

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), **feet:** 132

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 5-10

8. Frequency of one-way passage underneath I-5 main channel (typical per month):

Jan ____ **Feb** ____ **Mar**____ **Apr**____ **May**____ **Jun**____ **Jul**____ **Aug**____ **Sep**____ **Oct**____ **Nov**____ **Dec**____

9. Frequency of one-way passage underneath I-5 main channel (other historic events):

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

Jan ____ **Feb** ____ **Mar**____ **Apr**____ **May**____ **Jun**____ **Jul**____ **Aug**____ **Sep**____ **Oct**____ **Nov**____ **Dec**____

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events):

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? NOT AVAILABLE

What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)?

May we have a copy?

13. Other miscellaneous MANSON'S LARGEST BARGE. CURRENTLY WORKING IN THE GULF OF MEXICO IN THE OFFSHORE INDUSTRY. MANSON DOES NOT SEE EVER RELOCATING IT TO THE PACIFIC NW.

Columbia River CROSSING

River User Data Sheet

By: RALPH PETEREIT Date: 2/27/2012

1. Company Name and/or Owner of Vessel and contact information

Name of company: MANSON CONSTRUCTION CO.

Name of contact: RANDY THORSEN

Phone number (Office): 206-762-0850 (Cell): 206-793-2630

Email: rthorsen@mansonconstruction.com

Address: 5209 E. MARGINAL WAY S.

City: SEATTLE State: WA Zip code: 98134

3a. Vessel Name: WOTAN **3b. Vessel Type:** FLOATING CRANE / DERRICK BARGE

3c. US Coast Guard Document Number:

4a. Length Overall (LOA), **feet:** 299 **4b. Beam** (width), **feet:** 96

5. Draft (depth of hull below waterline, fully laden), **feet:** 8

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), **feet:** 109.5

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 5-10

8. Frequency of one-way passage underneath I-5 main channel (typical per month):

Jan ____ **Feb** ____ **Mar**____ **Apr**____ **May**____ **Jun**____ **Jul**____ **Aug**____ **Sep**____ **Oct**____ **Nov**____ **Dec**____

9. Frequency of one-way passage underneath I-5 main channel (other historic events):

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

Jan ____ **Feb** ____ **Mar**____ **Apr**____ **May**____ **Jun**____ **Jul**____ **Aug**____ **Sep**____ **Oct**____ **Nov**____ **Dec**____

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events):

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? NOT AVAILABLE

What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)?

May we have a copy?

13. Other miscellaneous BARGE IS CURRENTLY WORKING IN THE MISSISSIPPI RIVER SYSTEM. MANSON DOES NOT SEE EVER RELOCATING IT TO THE COLUMBIA RIVER.

Columbia River CROSSING

River User Data Sheet

By: RALPH PETEREIT Date: 2/27/2012

1. Company Name and/or Owner of Vessel and contact information

Name of company: MANSON CONSTRUCTION CO.

Name of contact: RANDY THORSEN

Phone number (Office): 206-762-0850 (Cell): 206-793-2630

Email: rthorsen@mansonconstruction.com

Address: 5209 E. MARGINAL WAY S.

City: SEATTLE State: WA Zip code: 98134

3a. Vessel Name: DERRICK NO. 24 **3b. Vessel Type:** FLOATING CRANE / DERRICK BARGE

3c. US Coast Guard Document Number:

4a. Length Overall (LOA), **feet:** 200 **4b. Beam** (width), **feet:** 90

5. Draft (depth of hull below waterline, fully laden), **feet:** 6

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), **feet:** 99

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 5-10

8. Frequency of one-way passage underneath I-5 main channel (typical per month):

Jan ____ **Feb** ____ **Mar**____ **Apr**____ **May**____ **Jun**____ **Jul**____ **Aug**____ **Sep**____ **Oct**____ **Nov**____ **Dec**____

9. Frequency of one-way passage underneath I-5 main channel (other historic events):

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

Jan ____ **Feb** ____ **Mar**____ **Apr**____ **May**____ **Jun**____ **Jul**____ **Aug**____ **Sep**____ **Oct**____ **Nov**____ **Dec**____

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events):

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? NOT AVAILABLE

What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)?

May we have a copy?

13. Other miscellaneous LOCATED IN SEATTLE AND IS THE LARGEST BARGE IN THE PACIFIC NW. THIS BARGE HAS NOT BEEN UP THE COLUMBIA RIVER IN OVER 10 YEARS. NO CURRENT PLANS TO RELOCATE THIS BARGE TO THE COLUMBIA RIVER.

Columbia River CROSSING

River User Data Sheet

By: RALPH PETEREIT Date: 2/27/2012

1. Company Name and/or Owner of Vessel and contact information

Name of company: MANSON CONSTRUCTION CO.

Name of contact: RANDY THORSEN

Phone number (Office): 206-762-0850 (Cell): 206-793-2630

Email: rthorsen@mansonconstruction.com

Address: 5209 E. MARGINAL WAY S.

City: SEATTLE State: WA Zip code: 98134

3a. Vessel Name: HAAKON **3b. Vessel Type:** FLOATING CRANE/ DERRICK BARGE

3c. US Coast Guard Document Number:

4a. Length Overall (LOA), **feet:** 280 **4b. Beam** (width), **feet:** 68

5. Draft (depth of hull below waterline, fully laden), **feet:** 9

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), **feet:** 84

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 5-10

8. Frequency of one-way passage underneath I-5 main channel (typical per month):

Jan ____ **Feb** ____ **Mar**____ **Apr**____ **May**____ **Jun**____ **Jul**____ **Aug**____ **Sep**____ **Oct**____ **Nov**____ **Dec**____

9. Frequency of one-way passage underneath I-5 main channel (other historic events):

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

Jan ____ **Feb** ____ **Mar**____ **Apr**____ **May**____ **Jun**____ **Jul**____ **Aug**____ **Sep**____ **Oct**____ **Nov**____ **Dec**____

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events):

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? NOT AVAILABLE

What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)?

May we have a copy?

13. Other miscellaneous

River User Data Sheet By: Craig Mark Date: 3/1/12

1. Company Name and/or Owner of Vessel and contact information
   a. Name of company: Mark Marine Service, Inc
   b. Name of contact: Craig Mark
   c. Phone number (Office): 3608372677 d. (Cell): 3607720916
   e. Email: markmarine@earthlink.net
   f. Address: P.O. Box 574
   g. City: Washougal
   h. State: WA i. Zip code: 98671

3a. Vessel Name: DB Columbia 3b. Vessel Type: Derrick Barge

3c. US Coast Guard Document Number: Undocumented

4a. Length Overall (LOA), feet: 140 4b. Beam (width), feet: 34

5. Draft (depth of hull below waterline, fully laden), feet: 12

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: 75'

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): bridge At Owater 110'

8. Frequency of one-way passage underneath I-5 main channel (typical per month):_____

   Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___

9. Frequency of one-way passage underneath I-5 main channel (other historic events):____

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

    Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events):_____

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy?
13. Other miscellaneous

River User Data Sheet By: Craig Mark Date: 3/1/12

1. Company Name and/or Owner of Vessel and contact information
   a. Name of company: Mark Marine Service, Inc
   b. Name of contact: Craig Mark
   c. Phone number (Office): 360 837 2677 d. (Cell): 360 772 0916
   e. Email: markmarine@earthlink.net
   f. Address: P.O. Box 574
   g. City: Washougal
   h. State: WA i. Zip code: 98671

3a. Vessel Name: DB Camas 3b. Vessel Type: Derrick Barge

3c. US Coast Guard Document Number: undocumented

4a. Length Overall (LOA), feet: 90 4b. Beam (width), feet: 34

5. Draft (depth of hull below waterline, fully laden), feet: 12
6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: 75'
7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): Bridge Shall Be A 110' At Zero water
8. Frequency of one-way passage underneath I-5 main channel (typical per month): _____

   Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___
9. Frequency of one-way passage underneath I-5 main channel (other historic events): ____
10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

    Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___
11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): 1 Per year

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy?
13. Other miscellaneous

River User Data Sheet By: Craig Mark Date: 3/4/12

1. Company Name and/or Owner of Vessel and contact information
   a. Name of company: Mark Marine Service, Inc
   b. Name of contact: Craig Mark
   c. Phone number (Office): 360 837 2677 d. (Cell): 360 772 0916
   e. Email: markmarine@earthlink.net
   f. Address: P.O. Box 574
   g. City: Washougal
   h. State: WA i. Zip code: 98671

3a. Vessel Name: Patricia 3b. Vessel Type: Twin diesel oil screw Towboat with Tower

3c. US Coast Guard Document Number: 236788

4a. Length Overall (LOA), feet: 84 4b. Beam (width), feet: 22

5. Draft (depth of hull below waterline, fully laden), feet: 7
6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: ~~85~~ 48'
7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 110' For we Push Crane Barges
8. Frequency of one-way passage underneath I-5 main channel (typical per month): _____

   Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___
9. Frequency of one-way passage underneath I-5 main channel (other historic events): ____
10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

    Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___
11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): 1 Per Year

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy?
13. Other miscellaneous

River User Data Sheet By: Craig Mark Date: 3/1/12

1. Company Name and/or Owner of Vessel and contact information
   a. Name of company: Mark Marine Service, Inc.
   b. Name of contact: Craig Mark
   c. Phone number (Office): 360 837 2677 d. (Cell): 360 772 0916
   e. Email: markmarine@earthlink.net
   f. Address: P.O. Box 574
   g. City: Washougal
   h. State: WA i. Zip code: 98671

3a. Vessel Name: Umatilla (AKA: Washougal) 3b. Vessel Type: Twin diesel oil Screw Towboat with Tower

3c. US Coast Guard Document Number: 227132

4a. Length Overall (LOA), feet: 82.5 4b. Beam (width), feet: 20.0

5. Draft (depth of hull below waterline, fully laden), feet: 7.5
6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: 50
7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 110' For We Pick CRANE Barges
8. Frequency of one-way passage underneath I-5 main channel (typical per month):_____

   Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___
9. Frequency of one-way passage underneath I-5 main channel (other historic events):____
10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

    Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___
11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): 1 Per Year

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy?
13. Other miscellaneous

River User Data Sheet By:_____ Date:_____

1. Company Name and/or Owner of Vessel and contact information
   a. Name of company: Mark Marine Service, Inc
   b. Name of contact: Craig Mark
   c. Phone number (Office): 360 834-2678 d. (Cell): (360) 772-0916
   e. Email: Markmarine@earthlink.net
   f. Address: P.O. Box 574
   g. City: Washougal
   h. State: WA i. Zip code: 98671

3a. Vessel Name: Barge #7 3b. Vessel Type: Crane Barge

3c. US Coast Guard Document Number: Undocumented

4a. Length Overall (LOA), feet: 100 4b. Beam (width), feet: 40

5. Draft (depth of hull below waterline, fully laden), feet: 4
6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: 80'
7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 110'
8. Frequency of one-way passage underneath I-5 main channel (typical per month):_____

   Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___
9. Frequency of one-way passage underneath I-5 main channel (other historic events):____
10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

    Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___
11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events):_____

River User Data Sheet By: MARK STILWELL Date: 3/8/12

1. Company Name and/or Owner of Vessel and contact information

   a. Name of company: PORT OF PORTLAND

   b. Name of contact: MARK STILWELL

   c. Phone number (Office): 503 240 2201 d. (Cell): 503 593 5204

   e. Email: MARK.STILWELL@PORTOFPORTLAND.COM

   f. Address: 6208 N. ENSIGN

   g. City: PORTLAND

   h. State: OREGON i. Zip code: 97217

3a. Vessel Name: DREDGE OREGON 3b. Vessel Type: CUTTER SUCTION DREDGE

3c. US Coast Guard Document Number: #4412269

4a. Length Overall (LOA), feet: 268' 4b. Beam (width), feet: 52'

5. Draft (depth of hull below waterline, fully laden), feet: 10.5 HULL / 15.5 W/SPUDS UP

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: 103'

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 2 FEET

8. Frequency of one-way passage underneath I-S main channel (typical per month): 0

   Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___

9. Frequency of one-way passage underneath I-5 main channel (other historic events): 6 times in 30yrs

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month): 0

    Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): 0 Possible to Ship yard if Diversified WINS CONTRACT

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy? NO PLANS AT THIS TIME.

13. Other miscellaneous

(1) IF THE PORT WANTED SOME MATERIAL PLACED UPLAND @ THE AIRPORT THE DREDGE WOULD NEED TRANSIT UPRIVER

(2) IF THE DRY DOCK @ SUNDIAL IS PLACED BACK INTO SERVICE & SOMEHOW WINS A CONTRACT FOR WORK ABOARD THE DREDGE WE WOULD NEED TRANSIT UPRIVER

(3) SOME TALKS HAVE TAKEN PLACE REGARDING THE DREDGE DOING SOME WORK (DREDGING) NEAR HOOD RIVER

River User Data Sheet By: Ron Del Rosario Date: 3/6/2012

1. Company Name and/or Owner of Vessel and contact information
   a. Name of company: Ross Island Sand and Gravel
   b. Name of contact: Paul Godsil
   c. Phone number (Office): 503-239-5504 d. (Cell):
   e. Email: ptgodsil@ridredge.com
   f. Address: 4315 Se McLoughlin Blvd
   g. City: Portland
   h. State: Or i. Zip code: 97282

3a. Vessel Name: RI Dredge no.9 3b. Vessel Type: Floating Crane

3c. US Coast Guard Document Number:

4a. Length Overall (LOA), feet: 120 4b. Beam (width), feet: 40

5. Draft (depth of hull below waterline, fully laden), feet: 5
6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: 45
7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge):
8. Frequency of one-way passage underneath I-5 main channel (typical per month):

   Jan 1 Feb 1 Mar 1 Apr 1 May 1 Jun 1 Jul Aug Sep Oct Nov Dec
9. Frequency of one-way passage underneath I-5 main channel (other historic events):
10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

    Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events):

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy? The vessel will be modified to 80 ft air draft and 60 ft beam width.
13. Other miscellaneous

River User Data Sheet By: Ron Del Rosario Date: 3/6/2012

1. Company Name and/or Owner of Vessel and contact information
   a. Name of company: Ross Island Sand and Gravel
   b. Name of contact: Paul Godsil
   c. Phone number (Office): 503-239-5504 d. (Cell): _____
   e. Email: ptgodsil@ridredge.com
   f. Address: 4315 Se McLoughlin Blvd
   g. City: Portland
   h. State: Or i. Zip code: 97282

3a. Vessel Name: RI Dredge no.8 3b. Vessel Type: Cutter Section Dredge

3c. US Coast Guard Document Number: _____

4a. Length Overall (LOA), feet: 158 4b. Beam (width), feet: 35

5. Draft (depth of hull below waterline, fully laden), feet: 5
6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: 80
7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): _____
8. Frequency of one-way passage underneath I-5 main channel (typical per month): _____

   Jan 1 Feb 1 Mar 1 Apr 1 May 1 Jun 1 Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___
9. Frequency of one-way passage underneath I-5 main channel (other historic events): ____
10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

    Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___
11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): _____

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy?
13. Other miscellaneous

River User Data Sheet By: Ron Del Rosario Date: 3/6/2012

1. Company Name and/or Owner of Vessel and contact information
   a. Name of company: Ross Island Sand and Gravel
   b. Name of contact: Paul Godsil
   c. Phone number (Office): 503-239-5504 d. (Cell):
   e. Email: ptgodsil@ridredge.com
   f. Address: 4315 Se McLoughlin Blvd
   g. City: Portland
   h. State: Or i. Zip code: 97282

3a. Vessel Name: RI Dredge no.7 3b. Vessel Type: Cutter Section Dredge

3c. US Coast Guard Document Number:

4a. Length Overall (LOA), feet: 185 4b. Beam (width), feet: 35

5. Draft (depth of hull below waterline, fully laden), feet: 5.5
6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: 80
7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge):
8. Frequency of one-way passage underneath I-5 main channel (typical per month):

   Jan 1 Feb 1 Mar 1 Apr 1 May 1 Jun 1 Jul Aug Sep Oct Nov Dec
9. Frequency of one-way passage underneath I-5 main channel (other historic events):
10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

    Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events):

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy?
13. Other miscellaneous

River User Data Sheet By: Gary Collins Date: 3-13-12

1. Company Name and/or Owner of Vessel and contact information
   a. Name of company: SDS Lumber Co.
   b. Name of contact: Gary Collins
   c. Phone number (Office): 509-493-2155 d. (Cell): 541-490-1370
   e. Email: GaryC@SDSLumber.com
   f. Address: PO Box 266
   g. City: Bingen WA
   h. State: WA i. Zip code: 98605

3a. Vessel Name: Darby 3b. Vessel Type: Tug

3c. US Coast Guard Document Number: _____

4a. Length Overall (LOA), feet: 86 4b. Beam (width), feet: 28

5. Draft (depth of hull below waterline, fully laden), feet: 8'
6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: 55'
7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 10'
8. Frequency of one-way passage underneath I-5 main channel (typical per month): 10

   Jan ✓ Feb ✓ Mar ✓ Apr ✓ May ✓ Jun ✓ Jul ✓ Aug ✓ Sep ✓ Oct ✓ Nov ✓ Dec ✓
9. Frequency of one-way passage underneath I-5 main channel (other historic events): ____
10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

    Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___
11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): 6

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy?

13. Other miscellaneous

Barges That might Be higher Then Tug That has Equitment Loaded on Them Could Be as high AS 100' ?

River User Data Sheet By: Rachel Preisinger Date: 03/01/2012

1. Company Name and/or Owner of Vessel and contact information

   a. Name of company: Puget Sound Naval Shipyard and Intermediate Maintenance Facility

   b. Name of contact: (1) Richard Schoenberg

   (2) Terry Carter

   (3) Rachel Preisinger

   c. Phone number (Office): (1) 360-476-8544 d. (Cell): N/A

   Phone number (Office): (2) 360-476-4802 d. (Cell): N/A

   Phone number (Office): (3) 360-476-8546 d. (Cell): N/A

   e. Email: (1) richard.a.schoenberg@navy.mil

   (2) terry.a.carter1@navy.mil

   (3) rachel.preisinger@navy.mil

   f. Address: Building 850A, 3rd Floor, 1400 Farragut Avenue

   g. City: Bremerton

   h. State: Washington i. Zip code: 98314-5001

3a. Vessel Name: Barge 40 3b. Vessel Type: Freight Barge

3c. US Coast Guard Document Number: 1035597

4a. Length Overall (LOA), feet: 250 ft 4b. Beam (width), feet: 68 ft

5. Draft (depth of hull below waterline, fully laden), feet: 14'-9", worst case

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), ft: 26 ft

   See answer to #13 for air draft of shipment

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): See answer to #13

8. Frequency of one-way passage underneath I-5 main channel (typical per month):

   For applicability see #12

   Jan ___ Feb ___ Mar_X_ Apr_X_ May___ Jun___ Jul___Aug___Sep_X_Oct_X_Nov___Dec___

9. Frequency of one-way passage underneath I-5 main channel (other historic events): See #12

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month): None

    Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): None

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy?

    Puget Sound Naval Shipyard and Intermediate Maintenance Facility's shipping plan is based on the Shipyard's long range dry dock schedule and ocean and river conditions. The number of shipments per year can vary. They currently average two per year and will increase to five per year in the foreseeable future. The historical range is one to eleven. The time of year can also vary. Shipments typically occur during two seasons, mid-Mar to mid-April and September through October.

    The frequency of one-way passage under the I-5 Bridge for this barge is currently once per year laden and once per year unladen, at some point during the time indicated above. This barge currently uses the alternate barge channel under the high span of the existing bridge. If this span is unusable, the lift span would be used instead.

13. Other miscellaneous

    Max Shipment Air Draft (Highest point of the shipment above the waterline): 51'-3"

    Air Gap for Shipment (desired clearance): 15 ft

River User Data Sheet By: Rachel Preisinger Date: 03/01/2012

1. Company Name and/or Owner of Vessel and contact information

   a. Name of company: Puget Sound Naval Shipyard and Intermediate Maintenance Facility

   b. Name of contact: (1) Richard Schoenberg

      (2) Terry Carter

      (3) Rachel Preisinger

   c. Phone number (Office): (1) 360-476-8544 d. (Cell): N/A

      Phone number (Office): (2) 360-476-4802 d. (Cell): N/A

      Phone number (Office): (3) 360-476-8546 d. (Cell): N/A

   e. Email: (1) richard.a.schoenberg@navy.mil

      (2) terry.a.carter1@navy.mil

      (3) rachel.preisinger@navy.mil

   f. Address: Building 850A, 3rd Floor, 1400 Farragut Avenue

   g. City: Bremerton

   h. State: Washington i. Zip code: 98314-5001

3a. Vessel Name: Barge 60 3b. Vessel Type: Freight Barge

3c. US Coast Guard Document Number: 630028

4a. Length Overall (LOA), feet: 230 ft 4b. Beam (width), feet: 60 ft

5. Draft (depth of hull below waterline, fully laden), feet: 14'-9", worst case

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), ft: 26 ft

   See answer to #13 for air draft of shipment

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): See answer to #13

8. Frequency of one-way passage underneath I-5 main channel (typical per month):

   For applicability see #12

   Jan ___ Feb ___ Mar_X_ Apr_X_ May___ Jun___ Jul___Aug___Sep_X_Oct_X_Nov___Dec___

9. Frequency of one-way passage underneath I-5 main channel (other historic events): See #12

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month): None

    Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): None

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy?

    Puget Sound Naval Shipyard and Intermediate Maintenance Facility's shipping plan is based on the Shipyard's long range dry dock schedule and ocean and river conditions. The number of shipments per year can vary. They currently average two per year and will increase to five per year in the foreseeable future. The historical range is one to eleven. The time of year can also vary. Shipments typically occur during two seasons, mid-Mar to mid-April and September through October.

    The frequency of one-way passage under the I-5 Bridge for this barge is currently once per year laden and once per year unladen, at some point during the time indicated above. This barge currently uses the alternate barge channel under the high span of the existing bridge. If this span is unusable, the lift span would be used instead.

13. Other miscellaneous

    Max Shipment Air Draft (Highest point of the shipment above the waterline): 42'-5"

    Air Gap for Shipment (desired clearance): 15 ft

River User Data Sheet By: Rachel Preisinger Date: 03/01/2012

1. Company Name and/or Owner of Vessel and contact information

   a. Name of company: Puget Sound Naval Shipyard and Intermediate Maintenance Facility

   b. Name of contact: (1) Richard Schoenberg

   (2) Terry Carter

   (3) Rachel Preisinger

   c. Phone number (Office): (1) 360-476-8544 d. (Cell): N/A

   Phone number (Office): (2) 360-476-4802 d. (Cell): N/A

   Phone number (Office): (3) 360-476-8546 d. (Cell): N/A

   e. Email: (1) richard.a.schoenberg@navy.mil

   (2) terry.a.carter1@navy.mil

   (3) rachel.preisinger@navy.mil

   f. Address: Building 850A, 3rd Floor, 1400 Farragut Avenue

   g. City: Bremerton

   h. State: Washington i. Zip code: 98314-5001

3a. Vessel Name: Beluga 3b. Vessel Type: Freight Barge

3c. US Coast Guard Document Number: 586036

4a. Length Overall (LOA), feet: 240 ft 4b. Beam (width), feet: 60 ft

5. Draft (depth of hull below waterline, fully laden), feet: 14'-9", worst case

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), ft: 26 ft

   See answer to #13 for air draft of shipment

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): See answer to #13

8. Frequency of one-way passage underneath I-5 main channel (typical per month):

   For applicability see #12

   Jan ___ Feb ___ Mar_X_ Apr_X_ May___ Jun___ Jul___Aug___Sep_X_Oct_X_Nov___Dec___

9. Frequency of one-way passage underneath I-5 main channel (other historic events): See #12

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month): None

    Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): None

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy?

    Puget Sound Naval Shipyard and Intermediate Maintenance Facility's shipping plan is based on the Shipyard's long range dry dock schedule and ocean and river conditions. The number of shipments per year can vary. They currently average two per year and will increase to five per year in the foreseeable future. The historical range is one to eleven. The time of year can also vary. Shipments typically occur during two seasons, mid-Mar to mid-April and September through October.

    The frequency of one-way passage under the I-5 Bridge for this barge is currently twice per year laden and twice per year unladen, at some point during the time indicated above. This barge currently uses the alternate barge channel under the high span of the existing bridge. If this span is unusable, the lift span would be used instead.

13. Other miscellaneous

    Max Shipment Air Draft (Highest point of the shipment above the waterline): 42'-7"

    Air Gap for Shipment (desired clearance): 15 ft

River User Data Sheet By: Rachel Preisinger Date: 03/01/2012

1. Company Name and/or Owner of Vessel and contact information

   a. Name of company: Puget Sound Naval Shipyard and Intermediate Maintenance Facility

   b. Name of contact: (1) Richard Schoenberg

   (2) Terry Carter

   (3) Rachel Preisinger

   c. Phone number (Office): (1) 360-476-8544 d. (Cell): N/A

   Phone number (Office): (2) 360-476-4802 d. (Cell): N/A

   Phone number (Office): (3) 360-476-8546 d. (Cell): N/A

   e. Email: (1) richard.a.schoenberg@navy.mil

   (2) terry.a.carter1@navy.mil

   (3) rachel.preisinger@navy.mil

   f. Address: Building 850A, 3rd Floor, 1400 Farragut Avenue

   g. City: Bremerton

   h. State: Washington i. Zip code: 98314-5001

3a. Vessel Name: Edgecumbe 3b. Vessel Type: Freight Barge

3c. US Coast Guard Document Number: 591009

4a. Length Overall (LOA), feet: 240 ft 4b. Beam (width), feet: 60 ft

5. Draft (depth of hull below waterline, fully laden), feet: 14'-9", worst case

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), ft: 26 ft

   See answer to #13 for air draft of shipment

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): See answer to #13

8. Frequency of one-way passage underneath I-5 main channel (typical per month):

   For applicability see #12

   Jan ___ Feb ___ Mar_X_ Apr_X_ May___ Jun___ Jul___Aug___Sep_X_Oct_X_Nov___Dec___

9. Frequency of one-way passage underneath I-5 main channel (other historic events): See #12

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month): None

    Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): None

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy?

    Puget Sound Naval Shipyard and Intermediate Maintenance Facility's shipping plan is based on the Shipyard's long range dry dock schedule and ocean and river conditions. The number of shipments per year can vary. They currently average two per year and will increase to five per year in the foreseeable future. The historical range is one to eleven. The time of year can also vary. Shipments typically occur during two seasons, mid-Mar to mid-April and September through October.

    The frequency of one-way passage under the I-5 Bridge for this barge is currently twice per year laden and twice per year unladen, at some point during the time indicated above. This barge currently uses the alternate barge channel under the high span of the existing bridge. If this span is unusable, the lift span would be used instead.

13. Other miscellaneous

    Max Shipment Air Draft (Highest point of the shipment above the waterline): 42'-7"

    Air Gap for Shipment (desired clearance): 15 ft

River User Data Sheet By: Rachel Preisinger Date: 03/01/2012

1. Company Name and/or Owner of Vessel and contact information

   a. Name of company: Puget Sound Naval Shipyard and Intermediate Maintenance Facility

   b. Name of contact: (1) Richard Schoenberg

   (2) Terry Carter

   (3) Rachel Preisinger

   c. Phone number (Office): (1) 360-476-8544 d. (Cell): N/A

   Phone number (Office): (2) 360-476-4802 d. (Cell): N/A

   Phone number (Office): (3) 360-476-8546 d. (Cell): N/A

   e. Email: (1) richard.a.schoenberg@navy.mil

   (2) terry.a.carter1@navy.mil

   (3) rachel.preisinger@navy.mil

   f. Address: Building 850A, 3rd Floor, 1400 Farragut Avenue

   g. City: Bremerton

   h. State: Washington i. Zip code: 98314-5001

3a. Vessel Name: Future Barge 1 3b. Vessel Type: Freight Barge

3c. US Coast Guard Document Number: N/A

4a. Length Overall (LOA), feet: 400 ft 4b. Beam (width), feet: 80 ft

5. Draft (depth of hull below waterline, fully laden), feet: 15'-9", worst case

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), ft: 25 ft

   See answer to #13 for air draft of shipment

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): See answer to #13

8. Frequency of one-way passage underneath I-5 main channel (typical per month):

   For applicability see #12

   Jan ___ Feb ___ Mar_X_ Apr_X_ May___ Jun___ Jul___Aug___Sep_X_Oct_X_Nov___Dec___

9. Frequency of one-way passage underneath I-5 main channel (other historic events): See #12

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month): None

    Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): None

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy?

    Puget Sound Naval Shipyard and Intermediate Maintenance Facility's shipping plan is based on the Shipyard's long range dry dock schedule and ocean and river conditions. The number of shipments per year can vary. They currently average two per year and will increase to five per year in the foreseeable future. The historical range is one to eleven. The time of year can also vary. Shipments typically occur during two seasons, mid-Mar to mid-April and September through October.

    The frequency of one-way passage under the I-5 Bridge for this barge is anticipated to be three times per year laden and three times per year unladen, at some point during the time indicated above.

13. Other miscellaneous

    Max Shipment Air Draft (Highest point of the shipment above the waterline): 57 ft

    Air Gap for Shipment (desired clearance): 15 ft

River User Data Sheet By: Rachel Preisinger Date: 03/01/2012

1. Company Name and/or Owner of Vessel and contact information

   a. Name of company: Puget Sound Naval Shipyard and Intermediate Maintenance Facility

   b. Name of contact: (1) Richard Schoenberg

   (2) Terry Carter

   (3) Rachel Preisinger

   c. Phone number (Office): (1) 360-476-8544 d. (Cell): N/A

   Phone number (Office): (2) 360-476-4802 d. (Cell): N/A

   Phone number (Office): (3) 360-476-8546 d. (Cell): N/A

   e. Email: (1) richard.a.schoenberg@navy.mil

   (2) terry.a.carter1@navy.mil

   (3) rachel.preisinger@navy.mil

   f. Address: Building 850A, 3rd Floor, 1400 Farragut Avenue

   g. City: Bremerton

   h. State: Washington i. Zip code: 98314-5001

3a. Vessel Name: Future Barge 2 3b. Vessel Type: Freight Barge

3c. US Coast Guard Document Number: N/A

4a. Length Overall (LOA), feet: 460 ft 4b. Beam (width), feet: 80 ft

5. Draft (depth of hull below waterline, fully laden), feet: 15'-9", worst case

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), ft: 25 ft

   See answer to #13 for air draft of shipment

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): See answer to #13

8. Frequency of one-way passage underneath I-5 main channel (typical per month):

   For applicability see #12

   Jan ___ Feb ___ Mar_X_ Apr_X_ May___ Jun___ Jul___Aug___Sep_X_Oct_X_Nov___Dec___

9. Frequency of one-way passage underneath I-5 main channel (other historic events): See #12

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month): None

    Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): None

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy?

    Puget Sound Naval Shipyard and Intermediate Maintenance Facility's shipping plan is based on the Shipyard's long range dry dock schedule and ocean and river conditions. The number of shipments per year can vary. They currently average two per year and will increase to five per year in the foreseeable future. The historical range is one to eleven. The time of year can also vary. Shipments typically occur during two seasons, mid-Mar to mid-April and September through October.

    The frequency of one-way passage under the I-5 Bridge for this barge is anticipated to be twice per year laden and twice per year unladen, at some point during the time indicated above.

13. Other miscellaneous

    Max Shipment Air Draft (Highest point of the shipment above the waterline): 57 ft

    Air Gap for Shipment (desired clearance): 15 ft

River User Data Sheet By: Rachel Preisinger Date: 03/20/2012

1. Company Name and/or Owner of Vessel and contact information

   a. Name of company: Puget Sound Naval Shipyard and Intermediate Maintenance Facility

   b. Name of contact: (1) Richard Schoenberg

      (2) Terry Carter

      (3) Rachel Preisinger

   c. Phone number (Office): (1) 360-476-8544 d. (Cell): N/A

      Phone number (Office): (2) 360-476-4802 d. (Cell): N/A

      Phone number (Office): (3) 360-476-8546 d. (Cell): N/A

   e. Email: (1) richard.a.schoenberg@navy.mil

      (2) terry.a.carter1@navy.mil

      (3) rachel.preisinger@navy.mil

   f. Address: Building 850A, 3rd Floor, 1400 Farragut Avenue

   g. City: Bremerton

   h. State: Washington i. Zip code: 98314-5001

3a. Vessel Name: YP 701 Liberty Bay 3b. Vessel Type: Service Craft, USNV

3c. US Coast Guard Document Number: N/A

4a. Length Overall (LOA), feet: 108 ft 4b. Beam (width), feet: 24'-3"

5. Draft (depth of hull below waterline, fully laden), feet: 6.5 ft

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), ft: 47 ft

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 15 ft

8. Frequency of one-way passage underneath I-5 main channel (typical per month):

   For applicability see #12

   Jan ___ Feb ___ Mar_X_ Apr_X_ May___ Jun___ Jul___Aug___Sep_X_Oct_X_Nov___Dec___

9. Frequency of one-way passage underneath I-5 main channel (other historic events): See #12

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month): None

    Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): None

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy?

    This is the primary escort vessel that may accompany a shipment from Puget Sound Naval Shipyard and Intermediate Maintenance Facility. The shipping plan is based on the Shipyard's long range dry dock schedule and ocean and river conditions. The number of shipments per year can vary. They currently average two per year and will increase to five per year in the foreseeable future. The historical range is one to eleven. The time of year can also vary. Shipments typically occur during two seasons, mid-Mar to mid-April and September through October.

    The frequency of one-way passage under the I-5 Bridge for this vessel could be as high as ten times per year at some point during the time indicated above. This vessel currently uses the alternate barge channel under the high span of the existing bridge. If this span is unusable, the lift span would be used instead.

13. Other miscellaneous

    Full Load Displacement: 175.38 long tons

River User Data Sheet By: Rachel Preisinger Date: 03/20/2012

1. Company Name and/or Owner of Vessel and contact information

   a. Name of company: Puget Sound Naval Shipyard and Intermediate Maintenance Facility

   b. Name of contact: (1) Richard Schoenberg

      (2) Terry Carter

      (3) Rachel Preisinger

   c. Phone number (Office): (1) 360-476-8544 d. (Cell): N/A

      Phone number (Office): (2) 360-476-4802 d. (Cell): N/A

      Phone number (Office): (3) 360-476-8546 d. (Cell): N/A

   e. Email: (1) richard.a.schoenberg@navy.mil

      (2) terry.a.carter1@navy.mil

      (3) rachel.preisinger@navy.mil

   f. Address: Building 850A, 3rd Floor, 1400 Farragut Avenue

   g. City: Bremerton

   h. State: Washington i. Zip code: 98314-5001

3a. Vessel Name: YTT 10 Battle Point 3b. Vessel Type: Service Craft, USNV

3c. US Coast Guard Document Number: N/A

4a. Length Overall (LOA), feet: 186 ft 4b. Beam (width), feet: 40 ft

5. Draft (depth of hull below waterline, fully laden), feet: 11 ft

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), ft: 74 ft

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 15 ft

8. Frequency of one-way passage underneath I-5 main channel (typical per month):

   For applicability see #12

   Jan ___ Feb ___ Mar_X_ Apr_X_ May___ Jun___ Jul___Aug___Sep_X_Oct_X_Nov___Dec___

9. Frequency of one-way passage underneath I-5 main channel (other historic events): See #12

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month): None

    Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): None

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy?

    This is the largest escort vessel that may accompany a shipment from Puget Sound Naval Shipyard and Intermediate Maintenance Facility. The shipping plan is based on the Shipyard's long range dry dock schedule and ocean and river conditions. The number of shipments per year can vary. They currently average two per year and will increase to five per year in the foreseeable future. The historical range is one to eleven. The time of year can also vary. Shipments typically occur during two seasons, mid-Mar to mid-April and September through October.

    The frequency of one-way passage under the I-5 Bridge for this vessel could be as high as ten times per year at some point during the time indicated above. Passage of this vessel under the existing bridge requires use of the lift span.

13. Other miscellaneous

    Full Load Displacement: 1,200 long tons

Columbia River CROSSING




River User Data Sheet

By: NWP Dredge OPS **Date:** Feb 27, 2012

1. Company Name and/or Owner of Vessel and contact information

Name of company: US Army Corps of Engineers, Portland District

Name of contact: Marci Johnson

Phone number (Office): (503) 808-4765 (Cell): _____

Email: Marci.E.Johnson@usace.army.mil

Address: 333 SW 1st Avenue, P.O. Box 2946

City: Portland State: OR Zip code: 97204

3a. Vessel Name: Yaquina **3b. Vessel Type:** Hopper Dredge

3c. US Coast Guard Document Number: CG000073

4a. Length Overall (LOA)**, feet:** 200 **4b. Beam** (width)**, feet:** 58

5. Draft (depth of hull below waterline, fully laden)**, feet:** 16

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen)**, feet:** 92

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge)**:** 8

8. Frequency of one-way passage underneath I-5 main channel (typical per month)**:** based on historical

Jan 2 **Feb** 2 **Mar** 2 **Apr** 2 **May** 2 **Jun** 2 **Jul** 2 **Aug** 4 **Sep** 4 **Oct** 2 **Nov** 2 **Dec** 2

9. Frequency of one-way passage underneath I-5 main channel (other historic events)**:** included in 8.

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month)**:**

Jan 0 **Feb** 0 **Mar** 0 **Apr** 0 **May** 0 **Jun** 0 **Jul** 0 **Aug** 0 **Sep** 0 **Oct** 0 **Nov** 0 **Dec** 0

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events)**:** none

12. Do you have a Business Plan (e.g. 10 or 20 year plan)**?** provided by letter dated Feb 23, 2012

What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)**?** _____

May we have a copy? _____

13. Other miscellaneous Historical information provided above does not represent future needs. Future needs were provided to CRC by letter dated Feb, 23 2012. As stated in Feb 23, 2012 letter, to ensure safe passage of the dredge Yaquina, the minimum bridge height required for current and future operational needs is 116 feet CRD.

River User Data Sheet By: **Date:** March 07, 2012

1. Company Name and/or Owner of Vessel and contact information
    a. **Name of company:** Christensen Shipyards, Ltd
    b. **Name of contact:** Brad Given
    c. **Phone number (Office):** (360) 695-3238 **d. (Cell):**
    e. **Email:** bgiven@christensenyachts.com
    f. **Address:** 4400 SE Columbia Way
    g. **City:** Vancouver
    h. **State:** WA **i. Zip code:** 98661
3. **3a. Vessel Name:** Various **3b. Vessel Type:** Motor Yacht

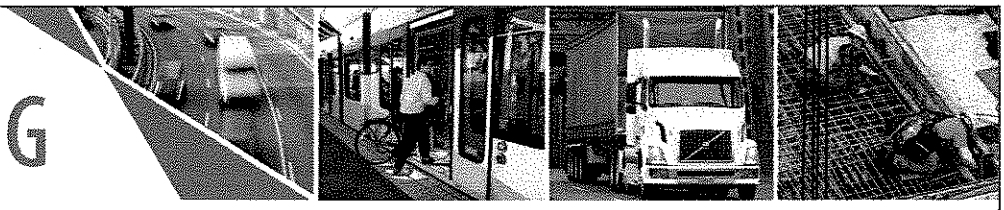
    3c. US Coast Guard Document Number:
4. **4a. Length Overall (LOA), feet:** 164.0 **4b. Beam (width), feet:** 30.0
5. **Draft (depth of hull below waterline, fully laden), feet:** 8.5
6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet:
    a. 60.0 feet: For current fleet of Christensen Yachts
    b. 77.0 feet: Joint venture between Christensen Yachts and Oregon Iron Works
7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): Minimum of 5 feet
8. Frequency of one-way passage underneath I-5 main channel (typical per month): We typically deliver a vessel every six months. During each delivery cycle, we will transit underneath the I5 Bridge approximately 12 times while performing testing and trials.

    Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___
9. Frequency of one-way passage underneath I-5 main channel (other historic events):
10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month): Typically none

Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): N/A
12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy? Bridge is not mentioned in our business plan
13. Other miscellaneous
    a. **Military Project:** We are pursuing other marine vessel construction work in the military sector where the air draft is much less than our yachts but the vessel beam is 42 feet.
    b. **Christensen / Oregon Iron Works JV:** Paramaters for motor yacht to potentially be built by JV of Christensen and Oregon Iron Works:
        - LOA = 230.0 feet
        - Beam = 44.5 feet
        - Draft = 13.5 feet
        - Air Draft = 77.0 feet

Columbia River CROSSING



River User Data Sheet

By: JASON POND Date: 3/27/12

1. Company name and/or owner of vessel and contact information

* I ALSO ATTACHED A GOOD ARTICLE *

Name of company: GREENBERRY INDUSTRIAL

Name of contact: JASON POND

Phone number (Office): 541-760-0266 (Cell): 541-760-0266

Email: JPOND@GREENBERRY.COM

Address: 3000 HIDDEN WAY, BLDG 40, BAY 2

City: VANCOUVER State: WA Zip code: 98661

3a. Vessel name: N/A **3b. Vessel type:** N/A - BARGE NORMALLY

3c. U.S. Coast Guard Document Number: VARIOUS

4a. Length Overall (LOA), **feet:** VARIOUS **4b. Beam** (width), **feet:** VARIOUS

5. Draft (depth of hull below waterline, fully laden), **feet:** VARIOUS

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), **feet:** 165' - WITH LOAD

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 165' WITH LOAD

8. Frequency of one-way passage underneath I-5 main channel (typical per month):

Jan — Feb — Mar — Apr — May — Jun 1 Jul 1 Aug 1 Sep — Oct — Nov — Dec —

9. Frequency of one-way passage underneath I-5 main channel (other historic events): 1 ANNUAL

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

Jan 1 Feb 1 Mar 1 Apr 1 May 1 Jun 1 Jul 1 Aug 1 Sep 1 Oct 1 Nov 1 Dec 1

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): 1

12. Do you have a business plan (e.g. 10 or 20 year plan)? YES

What does it say related to vessels traveling under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? IT IS CENTER PIECE OF OUR BUSINESS PLAN. WE HAVE MADE VERY LARGE LONG TERM INVESTMENTS AROUND IT.

May we have a copy? NO - PRIVATE.

13. Other (additional sheets may be attached.)

* I HAVE ATTACHED PICTURES OF A MODULE WE SHIPPED IN JULY OF 2011 THIS EXACTLY WHAT WE PLAN TO DO ANNUALLY FOR THE NEXT 30 PLUS YEARS. *

Provided by Kiewit

River User Data Sheet By:_____Date:_____

1. Company Name and/or Owner of Vessel and contact information
   a. Name of company: GENERAL CONSTRUCTION COMPANY
   b. Name of contact: _____
   c. Phone number (Office):_____ d. (Cell):_____
   e. Email:_____
   f. Address: 33455 6TH AVE S.
   g. City: FEDERAL WAY
   h. State: WA i. Zip code: 98003

3a. Vessel Name: D.B. GENERAL 3b. Vessel Type: CRANE BARGE

3c. US Coast Guard Document Number: 1042279

4a. Length Overall (LOA), feet: 288.0 4b. Beam (width), feet: 100.0

5. Draft (depth of hull below waterline, fully laden), feet: 8'
6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: 93'
7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 10'
8. Frequency of one-way passage underneath I-5 main channel (typical per month):_____

   Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___
9. Frequency of one-way passage underneath I-5 main channel (other historic events):____
10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

    Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___
11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events):_____

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy?
13. Other miscellaneous

River User Data Sheet By: Pat Scott Date: 3/28/2012

1. Company Name and/or Owner of Vessel and contact information
   a. Name of company: Legendary Yachts, Inc.
   b. Name of contact: Pat Scott
   c. Phone number (Office): 360-835-0342 d. (Cell): 360-798-4372
   e. Email: pscott@legendaryyachts.com
   f. Address: 2902 Addy St./ P.O. Box 720
   g. City: Washougal
   h. State: WA i. Zip code: 98671

3a. Vessel Name: RADIANCE 3b. Vessel Type: SAIL

3c. US Coast Guard Document Number: 1025262

4a. Length Overall (LOA), feet: 84' 4b. Beam (width), feet: 16'

5. Draft (depth of hull below waterline, fully laden), feet: 7'9"
6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: 86
7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 3'
8. Frequency of one-way passage underneath I-5 main channel (typical per month): .6

   Jan ___ Feb ___ Mar___ Apr___ May___ Jun_н_ Jul_н_Aug_н_Sep_н_Oct___Nov___Dec___
9. Frequency of one-way passage underneath I-5 main channel (other historic events): 2
10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month): b2yŜ

    Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___
11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events) 0

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy? I l·ØŜ y⁄2yŜ¢ bκ!

13. Other miscellaneous¢

¢Kλă ØŜăăŜf 2y˝ŭKλă ₮2ℕY˝ KI·ă ŭKŜ fI·ℕƎŜăŭ I·λℕ ŘℕI·₮ŭ ŭ2 ŘI·ŭŜ ØλŭK I· K2YˆŜ LJ2ℕŭ 2₮ ±I·yŎ2dzØŜℕΣ ² !¢

w2dzŭλyŜfè ØŜ KI·ØŜ LJℕ2⁄2ŜŎŭă λy˝ŭKŜ πp↯ ℕI·yƎŜ ØKλfŜ 2ŎŎI·ăλ2yl·ffè ØŜ KI·ØŜ ŭKŜY˝ λy˝ŭKŜ co↯ ℕI·yƎŜ¢

River User Data Sheet By: 03 / 28 Date: 2012

1. Company Name and/or Owner of Vessel and contact information
   a. Name of company: Oregon Iron Works Inc.
   b. Name of contact: Thomas J. Hickman
   c. Phone number (Office): 503 653 6300 d. (Cell): 503 704 3749
   e. Email: thickman@oregoniron.com
   f. Address: 9700 SE Lawnfield Road
   g. City: Clackmas
   h. State: Oregon i. Zip code: 97015

3a. Vessel Name: N/A 3b. Vessel Type: N/A

3c. US Coast Guard Document Number: N/A

4a. Length Overall (LOA), feet: N/A 4b. Beam (width), feet: N/A

5. Draft (depth of hull below waterline, fully laden), feet: N/A
6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: N/A
7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge):
8. Frequency of one-way passage underneath I-5 main channel (typical per month):

   Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___
9. Frequency of one-way passage underneath I-5 main channel (other historic events):
10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

    Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___
11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events):

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy?

13. Other miscellaneous

Oregon Iron Works Inc. is a Heavy Industrial Fabrication Company that serves the Hydro Electric Industry, Nuclear Industry, and the Steel Bridge Industry and also manufactures marine craft for the US government and other marine operators around the world.

Oregon Iron Works Inc. ships goods and equipment on barges and/or ships based on the needs of our customers. We own both our own land in the Columbia Industrial Park in Vancouver and our own building and crane systems. We have invested heavily in this facility because it has the capacity to allow for both trucking rail shipping and for shipping by water via ship or barge. The current bridge height has been important for commerce and shipments along the Columbia River for nearly a century and even more critically important since the war effort in the 1940s. In the late sixties and early seventies, offshore drilling rigs were constructed at this location and had to transit under the bridge. These offshore platforms required the bridge to be raised to its full height of 174 feet to allow them to pass under the raised span. More recently we have watched drilling equipment destined for Alaska being assembled in the Columbia Industrial Park that required 150 feet of clearance to be shipped down the river.

As of today we have a project that we plan to ship in 110 foot tall sections to the Puget Sound area. With these parts sitting on a barge with dunnage underneath they will be 115 feet tall and the barge will be 10 feet out of the water. With at least 10 feet of clearance we would need to have a bridge that could be lifted to and/or built to 130 feet. This project is for the US Navy and if we cannot build and ship the project as planned we will not be able to be competitive with fabricators and manufacturers in the Puget Sound area.

As for future work we are now pursuing companies that will be drilling in Alaska once the oil fields are open in this part of the world. This will require the same sort of access we had in the sixties and seventies, as the platforms will be as large or larger than the units sent to California. This future work and our ability to compete for it are dependent on a bridge that has above river clearance of at least 150 feet.

In addition we also do work in other parts of the city such as the Portland Ship Yard and then ship products from there to areas upstream of the bridge. This means that the bridge height is an issue for both upstream as well as downstream shipping.

(Continued on attachment)

Additional page to RIVER USER DATA SHEET.

The lower height of the bridge limits our ability to compete not only locally but nationally. As it stands now we can ship products from our facility in the industrial park to locations around the country via the Columbia River system, down the coast, through the Panama Canal, and up the Mississippi River system to the Ohio or the Illinois. We are also able to take these loads to ports on the East Coast as well.

In summary:

The Bridge Height is now is 174 feet; this height has been needed as follows:

1960 to 1975	Drilling Platforms for the California Offshore Field.
1980 to 1995	Various loads from the Industrial Park to locations in Alaska and elsewhere.
2000 to 2012	Drilling Equipment for Parker Drilling assembled in the Park and shipped to Alaska.
Current	We have a current proposal to the US Navy to fabricate and ship structures that will require a minimum of 130 feet of clearance under the bridge.
Future	We have a marketing campaign going on now that targets the oil companies working in Alaska. We believe that in the future there will be a need for platforms and modules that will again require a 150 foot minimum clearance.

Conclusion:

This Marine Highway is used by a multitude of users with traffic going both upstream and down. We ship goods from the industrial park upstream of the bridge to Swan Island Ship Yard and from the Swan Island Ship Yard to the industrial park. The I-205 Bridge upstream of the bridge has a clearance of 144 feet and downstream of the bridge we have clearance limited only at Astoria and that is 196 feet with the Lewis and Clark bridge over 200 feet.

We believe it is critical to our business and the viability of the river system used for commerce to keep the height of this bridge at least 150 feet.

River User Data Sheet By: Karl Kruka, PB Date: 1/15/12 9:30
Scott Polzin, PB Lynn Rust, CRC

1. Company Name and/or Owner of Vessel and contact information

   a. Name of company: Schooner Creek Boat Works

   b. Name of contact: Steve Rander

   c. Phone number (Office): (503) 735-0569 d. (Cell): _____

   e. Email: steve@schoonercreek.com

   f. Address: 3355 N. Hayden Island Dr.

   g. City: Portland

   h. State: OR i. Zip code: 97217

3a. Vessel Name: RAGE 3b. Vessel Type: SA/C

3c. US Coast Guard Document Number: _____

4a. Length Overall (LOA), feet: 70' 4b. Beam (width), feet: 13'

5. Draft (depth of hull below waterline, fully laden), feet: 11'

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: 85'

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 5'

8. Frequency of one-way passage underneath I-5 main channel (typical per month): _____

   Jan ___ Feb ___ Mar 4 Apr 4 May 4 Jun 4 Jul 4 Aug 4 Sep 4 Oct ___ Nov ___ Dec ___

9. Frequency of one-way passage underneath I-5 main channel (other historic events): ____
   MORE FREQUENT PRIOR TO I-5 BRIDGE RESTRICTIONS

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

    Jan ___ Feb ___ Mar ___ Apr ___ May ___ Jun ___ Jul ___ Aug ___ Sep ___ Oct ___ Nov ___ Dec ___

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): _____

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy?
13. Other miscellaneous

River User Data Sheet **By:** Michael Moore - TMF **Date:** **3/7/2012**

1. Company Name and/or Owner of Vessel and contact information
   a. Name of Company: Thompson Metal Fab
   b. Name of Contact: John Rudi
   c. Phone number (Office): (360) 696-0811 d. (Cell): (360) 606-2414
   e. Email: jrudi@tmfab.com
   f. Address: 3000 SE Hidden Way
   g. City: Vancouver
   h. State: WA i. Zip Code: 98661

3a. Vessel Name: _____ 3b. Vessel Type: 400' x 100' Barge

3c. US Coast Guard Document Number: _____

4a. Length Overall (LOA), feet: 400 4b. Beam (width), feet: 100

5. Draft (depth of hull below waterline, fully laden), feet: 5 to 8

6. Air Draft (Heigth of the highest fixed point of the vessel above the waterline, unladen), feet: *See Page 2*

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge):
   20'

8. Frequency of one-way passage underneath I-5 main channel (typical per month):
   Jan: ___ Feb: ___ Mar: **x** Apr: ___ May: ___ Jun: ___ Jul: **x** Aug: ___ Sept: ___ Oct: ___ Nov: **x** Dec: ___

9. Frequency of one-way passage underneath I-5 main channel (other historic events):
   1-2 Times every 12-18 Months

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):
    Jan: ___ Feb: ___ Mar: ___ Apr: ___ May: ___ Jun: ___ Jul: ___ Aug: ___ Sept: ___ Oct: ___ Nov: ___ Dec: ___

11. Frequency of one-way pasage through North Portland Harbor (Oregon Slough) (other historic events):

Columbia River Crossing - River Usage Data
Thompson Metal Fab
March 2012

Customer	Project Name	Number of Barges	Barge Depth, feet	High point of Load, feet *(from barge deck)*	Total Required Clearance	Shipping Date	Shipping Destination
ARCO	Housing Expansion	1	20-28	65	85-93	1985	North Slope, Alaksa
Parker Drilling	Rig 245	1	20-28	78	98-106	1990	North Slope, Alaksa
Powell River Paper Company	Chlorine Dioxide Module	1	20-28	76	96-104	1991	British Columbia, Canada
Nordic-Calista	Rig 3	1	20-28	78	98-106	1997	North Slope, Alaksa
US Army Corps of Engineers	Lower Granite RSW	1	20-28	61	81-89	2001	Cascade General *(for repositioning & testing)* and then to Lower
US Army Corps of Engineers	Ice Harbor RSW	1	20-28	68	88-96	2005	Cascade General *(for repositioning & testing)* and then to Lower
British Petroleum (BP)	Liberty Rig	2	20-28	100	120-128	2009	North Slope, Alaksa
Parker Drilling	Rig 272	1	20-28	113	133-141	2011	North Slope, Alaksa
Parker Drilling	Rig 273	1	20-28	113	133-141	2011	North Slope, Alaksa
Doyon Drilling	Rig 25	2	20-28	52	72-80	2010	North Slope, Alaksa

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Rust, Lynn

From: Groth, Taylor J [Taylor.Groth@arcelormittal.com]
Sent: Monday, March 12, 2012 10:53 AM
To: Rust, Lynn
Subject: RE: Columbia River Crossing Project: River User Data

Lynn – thank you for the e-mail.

However, we are a steel supplier, not fabricator. We supply the steel directly from the mill to companies like Fought, TMF, and Oregon Iron Works. We would be happy to work with them when it comes to the point that you are looking at steel supply and pricing, but until then, this is more of a fabricator issue.

Best,

Taylor Groth | Account Manager
ArcelorMittal USA

Sales & Marketing | Houston, Texas

T + 1 312 576 6637 | F +1 312 896 9095 | www.arcelormittal.com

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From: Rust, Lynn [mailto:RustL@columbiarivercrossing.com]
Sent: Friday, March 09, 2012 6:45 PM
To: Groth, Taylor J
Subject: Columbia River Crossing Project: River User Data

Hello Taylor Groth,

The states of Washington and Oregon are planning to replace the Interstate 5 bridge over the Columbia River. As part of the CRC project, river user information is being collected for inclusion in a bridge permit application to the U.S. Coast Guard. Of interest are the navigation requirements for larger vessels or the shipment of large products traveling under the current I-5 bridge and transiting the Columbia River and Oregon Slough (North Portland Harbor).

Your name, company and email address were found online through the Pacific Northwest Steel Fabricators Association (PNSFA). As a fabricator, you have been identified as a potential river user and may have requested an Interstate bridge lift in the past.

Enclosed is a River User Data Sheet form. We request that as much information as possible be provided, especially your vessel's air draft and transiting frequency. A separate sheet is requested for each vessel or as a fabricator, each large product that is shipped. The completed form can be faxed to (360) 737-0294 or scanned and returned via e-mail to feedback@columbiarivercrossing.org. Alternatively, you may provide the information by telephone by calling the CRC project office at (866) 396-2726. Please reference "navigation user data collection" when you email or telephone. A response by March 16, 2012 would be appreciated.

For more information about the Columbia River Crossing Project please visit www.columbiarivercrossing.org.

Lynn Rust, PE
Project Delivery Engineering Manager
I-5 Columbia River Crossing Project

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Columbia River CROSSING

River User Data Sheet

By: Dan Graha Date: 3-13-12

1. Company name and/or owner of vessel and contact information

Name of company: Northwest College of Construction

Name of contact: Dan Graham

Phone number (Office): 503-256-7300 (Cell): _____

Email: dang@nwcoc.com

Address: 811 NE Holman St.

City: Portland State: OR Zip code: 97218

3a. Vessel name: N/A **3b. Vessel type:** N/A

3c. U.S. Coast Guard Document Number: N/A

4a. Length Overall (LOA), **feet:** N/A **4b. Beam** (width), **feet:** N/A

5. Draft (depth of hull below waterline, fully laden), **feet:** N/A

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), **feet:** N/A

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): N/A

8. Frequency of one-way passage underneath I-5 main channel (typical per month):

Jan Ø Feb Ø Mar Ø Apr Ø May Ø Jun Ø Jul Ø Aug Ø Sep Ø Oct Ø Nov Ø Dec Ø

9. Frequency of one-way passage underneath I-5 main channel (other historic events): Ø

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

Jan Ø Feb Ø Mar Ø Apr Ø May Ø Jun Ø Jul Ø Aug Ø Sep Ø Oct Ø Nov Ø Dec Ø

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): None

12. Do you have a business plan (e.g. 10 or 20 year plan)? Yes

What does it say related to vessels traveling under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? Not applicable

May we have a copy? No

13. Other (additional sheets may be attached.) _____

Columbia River CROSSING

River User Data Sheet

By: Ralph Petereit Date: 3/12/2012

1. Company Name and/or Owner of Vessel and contact information

Name of company: American Cruise Lines

Name of contact: Paul Taiclet

Phone number (Office): 203-453-6800 (Cell): _____

Email: Taiclet@americancruiselines.com

Address: 741 Boston Post Road

City: Guilford State: CT Zip code: 06437

3a. Vessel Name: Queen of the West **3b. Vessel Type:** Passenger - Cruise

3c. US Coast Guard Document Number: 1033572

4a. Length Overall (LOA), **feet:** 230 **4b. Beam** (width), **feet:** 50

5. Draft (depth of hull below waterline, fully laden), **feet:** 5'8"

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), **feet:** 64'4"

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): Not provided

8. Frequency of one-way passage underneath I-5 main channel (typical per month):

Jan ____ Feb ____ Mar 8-12 Apr 8-12 May 8-12 Jun 8-12 Jul 8-12 Aug 8-12 Sep 8-12 Oct 8-12 Nov 8-12 Dec ____

9. Frequency of one-way passage underneath I-5 main channel (other historic events): _____

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month): N/A

Jan ____ Feb ____ Mar ____ Apr ____ May ____ Jun ____ Jul ____ Aug ____ Sep ____ Oct ____ Nov ____ Dec ____

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): _____

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? _____

What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? _____

May we have a copy? _____

13. Other miscellaneous Plans include bringing the American Spirit and possibly one other vessel into the Columbia River system in the future

River User Data Sheet By: Sue Rooney Date: 3/9/12

1. Company Name and/or Owner of Vessel and contact information
   a. Name of company: American Safari Cruises/InnerSea Discoveries
   b. Name of contact: Sue Rooney
   c. Phone number (Office): 206.737.5710 d. (Cell):
   e. Email: suer@innerseadiscoveries.com
   f. Address: 3826 18th Ave W, Seattle, WA 98119
   g. City:
   h. State: i. Zip code:

3a. Vessel Name: Safari Legacy 3b. Vessel Type: motor vessel

3c. US Coast Guard Document Number: D677464/ 8963703

4a. Length Overall (LOA), feet: 192' 4b. Beam (width), feet: 40'

5. Draft (depth of hull below waterline, fully laden), feet: 9'
6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: 52 feet
7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 2 feet
8. Frequency of one-way passage underneath I-5 main channel (typical per month):

   Jan 0 Feb 0 Mar 0 Apr 0 May 0 Jun 0 Jul 0 Aug 1 Sep 8 Oct 8 Nov 4 Dec 0
9. Frequency of one-way passage underneath I-5 main channel (other historic events): n/a
10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):NONE

    Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): NONE

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy? Our plans have us on this stretch of the river for the foreseeable future.
13. Other miscellaneous

River User Data Sheet By: Sue Rooney Date: 3/9/12

1. Company Name and/or Owner of Vessel and contact information

   a. Name of company: American Safari Cruises/InnerSea Discoveries

   b. Name of contact: Sue Rooney

   c. Phone number (Office): 206.737.5710 d. (Cell):

   e. Email: suer@innerseadiscoveries.com

   f. Address: 3826 18th Ave W, Seattle, WA 98119

   g. City:

   h. State: i. Zip code:

3a. Vessel Name: Safari Spirit 3b. Vessel Type: motor yacht

3c. US Coast Guard Document Number: 631818

4a. Length Overall (LOA), feet: 110' 4b. Beam (width), feet: 24.5

5. Draft (depth of hull below waterline, fully laden), feet: 6

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: 42 feet

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 2 feet

8. Frequency of one-way passage underneath I-5 main channel (typical per month):

   Jan 0 Feb 0 Mar 0 Apr 0 May 0 Jun 0 Jul 0 Aug 0 Sep 0 Oct 6 Nov 2 Dec 0

9. Frequency of one-way passage underneath I-5 main channel (other historic events): n/a

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):None

    Jan ___ Feb ___ Mar___Apr___May___Jun___Jul___Aug___Sep___Oct___Nov___Dec___

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): None

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy? Our plans are to stay on this stretch of the river for the foreseeable future
13. Other miscellaneous

River User Data Sheet By: Ron Del Rosario Date: 2/22/2012

1. Company Name and/or Owner of Vessel and contact information
   a. Name of company: American Waterways, Inc (Portland Spirit)
   b. Name of contact: Dan Yates
   c. Phone number (Office): 503-224-3900 d. (Cell):
   e. Email: dan@portlandspirit.com
   f. Address: 111 Se Caruthers Street
   g. City: Portland
   h. State: Or i. Zip code: 97214

3a. Vessel Name: Portland Spirit 3b. Vessel Type: Passenger

3c. US Coast Guard Document Number: K Boats

4a. Length Overall (LOA), feet: 150 4b. Beam (width), feet: 36

5. Draft (depth of hull below waterline, fully laden), feet: 8
6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: 54
7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 4
8. Frequency of one-way passage underneath I-5 main channel (typical per month):

   Jan 2 Feb 2 Mar 2 Apr 4 May 30 Jun 80 Jul 80 Aug 80 Sep 80 Oct 40 Nov 4 Dec 4
9. Frequency of one-way passage underneath I-5 main channel (other historic events):
10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

    Jan 2 Feb 2 Mar 2 Apr 4 May 30 Jun 80 Jul 80 Aug 80 Sep 80 Oct 40 Nov 4 Dec 4
11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events):

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy?
13. Other miscellaneous

River User Data Sheet By: Ron Del Rosario Date: 2/22/2012

1. Company Name and/or Owner of Vessel and contact information
   a. Name of company: American Waterways, Inc (Portland Spirit)
   b. Name of contact: Dan Yates
   c. Phone number (Office): 503-224-3900 d. (Cell): _____
   e. Email: dan@portlandspirit.com
   f. Address: 111 Se Caruthers Street
   g. City: Portland
   h. State: Or i. Zip code: 97214

3a. Vessel Name: Crystal Dolphin 3b. Vessel Type: Passenger

3c. US Coast Guard Document Number: K Boats

4a. Length Overall (LOA), feet: 84 4b. Beam (width), feet: 32

5. Draft (depth of hull below waterline, fully laden), feet: 7
6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: 50
7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 4
8. Frequency of one-way passage underneath I-5 main channel (typical per month): _____

   Jan ___ Feb ___ Mar ___ Apr 4 May 30 Jun 80 Jul 80 Aug 80 Sep 80 Oct 40 Nov 4 Dec 4
9. Frequency of one-way passage underneath I-5 main channel (other historic events): ____
10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

    Jan ___ Feb 2 Mar 2 Apr 4 May 30 Jun 80 Jul 80 Aug 80 Sep 80 Oct 40 Nov 4 Dec 4
11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): _____

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy?
13. Other miscellaneous

River User Data Sheet By: Les Bolton Date: 2/21/12

1. Company Name and/or Owner of Vessel and contact information

   a. Name of company: GRAYS HARBOR HISTORICAL SEAPORT

   b. Name of contact: LES BOLTON

   c. Phone number (Office): 800. 200. 5239 d. (Cell): 360. 581. 1488

   e. Email: les@historicalseaport.org

   f. Address: 712 HAGARA STREET

   g. City: ABERDEEN

   h. State: WA i. Zip code: 98520

3a. Vessel Name: HAWAIIAN CHIEFTAIN 3b. Vessel Type: SAILING

3c. US Coast Guard Document Number: 926755

4a. Length Overall (LOA), feet: 103'-9" 4b. Beam (width), feet: 22

5. Draft (depth of hull below waterline, fully laden), feet: 5'-6"

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: 81'

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 15 feet

8. Frequency of one-way passage underneath I-5 main channel (typical per month): _____

   Jan ___ Feb ___ Mar___ Apr___ May 1 Jun 1 Jul___Aug___Sep___Oct 2 Nov___Dec___

9. Frequency of one-way passage underneath I-5 main channel (other historic events): 2X every 2-4yrs

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month): Ø

    Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): Ø

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy?

13. Other miscellaneous

We sail up the Columbia River as far as the Dalles providing Shipboard Education programs for youth and the General Public. Occasionally we drop by the Dalles so we can provide programs in the Tri Cities.

River User Data Sheet By: Les Bolton Date: 2/21/12

1. Company Name and/or Owner of Vessel and contact information

   a. Name of company: GRAYS HARBOR HISTORICAL SEAPORT

   b. Name of contact: LES BOLTON

   c. Phone number (Office): 800. 200. 5239 d. (Cell): 360. 581. 1488

   e. Email: les@historicalseaport.org

   f. Address: 712 HAGARA STREET

   g. City: ABERDEEN

   h. State: WA i. Zip code: 98520

3a. Vessel Name: LADY WASHINGTON 3b. Vessel Type: SAILING

3c. US Coast Guard Document Number: 944970

4a. Length Overall (LOA), feet: 112 4b. Beam (width), feet: 22

5. Draft (depth of hull below waterline, fully laden), feet: 11

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: 90

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 15

8. Frequency of one-way passage underneath I-5 main channel (typical per month):

   Jan ___ Feb ___ Mar___ Apr___ May 1 Jun 1 Jul___Aug___Sep___Oct 2 Nov___Dec___

9. Frequency of one-way passage underneath I-5 main channel (other historic events): 2X every 3yrs +/-

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month):

    Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events):

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy? Our business plan refers to Columbia River Voyages. We sail up the Columbia 1-2X per year Prowding Education Programs for youth and the general Public. We Sail all the Way to the Dalles and on rare occasions down rig the ships to provide Access to the Tri Cities area.

13. Other miscellaneous

River User Data Sheet By: **Michael Jones** Date: **March 19, 2012**

1. Company Name and/or Owner of Vessel and contact information

a. Name of company: **Lindblad Expeditions, Inc.**

b. Name of contact: **Michael Jones**

c. Phone number (Office): **206-403-1512** d. (Cell): **206-499-1154**

e. Email: **mikej@expeditions.com**

f. Address: **1415 Western Avenue, Suite 700**

g. City: **Seattle**

h. State: **WA** i. Zip code: **98101**

3a. Vessel Name: **National Geographic Sea Lion** 3b. Vessel Type: **Small Passenger**

3c. US Coast Guard Document Number: **648350**

4a. Length Overall (LOA), feet: **152** 4b. Beam (width), feet: **35**

5. Draft (depth of hull below waterline, fully laden), feet: **9.5**

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: **59**

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): **6 feet**

8. Frequency of one-way passage underneath I-5 main channel (typical per month):

Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep **3** Oct **1** Nov___ Dec___

9. Frequency of one-way passage underneath I-5 main channel (other historic events): **4 one-way transits each Fall.**

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month): **Zero**

Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): **Zero**

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy? **There is not a copy of a business plan; however, our intention is to transit under the I-5 Bridge 4 one-way transits each Fall for the next 10 years.**

13. Other miscellaneous: **NA**

River User Data Sheet By: Michael Jones Date: March 19, 2012

1. Company Name and/or Owner of Vessel and contact information

a. Name of company: Lindblad Expeditions, Inc.

b. Name of contact: Michael Jones

c. Phone number (Office): 206-403-1512 d. (Cell): 206-499-1154

e. Email: mikej@expeditions.com

f. Address: 1415 Western Avenue, Suite 700

g. City: Seattle

h. State: WA i. Zip code: 98101

3a. Vessel Name: National Geographic Sea Bird 3b. Vessel Type: Small Passenger

3c. US Coast Guard Document Number: 644046

4a. Length Overall (LOA), feet: 152 4b. Beam (width), feet: 35

5. Draft (depth of hull below waterline, fully laden), feet: 9.5

6. Air Draft (Height of the highest fixed point of the vessel above the waterline, unladen), feet: 59

7. Air gap for vessel (desired clearance from the highest fixed point on the vessel to lowest part of bridge): 6 feet

8. Frequency of one-way passage underneath I-5 main channel (typical per month):

Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep 3 Oct 4 Nov 1 Dec___

9. Frequency of one-way passage underneath I-5 main channel (other historic events): 7 or 8 one-way transits each Fall.

10. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (typical per month): Zero

Jan ___ Feb ___ Mar___ Apr___ May___ Jun___ Jul___Aug___Sep___Oct___Nov___Dec___

11. Frequency of one-way passage through North Portland Harbor (Oregon Slough) (other historic events): Zero

12. Do you have a Business Plan (e.g. 10 or 20 year plan)? What does it say regarding vessels transiting under the I-5 Bridge or into North Portland Harbor (Oregon Slough)? May we have a copy? There is not a copy of a business plan; however, our intention is to transit under the I-5 Bridge 7 or 8 one-way transits each Fall for the next 10 years.

13. Other miscellaneous: NA

Appendix F – Additional User Information

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Appendix F – Additional User Information

Additional information for the following river users is included in this appendix:

Commercial Tugs and Tows

1. Crowley Maritime Corporation
2. Schnitzer Steel Industries, Inc.
3. Shaver Transportation Company
4. Tidewater

Recreational Sailboats and Powerboats

1. Portland Yacht Club

Marine Contractors

1. Diversified Marine, Inc.
2. General Construction Company
3. Hickey Marine Enterprises
4. JT Marine, Inc.
5. Manson Construction Company
6. Port of Portland

Federal Government

1. Nuclear Transporters (Puget Sound Naval Shipyard)
2. U.S. Army Corps of Engineers

Marine Industries

1. Greenberry Industrial
2. Thompson Metal Fab

Passenger Cruise

1. American Cruise Lines
2. American Safari Cruises/InnerSea Discoveries
3. American Waterways, Inc. (Portland Spirit)
4. Grays Harbor Historical Seaport
5. Linblad Expeditions, Inc.

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From: Ray.Loera@crowley.com [Ray.Loera@crowley.com]
Sent: Tuesday, March 20, 2012 2:52 PM
To: Del Rosario, Ronaldo
Subject: RE: I-5 Columbia River Crossing Project Marine Navigation User Data

Ronaldo,

I called and left you a V/M on your phone. None of our vessels transit thru those bridges so I won't be filling out the form.

Raymond J Loera
Director Chartering Operations
300 S. Harbor Boulevard
Berth 86
San Pedro, CA 90731
(O) 310-732-6527
(C) 510-710-3314
Ray.Loera@Crowley.com

-----Original Message-----
From: Del Rosario, Ronaldo [mailto:DelRosarioR@pbworld.com]
Sent: Tuesday, March 20, 2012 1:43 PM
To: Loera, Ray
Subject: I-5 Columbia River Crossing Project Marine Navigation User Data

Hello Ray

My name is Ron Del Rosario working for Parson Brinckerhoff. We are part of the design team for the I-5 Columbia River Crossing Bridge Replacement Project.

The I-5 Columbia River Crossing Project is collecting marine navigation user data for the Columbia River and Oregon Slough (or North Portland Harbor). The information will be provided to the USCG as part of an application to receive a bridge permit. Attached is the River User Data Sheet that we are using to collect user data. One sheet will be needed for each vessel. There are 13 questions. As much information as you can provide is appreciated.

Thanks.

Ron Del Rosario
Junior Bridge Engineer
Parsons Brinckerhoff
400 SW Sixth Ave, Suite 802
Portland, OR 97204-1628
503-478-2830 (direct)
503-274-8772 (front desk)

	Inland Conveyor	MAX 111	CHIPPY 002
(3a) Vessel Name			
(3b) Vessel Type	Flat deck self-unloading barge (with bin walls)	Flat deck barge (with bin walls)	Flat deck barge (with bin walls)
(3c) USCG O/N		643768	648823
(4a) Overall length	300 '	230 '	230 '
(4b) Width	84 '	60 '	60 '
(5) Draft (laden)	14 '	13 '	13 '
(5) Molded depth	16.5 '	15.5 '	15.5 '
(6) Air draft (unladen)			
(7) Desired air gap			
(8) Typical one-way passage per month	2 4	2 4	2 4
Jan	2	2	2
Feb	2	2	2
Mar	1 2	1	1
Apr	2	2	2
May	2	2	2
Jun	2	2	2
Jul	2	2	2
Aug	2	2	2
Sep	2	2	2
Oct	2	2	2
Nov	2	2	2
Dec	2	2	2

I-5

same

same

own

own

up empty
down full scrap

Cemex owned chartered to Bernert use 12 mo.

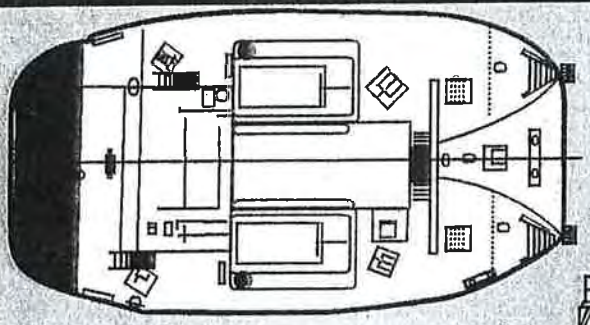
March drops in March

EQUIPMENT LIST

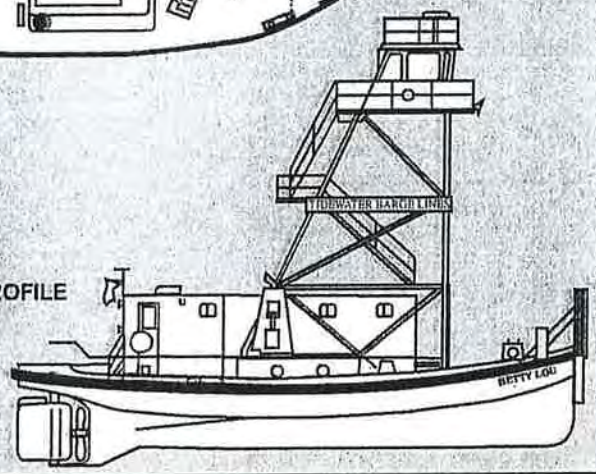
		DIMENSIONS					TYPE	OFFICIAL NUMBER	GROSS TON	YEAR BUILT
1.	CASCADES	93 x 30 x	8.50	3000HP		PUSH KNEE	555059	243.35	1974
	CHINOOK	77 x 22 x	8.00	1200HP		HARBOR	250205	96	1946
2.	CLEARWATER	89 x 28 x	10.50	3200HP		PUSH KNEE	268312	210	1954
	COLUMBIA	92 x 28 x	10.50	2750HP		HARBOR	516116	142	1968
3.	DESCHUTES	91 x 36 x	13.50	3600HP		TRACTOR TUG	1052828	320	1997
4.	LASSEN	70 x 24 x	7.30	2100HP		HARBOR	562754	136.3	1975
	PORTLAND	107 x 37 x	13.00	3200HP		TRACTOR TUG	635630	271.2	1981
	SANDY	41 x 12 x	5.00	165HP		LINE BOAT	244401	13	1943
	ST-6	100 x 44 x	5.00			T6 C. IRON			
	ST-10 (300T)	65 x 34 x	5.00			SPUD (RNR)			
	ST-11	260 x 38 x	12.00			SPUD (PDX)			
	ST-12	264 x 50 x	10.60			SPUD (PDX)	587324	1192	
	ST-13	195 x 35 x	11.50			SPUD	589535	919	
	ST-14	170 x 30 x	8.00			SPUD (FINLEY) DS			
	ST-15 (950T)	137 x 34 x	9.50			FLAT	274561	311	
	ST-16	170 x 36 x	8.00			SPUD (FINLEY) US			
	ST-20 (3600T)	273 x 42 x	16.50			GRAIN	1120104	1590	
	ST-21 (3600T)	273 x 42 x	16.50			GRAIN	1125022	1527	
	ST-33 (2750T)	244 x 42 x	14.00			GRAIN	500036	2009	
	ST-34 (2750T)	244 x 42 x	14.00			GRAIN	501866	2047	
	ST-35 (2500T)	207 x 42 x	14.50			GRAIN	534732	1979	
	ST-36 (2500T)	207 x 42 x	14.50			GRAIN	535181	1979	
	ST-37 (3000T)	242 x 42 x	14.00			GRAIN	559986	2158	
	ST-40 (3600T)	273 x 42 x	16.25			GRAIN	610259	2429	
	ST-41 (3600T)	273 x 42 x	16.25			GRAIN	613615	2429	
	ST-42 (3600T)	273 x 42 x	16.25			GRAIN	615352	2429	
	ST-43 (3600T)	273 x 42 x	16.25			GRAIN	624425	2429	
	ST-44 (3600T)	273 x 42 x	16.25			GRAIN	973819	1589	
	ST-45 (4200T)	298 x 42 x	16.50			GRAIN	1030167	1734	
	ST-46 (4200T)	298 x 42 x	16.50			GRAIN	1035976	1734	
	ST-47 (4200T)	298 x 42 x	16.50			GRAIN	1047323	1734	
	ST-48 (4200T)	298 x 42 x	16.50			GRAIN	1051794	1734	
5.	UMATILLA	65 x 24 x	8.00	1350HP		PUSH KNEE	613398	136	1979
	VANCOUVER	76 x 28 x	12.00	3200HP		TRACTOR TUG	990262	158	1993
6.	WILLAMETTE	91 x 36 x	13.50	3600HP		TRACTOR TUG	1085937	325	1999

TIDEWATER

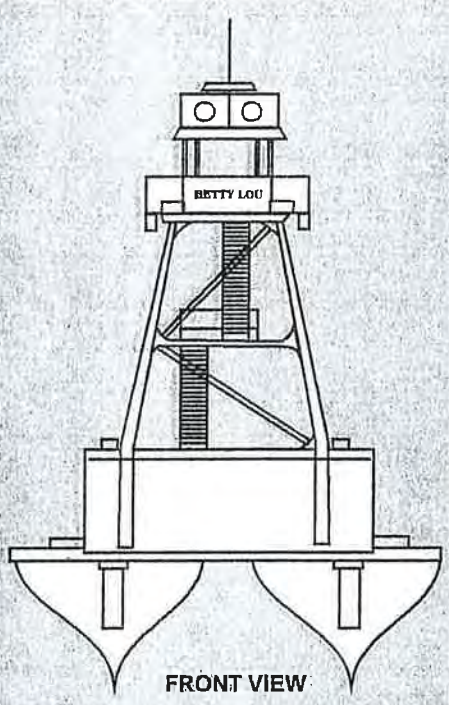
BETTY LOU



PLAN VIEW



OUTBOARD PROFILE



FRONT VIEW

Not to Scale

OWNER: *Tidewater Barge Lines, Inc.*
6305 NW Old Lower River Rd
Vancouver, WA 98660

PHONE: *(360)693-1491* ***FAX:*** *(360)694-8981*

OPERATOR: *Tidewater Barge Lines, Inc.*
6305 NW Old Lower River Rd
Vancouver, WA 98660

PHONE: *(360)693-1491* ***FAX:*** *(360)694-8981*

OFFICIAL NUMBER: *259542*

COFR NUMBER: *104834-10*

TIDEWATER DISPATCH
(800)562-1607

NATIONAL RESPONSE CENTER
(800)424-8802

LENGTH:	*70'*
BEAM:	*39' 7"*
DEPTH:	*9'*
HORSEPOWER:	*2,120*
PROPELLERS:	*Two 76" dia*
FUEL CAPACITY:	*10,500 gal*
LUBE OIL CAPACITY:	*580 gal*
FRESH WATER CAPACITY:	*1,000 gal*
EYE LEVEL:	*42' 6"*
FIXED HEIGHT:	*50'*
GROSS TONS:	*105*
NET TONS:	*71*
BARREL-O-BOOM:	*2*
SPILL KIT:	*1 set*

Developed By:
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Tug

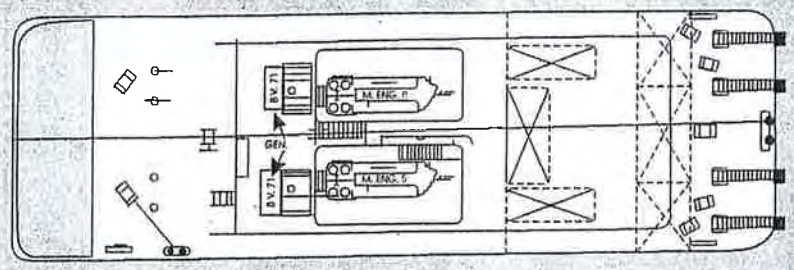
Tidewater/ICP/Graphics/Barge/Chief.cdr

4 upriver trips/year to Camas Oct - Jan. Mainly a harbor boat

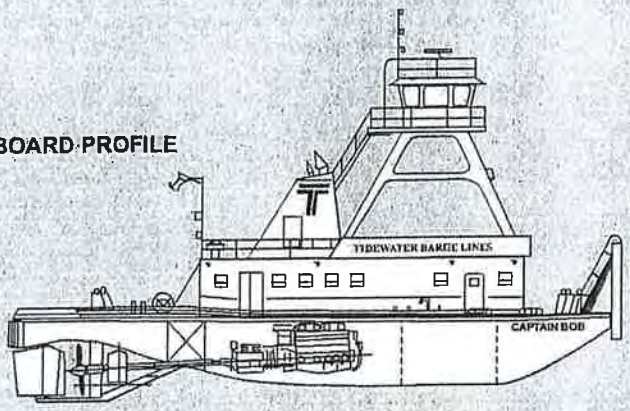
TIDEWATER

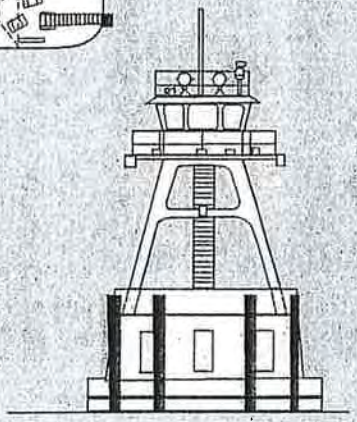
CAPTAIN BOB

PLAN VIEW



OUTBOARD PROFILE





FRONT VIEW

Not to Scale

OWNER: *Tidewater Barge Lines, Inc.*
6305 NW Old Lower River Rd
Vancouver, WA 98660

PHONE: *(360)693-1491* **FAX:** *(360)694-8981*

OPERATOR: *Tidewater Barge Lines, Inc.*
6305 NW Old Lower River Rd
Vancouver, WA 98660

PHONE: *(360)693-1491* **FAX:** *(360)694-8981*

OFFICIAL NUMBER: *553843*

COFR NUMBER: *104834-10*

TIDEWATER DISPATCH
(800)562-1607

NATIONAL RESPONSE CENTER
(800)424-8802

LENGTH:	*110'*
BEAM:	*34'*
DEPTH:	*11' 6"*
HORSEPOWER:	*3,000*
PROPELLERS:	*Two 106" dia*
FUEL CAPACITY:	*36,265 gal*
LUBE OIL CAPACITY:	*700 gal*
FRESH WATER CAPACITY:	*3,300 gal*
EYE LEVEL:	*43' 9"*
FIXED HEIGHT:	*50' 9"*
GROSS TONS:	*304*
NET TONS:	*206*
BARREL-O-BOOM:	*1*
SPILL KIT:	*1 set*

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Tug

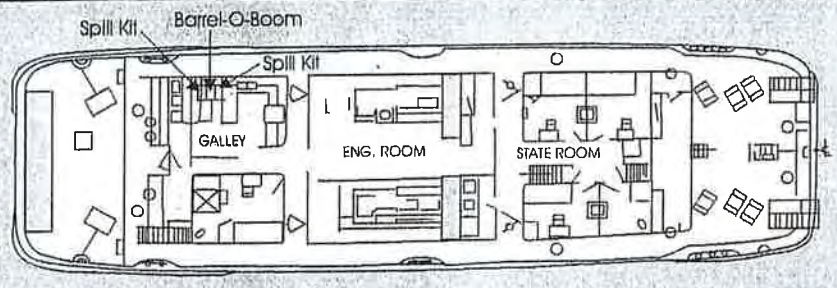
Tidewater/ICP/Graphics/Barge/Captain_Bob.cdr

8 upriver trips/year (ie Aug-Oct)

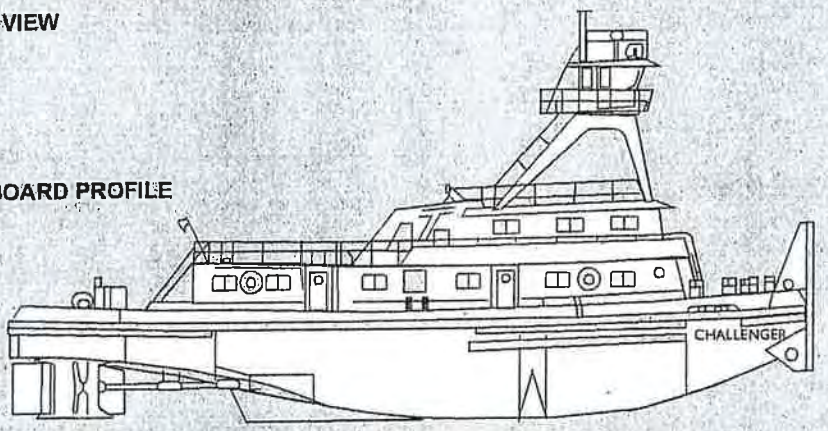
6 TRIPS

TIDEWATER

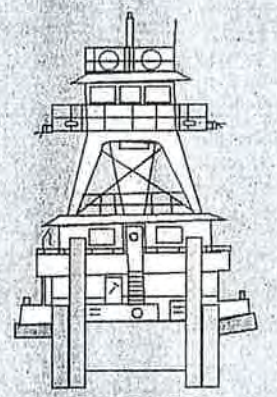
CHALLENGER



PLAN VIEW



OUTBOARD PROFILE



FRONT VIEW

Not to Scale

OWNER: *Tidewater Barge Lines, Inc.*
6305 NW Old Lower River Rd
Vancouver, WA 98660

PHONE: *(360)693-1491* **FAX:** *(360)694-8981*

OPERATOR: *Tidewater Barge Lines, Inc.*
6305 NW Old Lower River Rd
Vancouver, WA 98660

PHONE: *(360)693-1491* **FAX:** *(360)694-8981*

OFFICIAL NUMBER: *516611*

COFR NUMBER: *104834-10*

TIDEWATER DISPATCH
(800)562-1607

NATIONAL RESPONSE CENTER
(800)424-8802

LENGTH:	*111' 4"*
BEAM:	*33' 4"*
DEPTH:	*13' 8"*
HORSEPOWER:	*3,000*
PROPELLERS:	*Two 92" dia* *Two 93" dia Kort nozzle*
FUEL CAPACITY:	*29,000 gal*
LUBE OIL CAPACITY:	*800 gal*
FRESH WATER CAPACITY:	*3,000 gal*
EYE LEVEL:	*39'*
FIXED HEIGHT:	*48' 3"*
GROSS TONS:	*383*
NET TONS:	*260*
BARREL-O-BOOM:	*1*
SPILL KIT:	*1 set*

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Tug

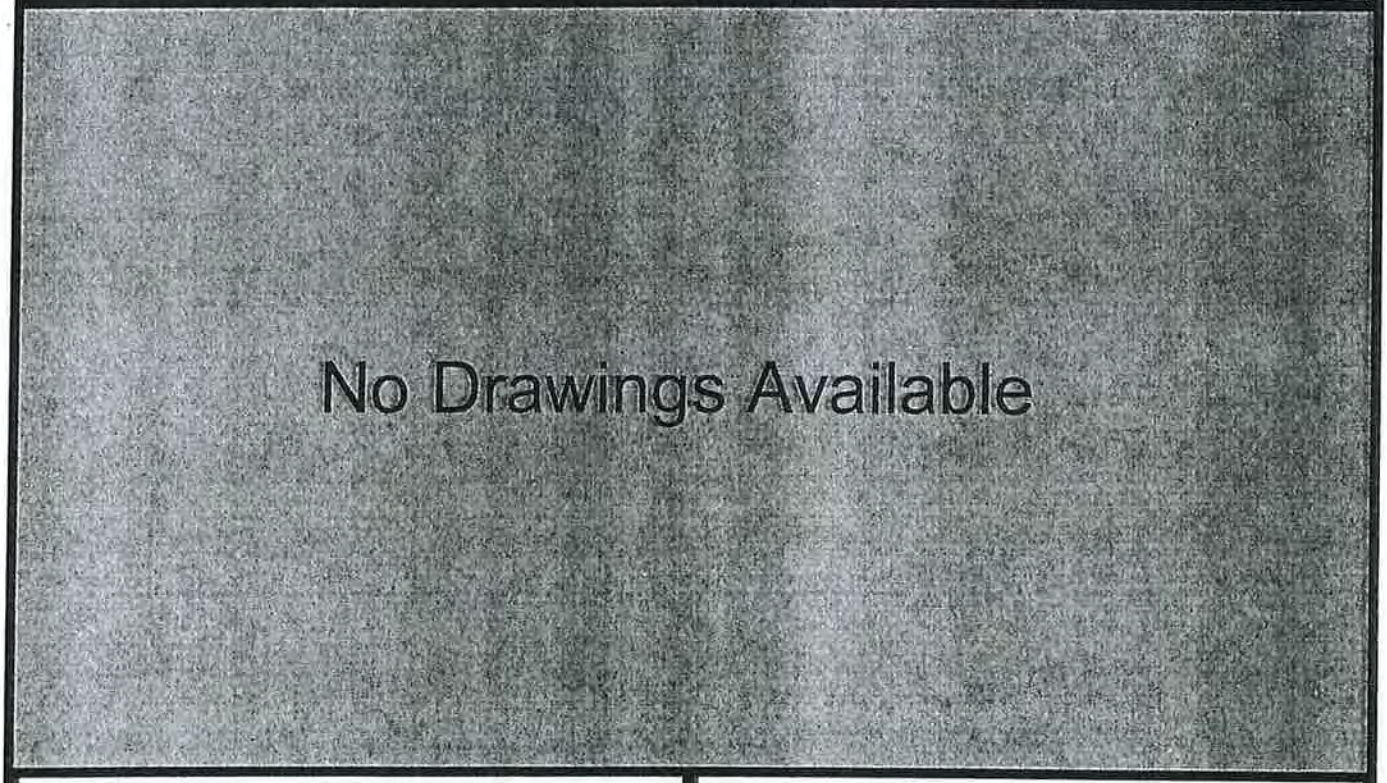
Tidewater/ICP/Graphics/Barge/challenger.cdr

8 Trips

Same freq. as Capt. Bob

TIDEWATER

CLARKSTON



OWNER: *Tidewater Barge Lines, Inc.*
6305 NW Old Lower River Rd
Vancouver, WA 98660

PHONE: *(360)693-1491* **FAX:** *(360)694-8981*

OPERATOR: *Tidewater Barge Lines, Inc.*
6305 NW Old Lower River Rd
Vancouver, WA 98660

PHONE: *(360)693-1491* **FAX:** *(360)694-8981*

OFFICIAL NUMBER: *514250*

COFR NUMBER: *104834-14*

TIDEWATER DISPATCH
(800)562-1607

NATIONAL RESPONSE CENTER
(800)424-8802

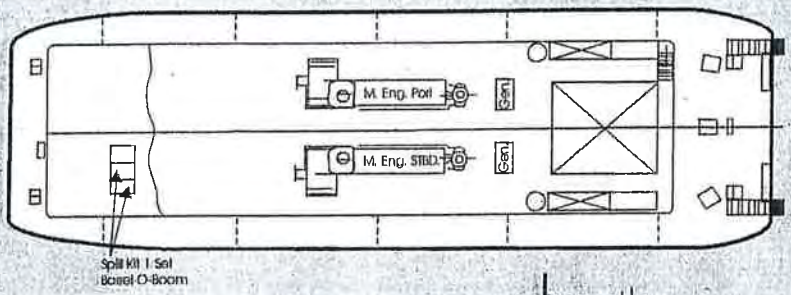
LENGTH:	*74.7'*
BEAM:	*28.5'*
DEPTH:	*10.8'*
HORSEPOWER:	3,000
PROPELLERS:	Three 72" dia.
FUEL CAPACITY:	20,000 gal
LUBE OIL CAPACITY:	*500 gal*
FRESH WATER CAPACITY:	*2,233 gal*
EYE LEVEL:	*42' 6"*
FIXED HEIGHT:	*48.2'*
GROSS TONS:	*149*
NET TONS:	*101*
BARREL-O-BOOM:	*1*
SPILL KIT:	*1 set*

Tug

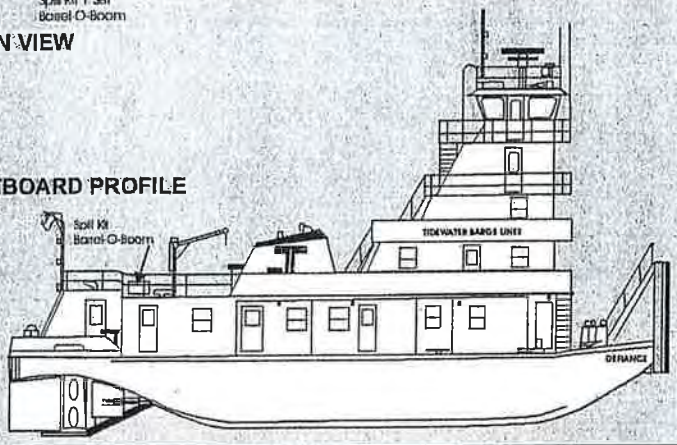
10 upriver trips/year throughout the year Harbor boat

TIDEWATER

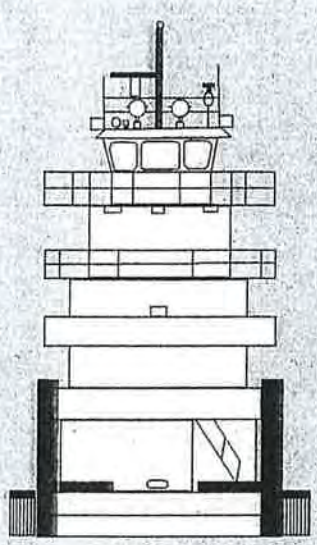
DEFIANCE



PLAN VIEW



OUTBOARD PROFILE



FRONT VIEW

Not to Scale

OWNER: *Tidewater Barge Lines, Inc.*
6305 NW Old Lower River Rd
Vancouver, WA 98660

PHONE: *(360)693-1491* **FAX:** *(360)694-8981*

OPERATOR: *Tidewater Barge Lines, Inc.*
6305 NW Old Lower River Rd
Vancouver, WA 98660

PHONE: *(360)693-1491* **FAX:** *(360)694-8981*

OFFICIAL NUMBER: *587247*

COFR NUMBER: *104834-10*

TIDEWATER DISPATCH
(800)562-1607

NATIONAL RESPONSE CENTER
(800)424-8802

LENGTH:	*95'*
BEAM:	*31'*
DEPTH:	*11' 6"*
HORSEPOWER:	*2,800*
PROPELLERS:	*Two 87" dia* *Two 88" dia Kort nozzles*
FUEL CAPACITY:	*38,360 gal*
LUBE OIL CAPACITY:	*1,000 gal*
FRESH WATER CAPACITY:	*5,175 gal*
EYE LEVEL:	*39' 6"*
FIXED HEIGHT:	*48' 6"*
GROSS TONS:	*295*
NET TONS:	*220*
BARREL-O-BOOM:	*1*
SPILL KIT:	*1 set*

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Tug

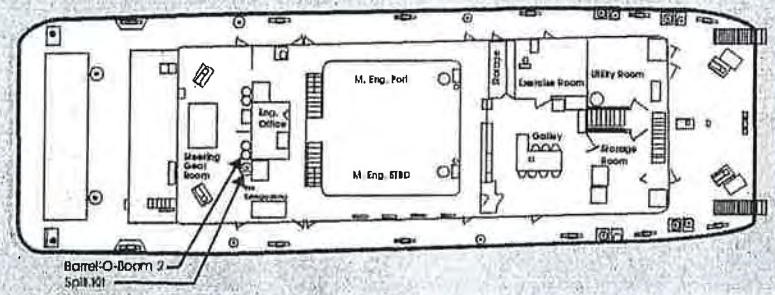
Tidewater/ICP/Graphics/Barge/Defiance.cdr

22 Trips

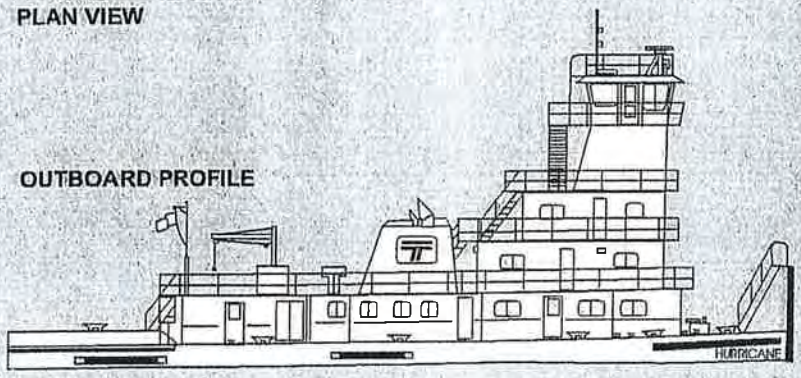
22 upriver trips / year throughout year
More during Aug-Oct (harvest season)

TIDEWATER

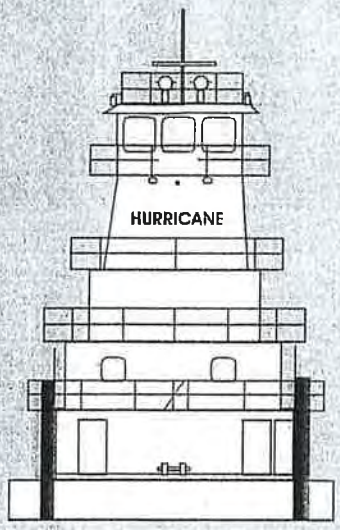
HURRICANE



PLAN VIEW



OUTBOARD PROFILE



FRONT VIEW

Not to Scale

OWNER: *Hickey Family Company*
1499 SE Tech Center Place, Suite 140
Vancouver, WA 98683 -9575

PHONE: *(360)604-4333* **FAX:** *(360)604-4343*

OPERATOR: *Tidewater Barge Lines, Inc.*
6305 NW Old Lower River Rd
Vancouver, WA 98660

PHONE: *(360)693-1491* **FAX:** *(360)694-89811*

OFFICIAL NUMBER: *505319*

COFR NUMBER: *104834-10*

TIDEWATER DISPATCH
(800)562-1607

NATIONAL RESPONSE CENTER
(800)424-8802

LENGTH:	*108' 11"*
BEAM:	*32'*
DEPTH:	*10' 6"*
HORSEPOWER:	*3,000*
PROPELLERS:	*Two 83" dia five blade* *Two 84" dia Kort nozzle*
FUEL CAPACITY:	*40,458 gal*
LUBE OIL CAPACITY:	*2,141 gal*
FRESH WATER CAPACITY:	*6,264 gal*
EYE LEVEL:	*41' 9.5"*
FIXED HEIGHT:	*48' 9"*
GROSS TONS:	*383*
NET TONS:	*261*
BARREL-O-BOOM:	*2*
SPILL KIT:	*1 set*

Developed By:
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Tug

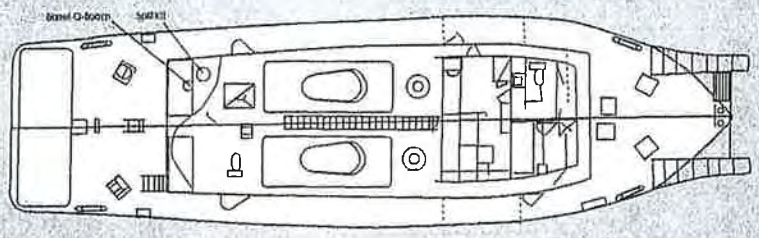
Tidewater/ICP/Graphics/Barge/Hurricane.cdr

Same frequency as Defiance

22 Trips

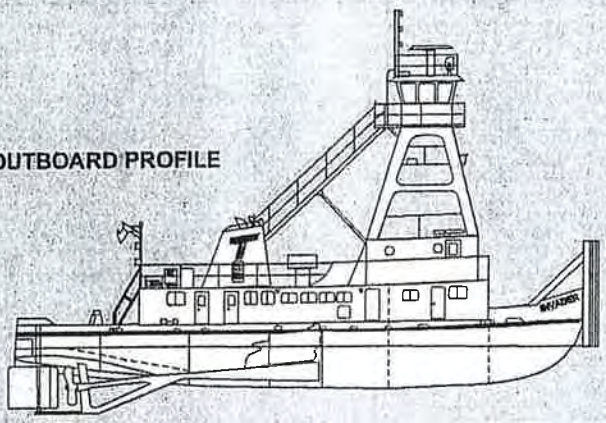
TIDEWATER

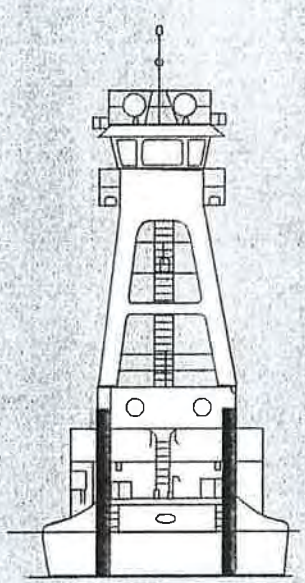
INVADER



PLAN VIEW

OUTBOARD PROFILE





FRONT VIEW

Not to Scale

OWNER: *Tidewater Barge Lines, Inc.*
6305 NW Old Lower River Rd
Vancouver, WA 98660

PHONE: *(360)693-1491* **FAX:** *(360)694-8981*

OPERATOR: *Tidewater Barge Lines, Inc.*
6305 NW Old Lower River Rd
Vancouver, WA 98660

PHONE: *(360)693-1491* **FAX:** *(360)694-8981*

OFFICIAL NUMBER: 239108

COFR NUMBER: *104834-10*

TIDEWATER DISPATCH
(800)562-1607

NATIONAL RESPONSE CENTER
(800)424-8802

LENGTH:	*95'*
BEAM:	*26'*
DEPTH:	*10'*
HORSEPOWER:	*1,700*
PROPELLERS:	*Two 70" dia*
FUEL CAPACITY:	*10,107 gal*
LUBE OIL CAPACITY:	*300 gal*
FRESH WATER CAPACITY:	*1,400 gal*
EYE LEVEL:	*40'*
FIXED HEIGHT:	*48'*
GROSS TONS:	*160*
NET TONS:	*108*
BARREL-O-BOOM:	*1*
SPILL KIT:	*1 set*

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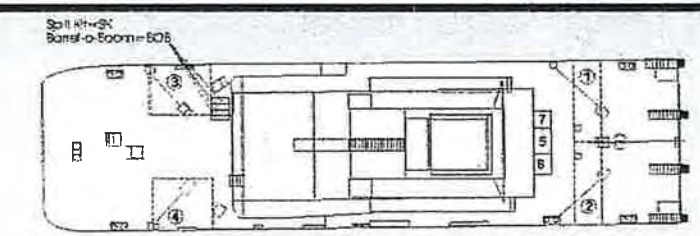
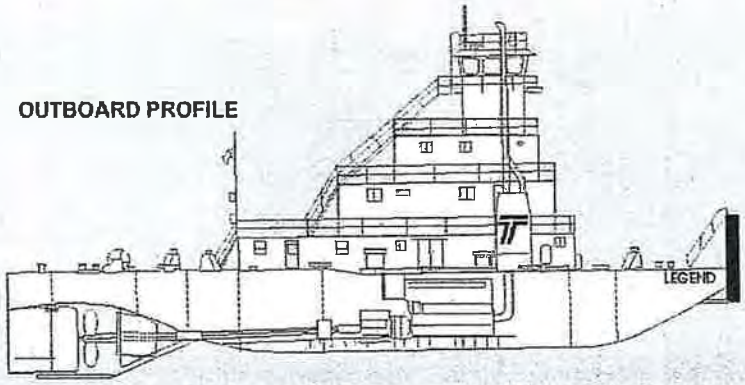
Tug

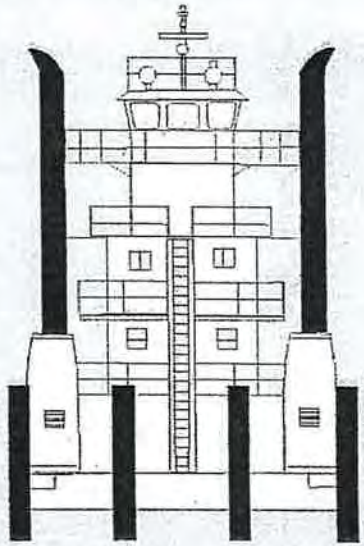
Tidewater/ICP/Graphics/Barge/invader.cdr

4 upriver trips/year April-July

TIDEWATER







Not to Scale

TANK CAPACITY TABLE: (CAPACITY GALS)

TANK	MAX	WORKING (95%)
Port bow	6112	5806
Starboard bow	6112	5806
Port stern	10488	9964
Starboard stern	10488	9964
Main Engine day tank	3960	3762
Generator day tank	789	750
Lube	2200	1980

Worst Case Discharge (BBLS)	Maximum Most Probable Discharge (BBLS)
956	95

FUEL
The Legend has four (4) diesel storage tanks. Two (2) are located in the bow - port and starboard and two are located in the stern - port and starboard. A main engine day tank supplies diesel to the main engines. A generator day tank supplies diesel to the generators. The ecology box is located on the starboard bow.

LUBE
The Legend has a lube oil storage tank located forward of the engine room, to the port side of the main engine day tank. The lube oil storage tank fill is a 2" deck hole in the lube oil tank cover (located aft and to port of center winch).

Detail transfer procedures are available in the Tidewater Operational Procedures notebook

June 2005

TidewaterVCP\Graphics\Bargelidwater.cdr

LEGEND

OWNER: Tidewater Barge Lines, Inc. 6305 NW Lower River Rd Vancouver, WA 98660	
PHONE: (360)683-1491 **FAX:** (360)694- 8981	
OPERATOR: Tidewater Barge Lines, Inc. 6305 NW Lower River Rd Vancouver, WA 98660	
PHONE: (360)683-1491 **FAX:** (360)694- 8981	
OFFICIAL NUMBER: 262975	
COFR NUMBER: 104864-10	
HULL MATERIAL:	Steel
ENGINE ROOM FIRE SYSTEM: Halon/CO2	
LENGTH:	127'
BEAM:	34'
DEPTH:	11' 6"
HORSEPOWER:	4,400
PROPELLERS:	Two 110" dia
FUEL CAPACITY:	37,950 gal
LUBE OIL CAPACITY:	1,980 gal
FRESH WATER CAPACITY:	3,500 gal
EYE LEVEL:	43' 6"
FIXED HEIGHT:	50' 5"
GROSS TONS:	412
NET TONS:	280
BARREL-O-BOOM:	2
SPILL KIT:	1 set

NRC INFORMATION
(800)582-1607
NATIONAL RESPONSE CENTER:
(800)424-8802

Tug

Same frequency as the Defiance

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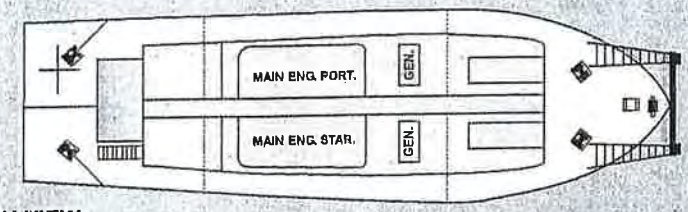
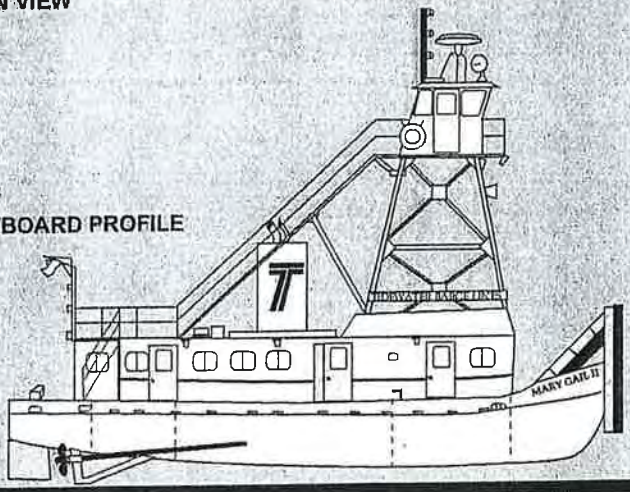
TIDEWATER

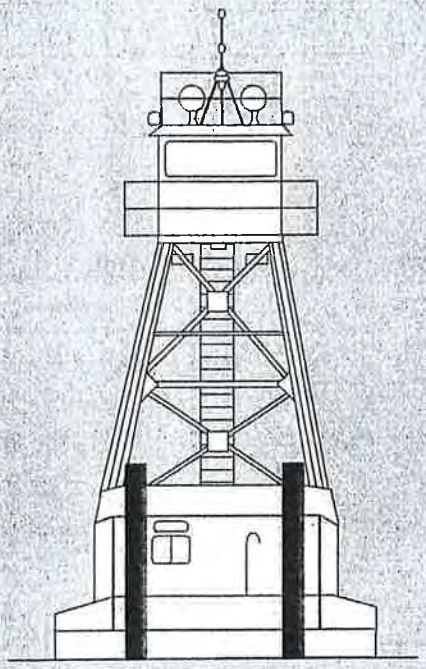
MARY GAIL



PLAN VIEW



OUTBOARD PROFILE



FRONT VIEW

Not to Scale

OWNER: *Tidewater Barge Lines, Inc.*
6305 NW Old Lower River Rd
Vancouver, WA 98660

PHONE: *(360)693-1491* **FAX:** *(360)694-8981*

OPERATOR: *Tidewater Barge Lines, Inc.*
6305 NW Old Lower River Rd
Vancouver, WA 98660

PHONE: *(360)693-1491* **FAX:** *(360)694-8981*

OFFICIAL NUMBER: *247125*

COFR NUMBER: *104834-10*

TIDEWATER DISPATCH
(800)562-1607

NATIONAL RESPONSE CENTER
(800)424-8802

LENGTH:	*76'*
BEAM:	*24'*
DEPTH:	*9' 6"*
HORSEPOWER:	*1,150*
PROPELLERS:	*Two 76" dia*
FUEL CAPACITY:	*7,038 gal*
LUBE OIL CAPACITY:	*517 gal*
FRESH WATER CAPACITY:	*1,150 gal*
EYE LEVEL:	*36'*
FIXED HEIGHT:	*42'*
GROSS TONS:	*97*
NET TONS:	*66*
BARREL-O-BOOM:	*1*
SPILL KIT:	*1 set*

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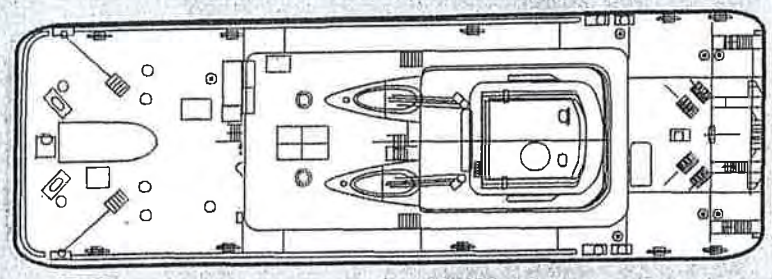
Tug

Tidewater/ICP/Graphics\Barge\Mary_Gail.cdr

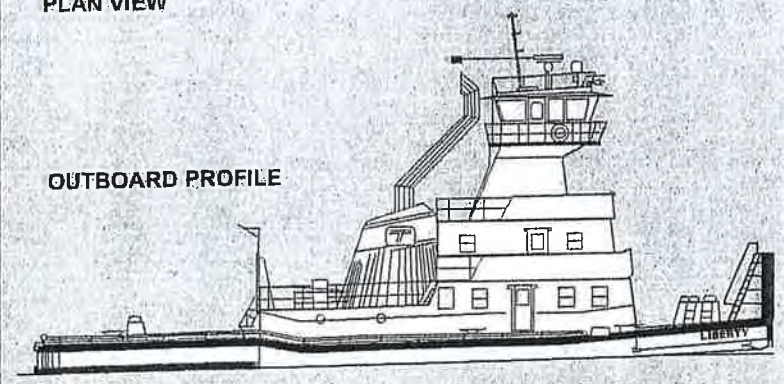
Same freaency as the Invader

TIDEWATER

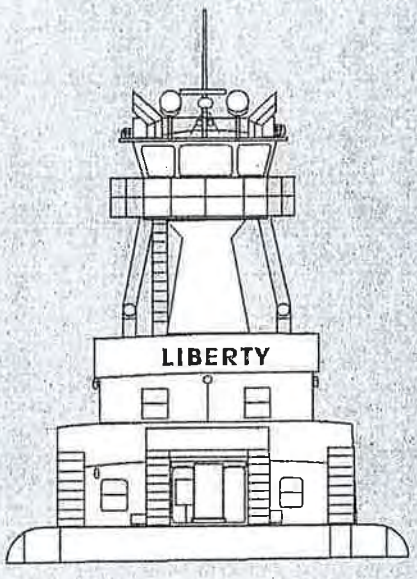
LIBERTY



PLAN VIEW



OUTBOARD PROFILE



FRONT VIEW

Not to Scale

OWNER: Tidewater Barge Lines, Inc.
6305 NW Old Lower River Rd
Vancouver, WA 98660

PHONE: (360)693-1491 **FAX:** (360)694-8981

OPERATOR: Tidewater Barge Lines, Inc.
6305 NW Old Lower River Rd
Vancouver, WA 98660

PHONE: (360)693-1491 **FAX:** (360)694-8981

OFFICIAL NUMBER: 526140

COFR NUMBER: 104834-10

TIDEWATER DISPATCH
(800)562-1607

NATIONAL RESPONSE CENTER
(800)424-8802

LENGTH:	108'
BEAM:	34'
DEPTH:	9' 6"
HORSEPOWER:	3,000
PROPELLORS:	Two 84" dia
FUEL CAPACITY:	21,800
LUBE OIL CAPACITY:	300
FRESH WATER CAPACITY:	10,000
EYE LEVEL:	37'
FIXED HEIGHT:	44'
GROSS TONS:	272
NET TONS:	129
BARREL-O-BOOM:	2
SPILL KIT:	1 set

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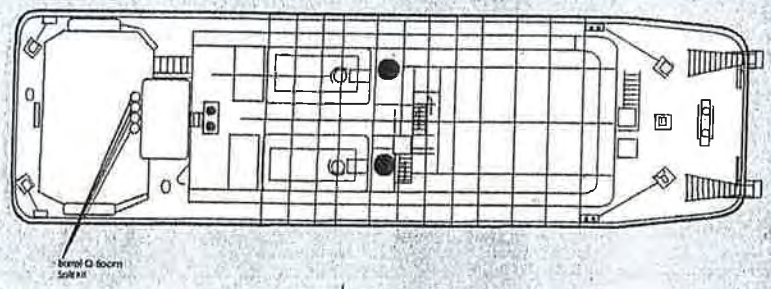
Tug

Tidewater/ICP/Graphics\Barge\liberty.cdr

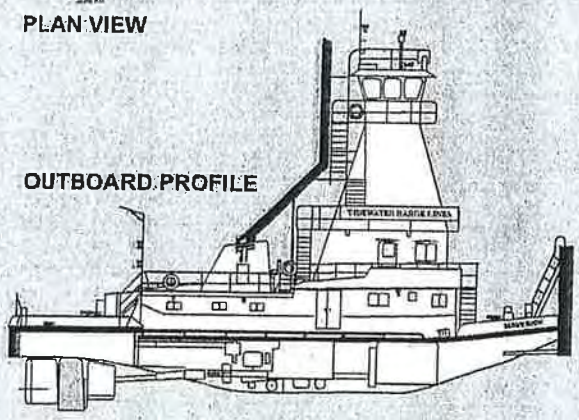
2 upriver trips/year for emergencies (anytime)
Dedicated downriver boat

TIDEWATER

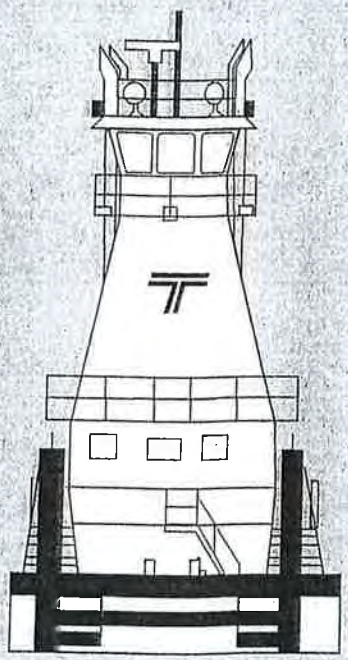
MAVERICK



PLAN VIEW



OUTBOARD PROFILE



FRONT VIEW

Not to Scale

OWNER: *Tidewater Barge Lines, Inc.*
6305 NW Old Lower River Rd
Vancouver, WA 98660

PHONE: *(360)693-1491* **FAX:** *(360)694-8981*

OPERATOR: *Tidewater Barge Lines, Inc.*
6305 NW Old Lower River Rd
Vancouver, WA 98660

PHONE: *(360)693-1491* **FAX:** *(360)694-8981*

OFFICIAL NUMBER: *618125*

COFR NUMBER: *104834-10*

TIDEWATER DISPATCH
(800)562-1607

NATIONAL RESPONSE CENTER
(800)424-8802

LENGTH:	*82'*
BEAM:	*26' 6"*
DEPTH:	*7' 6"*
HORSEPOWER:	*2,350*
PROPELLERS:	*Two 75" dia* *Two 76" dia Kort nozzles*
FUEL CAPACITY:	*17,664 gal*
LUBE OIL CAPACITY:	*517 gal*
FRESH WATER CAPACITY:	*1,000 gal*
EYE LEVEL:	*42'*
FIXED HEIGHT:	*52'*
GROSS TONS:	*150*
NET TONS:	*102*
BARREL-O-BOOM:	*2*
SPILL KIT:	*1 set*

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Tug

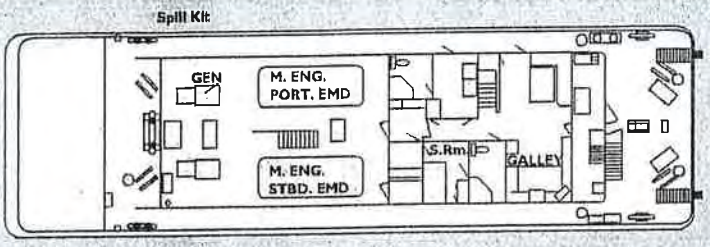
Tidewater/ICP/Graphics/Barge/Maverick.cdr

10 upriver trips/year throughout the year

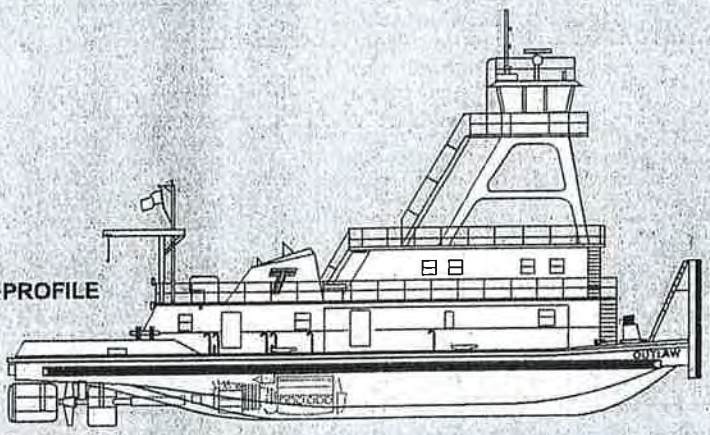
TIDEWATER

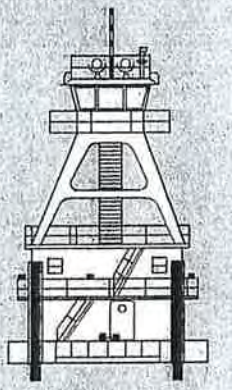
OUTLAW

PLAN VIEW



OUTBOARD PROFILE





FRONT VIEW

Not to Scale

OWNER: *Hickey Family Company*
1499 SE Tech Center Place, Suite 140
Vancouver, WA 98683 -9575

PHONE: *(360)604-4333* **FAX:** *(360)604-4343*

OPERATOR: *Tidewater Barge Lines, Inc.*
6305 NW Old Lower River Rd
Vancouver, WA 98660

PHONE: *(360)693-1491* **FAX:** *(360)694-89811*

OFFICIAL NUMBER: *561814*

COFR NUMBER: *104834-10*

TIDEWATER DISPATCH
(800)562-1607

NATIONAL RESPONSE CENTER
(800)424-8802

LENGTH:	*104'*
BEAM:	*31' 6"*
DEPTH:	*10'*
HORSEPOWER:	*3,000*
PROPELLERS:	*Two 87" dia* *Two 88" dia Kort nozzles*
FUEL CAPACITY:	*43,000 gal*
LUBE OIL CAPACITY:	*2,600 gal*
FRESH WATER CAPACITY:	*8,000 gal*
EYE LEVEL:	*40'0"*
FIXED HEIGHT:	*53'*
GROSS TONS:	*286*
NET TONS:	*194*
BARREL-O-BOOM:	*1*
SPILL KIT:	*1 set*

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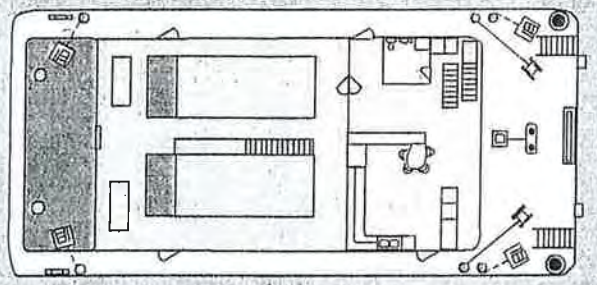
Tug

Tidewater/ICP/Graphics/Barge/outlaw.cdr

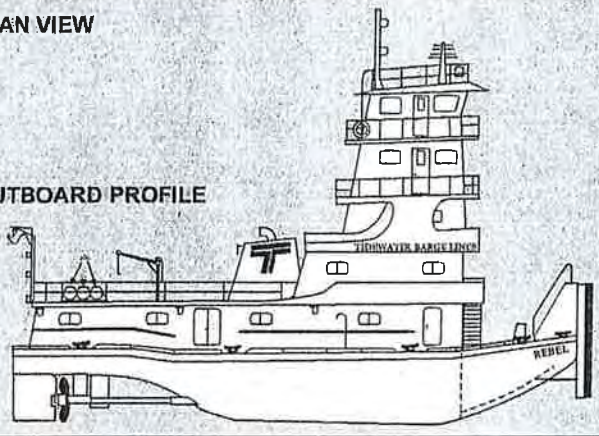
20 upriver trips/year throughout year (~10 Aug-Oct)

TIDEWATER

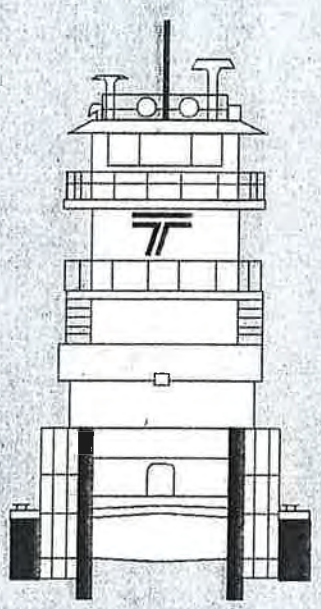
REBEL



PLAN VIEW



OUTBOARD PROFILE



FRONT VIEW

Not to Scale

OPERATOR: *Tidewater Barge Lines, Inc.*
6305 NW Old Lower River Rd
Vancouver, WA 98660

PHONE: *(360)693-1491* ***FAX:*** *(360)694-8981*

OPERATOR: *Tidewater Barge Lines, Inc.*
6305 NW Old Lower River Rd
Vancouver, WA 98660

PHONE: *(360)693-1491* ***FAX:*** *(360)694-8981*

OFFICIAL NUMBER: *586751*

COFR NUMBER: *104834-10*

TIDEWATER DISPATCH
(800)562-1607

NATIONAL RESPONSE CENTER
(800)424-8802

LENGTH:	*87'*
BEAM:	*30'*
DEPTH:	*11' 6"*
HORSEPOWER:	*1,900*
PROPELLERS:	*Two 88" dia*
FUEL CAPACITY:	*37, 208 gal*
LUBE OIL CAPACITY:	*1,100 gal*
FRESH WATER CAPACITY:	*3,076 gal*
EYE LEVEL:	*43' 4"*
FIXED HEIGHT:	*48'*
GROSS TONS:	*261*
NET TONS:	*177*
BARREL-O-BOOM:	*1*
SPILL KIT:	*1 set*

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Tug

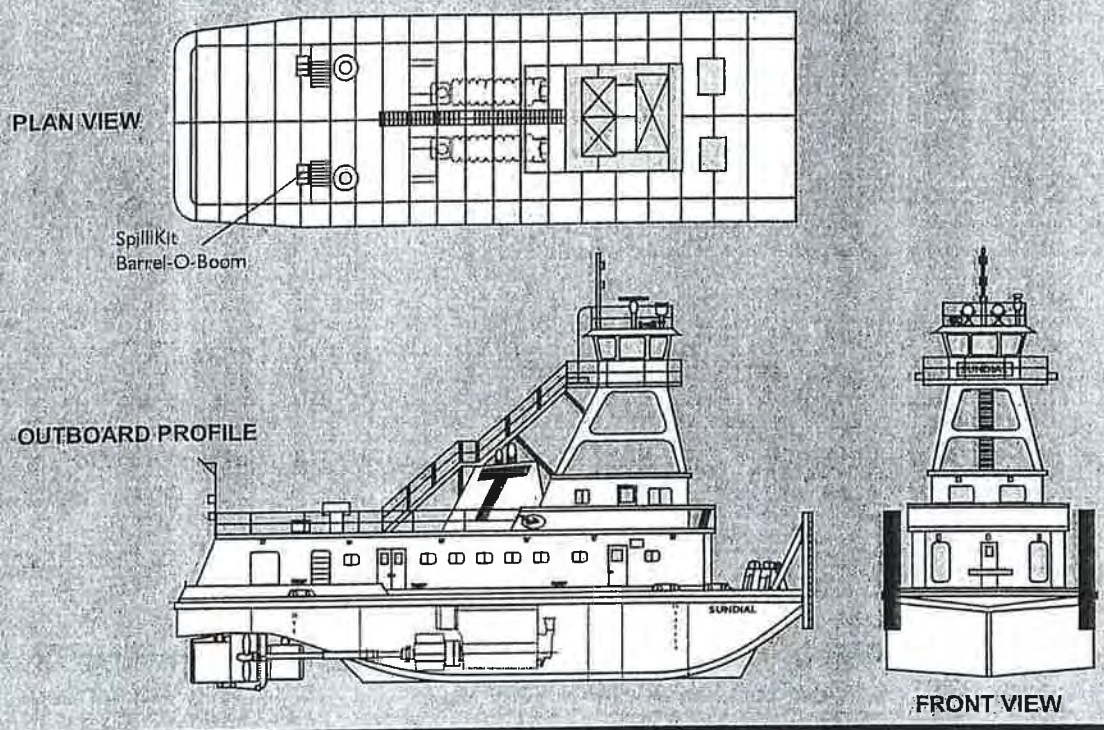
Tidewater/ICP/Graphics/Barge/Rebel.cdr

Same frequency as the Defiance

Same frequency as the Defiance

TIDEWATER

SUNDIAL



OWNER: Hickey Family Company
1499 SE Tech Center Place, Suite 140
Vancouver, WA 98683 -9575

PHONE: (360)604-4333 **FAX:** (360)604-4343

OPERATOR: Tidewater Barge Lines, Inc.
6305 NW Old Lower River Rd
Vancouver, WA 98660

PHONE: (360)693-1491 **FAX:** (360)694-89811

OFFICIAL NUMBER: 652357

COFR NUMBER: 104834-10

TIDEWATER DISPATCH
(800)562-1607

NATIONAL RESPONSE CENTER
(800)424-8802

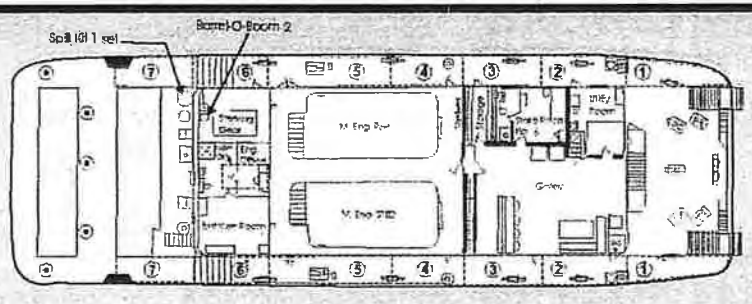
LENGTH:	94' 6"
BEAM:	31' 9"
DEPTH:	12' 6"
HORSEPOWER:	3,400
PROPELLERS:	Two 87" dia Two 88" dia Kort nozzle
FUEL CAPACITY:	38,000 gal
LUBE OIL CAPACITY:	1,496 gal
FRESH WATER CAPACITY:	3,500 gal
EYE LEVEL:	39' 6"
FIXED HEIGHT:	48'
GROSS TONS:	334'
NET TONS:	227
BARREL-O-BOOM:	1
SPILL KIT:	1 set

Developed By:
TRP TECHNICAL RESPONSE PLANNING CORPORATION www.trpcorp.com | (281) 955-9600

Tug

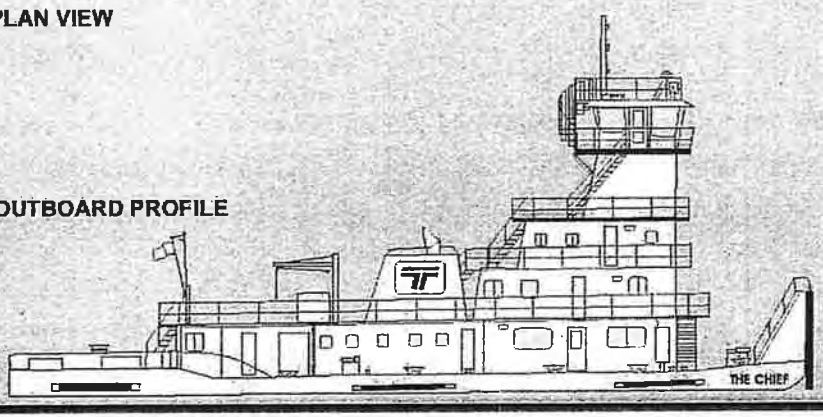
TIDEWATER

THE CHIEF

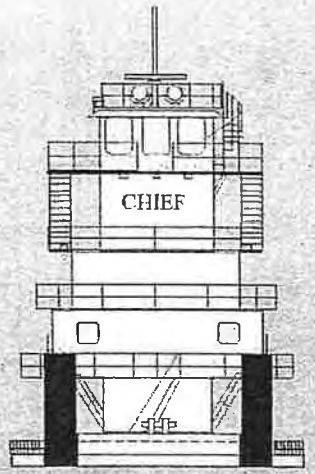


Not to Scale

PLAN VIEW



OUTBOARD PROFILE



FRONT VIEW

OWNER: Tidewater Barge Lines, Inc. 6305 NW Lower River Rd Vancouver, WA 98660	
PHONE: (360)683-1491 **FAX:** (360)694- 8981	
OPERATOR: Tidewater Barge Lines, Inc. 6305 NW Lower River Rd Vancouver, WA 98660	
PHONE: (360)683-1491 **FAX:** (360)694- 8981	
OFFICIAL NUMBER: 514987	
COFR NUMBER: 104864-10	
HULL MATERIAL:	Steel
ENGINE ROOM FIRE SYSTEM : CO2	
LENGTH:	121' 6"
BEAM:	40'
DEPTH:	11'
HORSEPOWER:	4,300
PROPELLERS:	Two 95" dia Two 96" dia Kort nozzels
FUEL CAPACITY:	63,662 gal
LUBE OIL CAPACITY:	2,280 gal
FRESH WATER CAPACITY:	8,785 gal
EYE LEVEL:	43'
FIXED HEIGHT:	49' 9"
GROSS TONS:	575
NET TONS:	365
BARREL-O-BOOM:	1
SPILL KIT:	1 set

TIDEWATER DISPATCH
(800)562-1637
NATIONAL RESPONSE CENTER:
(800)424-8802

ANK CAPACITY TABLE: (CAPACITY GALS)

ANK	MAX	WORKING (95%)
2 port & starboard (ea)	5860	5567
3 port & starboard (ea)	7340	6973
4 port & starboard (ea)	7480	7106
5 port & starboard (ea)	7175	6816
6 port & starboard (ea)	3976	3777
ube	2400	2280

Worst Case Discharge (BBLS)	Maximum Most Probable Discharge (BBLS)
1573	157

FUEL
The Chief has seven (7) tanks on each side of the hull. The #1 and #7 tanks are not used. The #4 tanks are used as day tanks for both the main and generator engines. The port and starboard systems are independent of each other. The fuel transfer pump is located in the port Generator Room.

LUBE
The Chief has a lube oil storage tank located on the aft bulkhead, center of the boat. The lube oil tank is a free drop tank. The tank fills from the header inside the ecology box at the stern of the main deck, center of house.

Detail transfer procedures are available in the Tidewater Operational Procedures notebook

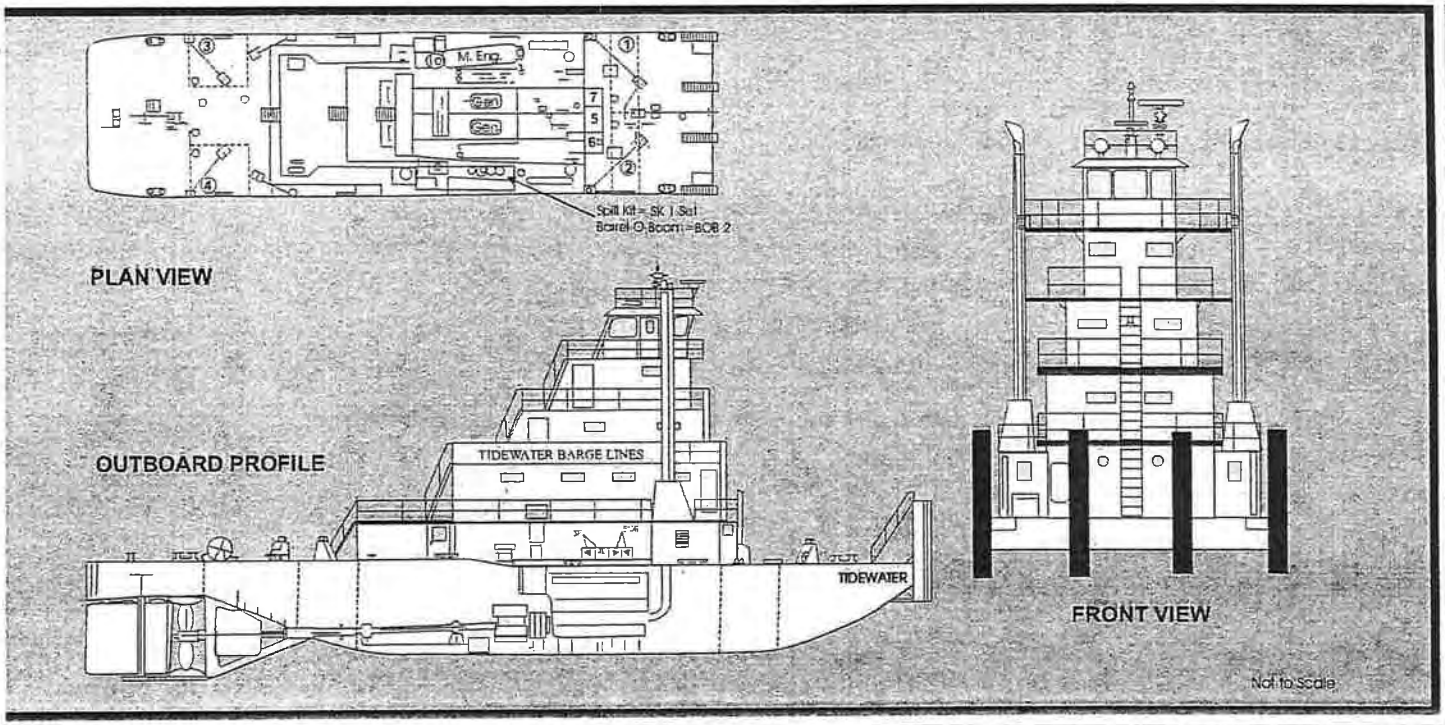
June 2005

Tug

waler\TCP\Graphics\Barge\chief.cdr

Same frequency as the Defiance

TIDEWATER



ANK CAPACITY TABLE: (CAPACITY GALS)

ANK	MAX	WORKING (95%)
ort bow	7447	7075
tarboard bow	7447	7075
ort stern	10311	9795
tarboard stern	10311	9795
lain Engine day tank	3958	3760
enerator day tank	789	750
ube	2200	1980

Worst Case Discharge (BBLS)	Maximum Most Probable Discharge (BBLS)
1011	101

FUEL
The Tidewater has four (4) diesel storage tanks. Two (2) are located in the bow - port and starboard and two are located in the stern - port and starboard. A main engine day tank supplies diesel to the main engines. A generator day tank supplies diesel to the generators. The diesel fuel header is in the starboard bow ecology box.

LUBE
The Tidewater has a lube oil storage tank located forward of the engine room, to the port side of the main engine day tank. The lube oil storage tank has a capacity of 2,200 gallons. The lube oil storage tank fill is on the bow - through a plug hole in the lube oil storage tank hatch (the hatch is painted black).

Detail transfer procedures are available in the Tidewater Operational Procedures notebook

June 2005

ater\ICP\Graphics\Barge\tidwater.cdr

TIDEWATER

OWNER: Tidewater Barge Lines, Inc.
6305 NW Lower River Rd
Vancouver, WA 98660

PHONE: (360)683-1491 **FAX:** (360)694- 8981

OPERATOR: Tidewater Barge Lines, Inc.
6305 NW Lower River Rd
Vancouver, WA 98660

PHONE: (360)683-1491 **FAX:** (360)694- 8981

OFFICIAL NUMBER:	277141
COFR NUMBER:	104864-10
HULL MATERIAL:	Steel
ENGINE ROOM FIRE SYSTEM :	Halon/CO2
LENGTH:	127'
BEAM:	34'
DEPTH:	11' 6"
HORSEPOWER:	3,600
PROPELLERS:	Two 107" dia Two 108" dia Kort nozzels
FUEL CAPACITY:	40,260 gal
LUBE OIL CAPACITY:	2,200 gal
FRESH WATER CAPACITY:	3,730 gal
EYE LEVEL:	42' 6"
FIXED HEIGHT:	49' 6"
GROSS TONS:	468
NET TONS:	318
BARREL-O-BOOM:	1
SPILL KIT:	1 set

TIDEWATER DISPATCH
(800)562-1607
NATIONAL RESPONSE CENTER:
(800)424-8802

Tug

Same frequency as the Reliance

From: Geoff Doerfler [geoff.doerfler@tidewater.com]
Sent: Friday, March 02, 2012 10:55 AM
To: Rabby, Jennifer
Subject: RE: Willamette slough

HI Jennifer, we are fine with a minimum clearance of 75' including the air gap. This is at 16' (flood) river stage. We would like 90' at flood stage. And no we enter from the other side of the slough we would not transit under I 5 at Jantzen Beach.

Geoff Doerfler
TIDEWATER
Dispatch and Logistics Manager
Tidewater Barge Lines
Email: geoff.doerfler@tidewater.com
Direct line: 360-759-0301
Cellular phone: 503-679-0027

From: Rabby, Jennifer [mailto:Rabby@pbworld.com]
Sent: Thursday, March 01, 2012 5:15 PM
To: Geoff Doerfler
Subject: RE: Willamette slough

Thanks for following up, Geoff, and thank you again for meeting with me yesterday. We're referring to it as the Oregon Slough or North Portland Harbor, but you're correct, it's the area where Diversified is located. Specifically what we're trying to find out is if you're going under the portion of I-5 that connects from the Portland side to Hayden Island to go into the Oregon Slough? It seems that many users just go in from whichever side (east or west) they need to get to so they don't go under that portion of I-5.

Also, were you able to confirm if 2' is sufficient clearance ("air gap") above your highest point and if your tallest vessel is the Outlaw at 53'?

Thanks again!

Jennifer Rabby, AICP
Parsons Brinckerhoff
400 SW Sixth Avenue, Suite 802
Portland, Oregon 97204
Phone: 503-417-9359
rabby@pbworld.com

Please consider the environment before printing this email

From: Geoff Doerfler [mailto:geoff.doerfler@tidewater.com]
Sent: Thursday, March 01, 2012 2:14 PM
To: Rabby, Jennifer
Subject: Willamette slough

Hi Jennifer:

Yesterday you asked me about trips in the Willamette Slough. I may have misunderstood the location you pointed out. If this is the waterway which Diversified marine is located on, south of Jantzen beach, we do go in there from time to time for work. Maybe 10 trips per year.

Geoff Doerfler
TIDEWATER
Dispatch and Logistics Manager
Tidewater Barge Lines
Email: geoff.doerfler@tidewater.com
Direct line: 360-759-0301
Cellular phone: 503-679-0027

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manager

From: FBocarde@aol.com

Sent: Thursday, February 23, 2012 8:24 AM

To: manager@portlandyc.com

Subject: Re: Gary

Attachments: PYC 10 largest sailboats.xls

Hi Gary,

I pulled up a sheet my committee used last year for my Moorage Design Committee. I think the list is also on the Club's computer. It shows all the boats in the Open/Combined moorage by length. It does not show beam, draft or height, but as a general rule they will have beams from 12-17', height from 65-85' and drafts from 5-12'. The office also maintains files on the individual boats that might show more info.

Anyway, I attached a file with the 10 largest. Hope that helps.

Frank

In a message dated 2/23/2012 12:07:24 A.M. Pacific Standard Time, manager@portlandyc.com writes:

> Hello Frank,
>
> Did you come to any conclusions about how to capture the CRC information using River User Data Sheets? Boat size etc...
>
> Gary Campbell
>
> o: 503-285-1922
>
> c: 360-597-3534

10 largest PYC sailing yachts

Name	Owner	length	builder	slip
Whisper	Grabisch	57	Searif	A1
Sargasso	Eudaly	54	Spencer	C14
Luscious	Knab	54	Hunter	C10
Galatea	Entler	54	Hunter	C11
Camelot	Shaw	54	Hunter	C13
Runaway	Fawcett	51	Beneteau	C15
Moondance	Padget	50	Gulfstar	N5
Halsey	Butler	53	Mapleleaf	D18
Sovereign	Olenshaw	53	Hans Christian	A2
Rya	McCann	49	Hylas	N1

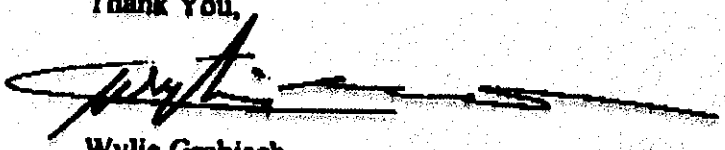
March 3, 1995

Bob Martin
Moorage Chairman

I hearby request to be put on the move up list.

Boat: Name - Brava
Type - C/C 41'
Beam - 13'
Draft - 8'

Thank You,



Wylie Grabisch
#5155

PORTLAND YACHT CLUB MOVE UP LIST 2/29/12 OPEN MOORAGE

MEM #	LAST NAME	FIRST NAME	REQUEST DATE	S/P	BOAT SIZE	BOAT NAME	BEAM	NOTES
0590	Butler	Jim	06/01/93	S	50'	HALSEY	14'	D18
0820	Damon	Bob	11/05/94	S	27'	TACHTICIAN	12'	B19
1910	Martin	Bob	03/02/95	S	35'	ROLLERBALL	12'	C5
2720	Shaw	Howard	02/21/97	S	54'	CAMELOT	11'4"	C13
0890	Dominey	Dick	11/07/97	P	42'	CON BRIO		F9
1600	Johnson	Nick	12/01/97	S	39'	MOLODEX	12'3"	A3
5655	Griffin	John	03/04/98	P	45'	SOLICE	14'	I3
5630	Walter	Brian	04/20/98	S	36'	PAP'S CHOICE	10'	B17
5740	Winter	Scott	11/15/98					
3250	Wilson	David	12/04/99	S	31'	RHUMB RUNNER	12'	D3
1883	Lyon	Bob	01/05/01	S	34'	BLUE JAY	11'	C4
5100	Colby	John	02/18/02	S	42'	IRIS	13'	D5
2972	Timmerman	Ron	03/31/02	S	41'	L'ADVENTURE	13'2"	D17
5885	Bieker	Ralph	10/21/02	S	32'	WESTERN GREBE	10.5'	B10
3210	Wilcox	Ken	11/21/03	S	41'	SILVA		C2
6825	Lewis	Michael	12/15/03	S	42'	WIND RAVEN	14'	D19
1690	Kelly	Tom	05/30/05	S	40'	Anam Cara		C1
6365	Entler	Terri	08/08/05	S	54'	Galatea	13'	C11
2698	Shambaugh	Craig	10/10/05	S	30'	Irie		D4
6870	Bishop	Charlie	07/17/06	S	45'6"	Tropicale	13'11"	N8
3292	Witschard	Walter	11/01/07	S	38'	Keydet	12"6'	D11
7580	Hauge	Tom	03/08/08	S	33'	Crazy Mo	11'6	D111
6765	Campbell	Scott	05/11/08	S	46'	Riva	13.5'	N11
6820	Burns	Sue	06/19/08	S	30'	Raven		D102
1430	Hendrickson	Tom	07/01/08	S	30'	Therapy	6'	
1369	Hazzard	Fred	08/07/08	S	44'	Fury	13'6"	D10
5905	Dickson	Dan	09/18/08	S	43'10"	Ecstasy	12'6"	A17
5385	Hosticka	Carl	02/03/09	S	33'	Little Miss Sunshine	12'6"	B12
7505	Dorn	Chris	04/21/09	S	34'	Libertas	11'6"	A6
5695	Collins	Todd	07/15/09	S	34'	Three Monkeys	11'6"	A13
1908	Smith	Berkeley	12/07/09	S	35'9"	Hot spur	11'9"	D8
5440	Creegan	John	02/13/10	S	31'5"	Sirocco	11'5"	A12
7840	Sinclair	Jim	05/07/10	S	30'	Dazzle	10'10"	B16
7830	Johnson	Terry	06/03/10	S	34'	Ozymandias	11'	A7
7835	Rice	Matt	06/11/10	S	43'	Selkie	11.4'	B22
7425	Hedges	Brian	11/16/10	S	34'	Mabe	14'	B+11
6290	MacGregor	Nancy	12/19/10	S	39'	Child of the Mist	10'	A10
1900	Markham	Tom	12/21/10	S	36'	Snowgoose	10'	Dry Dock
7915	Halle	John	01/17/11	S	36'	Mystique	11'6"	N 103
920	Drake	Jon	03/01/11	S	32'	Antares	11'9"	
5230	Becker	Jack	06/24/11	S	35'6"	Passage	11'7"	N 110
7955	Jones	Floyd	08/01/11	S	25'	Mirage	11'	B 3
7850	LeHericy	Xavier	09/07/11	S	38'	Rhapsodie	12'	D16
1885	Madden	Jim	11/28/11	S	29'8"	Lolita	10'6"	B 1
6860	Wells	Rod	01/31/12					

PORTLAND YACHT CLUB — MOVE IN LIST — OPEN MOORAGE

2/29/12

MEM #	LAST NAME	FIRST NAME	REQUEST DATE	S/P	BOAT SIZE	BOAT NAME	BEAM	NOTES
6330	Stringfield	Tom	03/08/00	S	36'	Vixen		
475	Brice	George	10/06/03	P	50'	NIRVANA	14'6"	temp headwalk
6805	McDonald	Michael	10/22/05	S	37'	Just Us II		McGuire
6340	Mitchem	Jack	10/24/05	S	34'	Wy'east	10'	RCYC
6760	Nitchie	Skip	07/05/06	S	20'		7'	
7210	Stonecliffe	George	10/19/07	S	45'	Julia Max	13'	Tomahawk Bay
7880	Latimer	Dave	07/21/10	S	43'	Elara	13'10"	
7905	Brandt	Larry	09/20/10	S	37'	High Flight	12'	
7995	Bradford	Michael	02/18/12	S	42'	Morning Star	11.5'	Seattle

PORTLAND YACHT CLUB **MOVE UP LIST** **COMBINED MOORAGE**

N Row and End Ties **2/29/12**

MEM #	MEMBER NAME	REQUEST DATE	S/P	BOAT SIZE	BOAT NAME	BEAM	Current Slip
6825	Michael Lewis	12/15/03	S	42'	Wind Raven	14'	D 19
5515	Craig Mortensen	11/28/05	S	36'	Patriot	12'	D14
2920	Bob Sudlow	07/21/06	P	40'	Big Easy	13.5'	L 2
5935	John McCoy	08/19/06	P	30'	McCoy's Toy	10'	N106
7495	Ken Obrist	05/06/07	P	35'5"	No Boss	11'6"	G 8
6860	Rod Wells	08/07/07	P	47'	Hey Jude	15'	J 3
7380	Vince Sweeney	10/11/07	P	44'5"	Bigger Me Boat	14'	N 102
6365	Terri Entler	12/12/07	S	54'	Galatea	11' 6"	C11
7130	Douglas Ness	12/15/07					
1600	Nick Johnson	05/01/08	S	40'	Molodez	13'	A3
7675	Andy McCann	09/03/08	S	49'	RYA	14'	N 1
7430	Steve Pearson	10/17/08	P	50"	Par a dox	15' 6"	F11
1430	Tom Hendrickson	02/03/09	S	30'	Therapy	6'	
7400	James Dean	02/11/09	P	48'	Oregonaute	15'	N 3
5665	Louis Kocevar	03/28/09	P	49'	Alta Mare	16'	N2
6870	Charles Bishop	03/31/09	S	45.5'	Tropicale	13'11"	N8
7730	Bruce Padgett	04/03/09	S	50'	Moondance	14'	N5
7335	Gary Erdahl	04/14/09	P	35'	Sea Ace	12'	N115
7595	Magnus Lakovics	05/01/09	P	50'	Amygdala	16'	N6
7530	Chris Dorn	09/13/09	S	34'	Libertas	11.6	A6
1908	Berkeley Smith	12/07/09	S	35'9"	Hot spur	11'9"	D8
7665	Terry Hagberg	01/04/10	P	47'5"	Chili Dog	13'3"	N4
7395	Rob Peterson	02/09/10	P	51'	Paulistana	15'	H 8
7710	Dale Mack	03/18/10	P	43'	Celtic Myst	13'5"	N 111
7390	Tom Winslow	05/11/10	P	43'	Tranquility	14'9"	N 105
7330	Ken Emmons	05/22/10	P	40'	Sea Ya	13'6"	N 101
7830	Terry Johnson	06/03/10	S	34'	Ozymandias	11'	A-7
7640	Greg Allison	06/06/10	P	43'	Rain-ie	14'	N 107
7425	Brian Hedges	11/16/10	S	34'	Mabe	14'	B+11
7915	John Halle	01/07/11	S	36'	Mystique	11'6"	
7410	Dennis Vaughn	03/23/11	P	52'	Five o'clock somewhere	15'	K 12
7460	Dano Toristoja	10/07/11	P	46'	No Drama	15'	J 13
7955	Floyd Jones	12/20/11	P	50'		15'	B3
7755	Klaus Drehmann	01/24/12	P	34'	Amanda Jean	12'	N114
7920	Tom Keffer	02/10/12	S	42'	Velocity	12'6"	N 106

PORTLAND YACHT CLUB **MOVE IN LIST** **COMBINED MOORAGE**

MEM #	MEMBER NAME	REQUEST DATE	S/P	BOAT SIZE	BOAT NAME	BEAM	NOTES
2120	John Moyer	04/03/05	P	25'	Good Times	8'	Sublet
0475	George Brice	01/27/06	P	70'	Delight	22'	
7505	Dan Kelly	04/12/06	S	35'	Spirits	11'9"	
7570	Doug Larson	12/12/06	P	42'	Snow Hawke	13'8"	
7635	Ken Hunkins	04/27/07	P	46'	Queen Anne	15'	
7165	Joon Moon	06/19/07	P	72'	Islander	18'	
7210	George Stonecliffe	10/19/07	S	45'	Julia Max	13'	
7645	Robert Morgan	11/16/07	P	56'	My Outlet	15'	
7725	Joe Brady	06/25/08	P	50'	The Bunch	15'	
7870	Corinne Bloomfield	04/09/10	P	27'	Labyrinth	8'6"	Hayden
7880	Dave Latimer	07/21/10	S	43'	Elara	13'10"	
7905	Larry Brandt	09/29/10	S	36'	High Flight	12'	
7935	Steve Weeks	09/15/11	P	36'	RUH ROW	11'	jantzen
7995	Michael Bradford	02/18/12	S	42'	Morning Star	11.5'	Seattle

DIVERSIFIED MARINE, INC.
PO Box 83723
Portland OR 97283-0723
Phone (503) 289-2669
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Email: DMI83723@aol.com
www.DiversifiedMarineInc.com

Feb, 17th 2012

Marine equipment list

Derrick barges:	Capacity	Size
DB Freedom	125 Ton	60′ x 155′ x 5′ draft (85′ tall spuds)
DB Vulcan	60 Ton	45′ x 101′ x 5′ draft (Bridge clearance 58′)
DB Lucy	25 Ton	35′ x 125′ (85′ tall spuds)
Barges:		
DMI 60	60,000#	26′ x 80′ Ramp barge with spuds x 85′ Tall
BMC 44	500 Ton	36′ x 208 Spud barge x 80′ tall
DMI 100	300 ton	60′ x 100′ Spud barge x 60′ tall
DMI 40	15 Ton	12′ x 40′ work barge
DMI 50	60,000#	26′ x 60′ Ramp barge with spuds x 60′ tall
Tugs:		
Tiger	1600 HP	18′ x 65′ x 6′ draft (Bridge clearance required 38′)
Cougar	1200 HP	22′ x 65′ x 6′ draft (Bridge clearance required 50′)
Mariner	1800 HP	25′ x 75′ x 10′ draft (Bridge clearance required 45′)
Utility:		
MV Sandwick	1050 HP	25′ x 78′ x 5′ draft Landing craft

NOTE: BREADTH DOES NOT INCLUDE FENDERS. DEPTH = DRAFT + FREEBOARD

Floating Cranes		Official Number	Length	Breadth	Depth	Gross Tonnage
53-0705	DB Tacoma, 37 ton	505025	150	44	9.5	557
53-0706	DB Olympia, 80 ton	1027118	150	60	10	756
53-0707	DB Beaver, 98 ton	602235	115.9	52	8.8	577
53-0732	DB Columbia, 125 ton	1048155	141	58	13	893
53-0733	DB Seattle, 165 ton	547079	152	70	11.6	1158
53-0734	DB Oakland Dredge	1089113	140	70	12	987
53-0738	DB Vancouver, 130 ton	587032	210	60	13.1	1487
53-0739	DB Pacific, 165 ton	653245	250	72	13.7	2114
53-0737	DB Los Angeles, 300 ton	1047575	210	68	15	1799
53-0736	DB General, 700 ton	1042279	288	100	18	4040
53-0755	DB Anchorage 75 ton	CG599745	120	50	9.1	
53-0754	DB Alameda 65 ton	1075264	142	58	12	830
Spud Barges						
53-0679	GC-26 Spud Barge	CG007597	119.5	43	9	
53-0544	Kiewit Pacific Barge	1041180	153.6	60	12	928
53-0830	Jeanne Barge	503792	164.9	50	12.1	731
53-0680	Burrard Barge	CG051637	116	51.6	10	
Dump Barges						
53-0704	Pt. Basalt Dump Barge, 1375 CY	597335	180	50	13.5	1086
53-0750	Pt. Defiance Dump Barge, 1375 CY	661902	180	50	14	1083
53-0756	Pt. No Point Dump Barge, 2000 CY	505209	217	43.1	15.4	1288
53-0749	Pt. Vashon Dump Barge, 1375 CY	605636	180	50	12	957
Small Flat Deck Barges						
53-0700	Longview Barge	UNDOC.	65	25	5	
53-0763	GC 20 Flat Barge	1172636	85	26	4.5	83
53-0681	GC 25 Flat Barge	UNDOC.	110	30	8	
53-0682	GC 28 Flat Barge	1140218	110	35	8	258
53-0685	GC 31 Flat Barge	1140219	110	32	8	236
53-0742	GC 34 Flat Barge	1140217	110	35	8	258
53-0743	GC 35 Flat Barge	1140215	110	35	8	258
53-0744	GC 36 Flat Barge	1140213	110	32	8	236
53-0745	GC 37 Flat Barge	1140212	110	35	6	194
53-0764	GC 39 Flat Barge	1172640	110	30	8	221
53-0854	GC 40 Flat Barge	1172646	110	32	8	236
53-0855	GC 41 Flat Barge	1172650	110	32	8	236
Large Flat Deck Barges						
53-0686	GC-101 Flat Barge	522512	164.1	50.1	10.2	745
53-0687	GC-102 Flat Barge	522513	164.1	50.1	10.2	745
53-0688	GC-103 Flat Barge	523820	164.1	50.1	10.2	745
53-0689	GC-104 Flat Barge	523821	164.1	50.1	10.2	745
53-0690	GC-120 Flat Barge	558616	159.6	50	12.4	902
53-0691	GC-121 Flat Barge	557752	159.6	50.5	12.4	902
53-0693	GC-151 Flat Barge	508395	150	42	11.3	586
53-0694	GC-152 Flat Barge	507931	150	42	9.3	523
53-0759	GC-155 Flat Barge	294820	150.3	42.1	10.5	607
53-0858	GC-156 Flat Barge	508468	144	48	10	479
53-0859	GC-160 Flat Barge	297320	160.1	43.6	10.2	607
53-0698	GC-173 Flat Barge	298614	178	50	11.6	946
53-0857	GC-175 Flat Barge	278799	170.2	44	11.6	806
53-0752	GC-180 Flat Barge	503956	180	45.1	11.5	768
53-0765	CG-181 Flat Barge	273546	175	60	9	793
53-0801	GC-183 Flat Barge	502560	180	44.1	16.2	1095
53-0821	GC-184 Flat Barge	508544	178	50	11.6	946
53-0829	GC-185 Flat Barge	561206	180	50	11.3	945
53-0699	GC-191 Flat Barge	288082	189.5	44	13.5	1027
53-0748	GC-192 Flat Barge	542082	178.1	50	12	1097
53-0692	GC-205 Flat Barge	503698	210	54	14.3	1341
53-0263	KP-202 Barge	504019	200	45	14	1056
53-0266	KP-203 Barge	504480	200	45	14	1050

GENERAL CONSTRUCTION COMPANY

D.B. GENERAL
700 TON FLOATING CRANE

SPECIFICATIONS

- Main Crane: Clyde 52
- Capacities: 700 tons @ 70′ radius over the stern
  500 tons @ 70′ radius fully revolving
  40 tons @ 243′ radius (auxiliary)
  25 tons @ 257′ radius (whip)
- Boom: 200′ to main fall (260′ available)
  230′ to auxiliary line (290′ available)
  245′ to whip line (305′ available)
- Barge Size: 300′ x 100′ x 18′
- Classification: ABS+A1, USCG
- Draft (std.): 8′-0″
- Spuds: Two 48″Ø x 90′ long
- Anchors: 6-point moorage
- Deck Loading: 2,000 psf uniform
- Bunkers: 50,000 gallons diesel fuel
  310,000 gallons fresh water

CAPABILITIES

- Heavy Lifting
- Piledriving
- Offshore Construction & Service
- Duty Cycle – Dredging
- Pipe Lay

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Please contact Pat Boyd-Equipment Manager at (206) 938-6758 or pat.boyd@kiewit.com for load charts, deck configuration, and availability.

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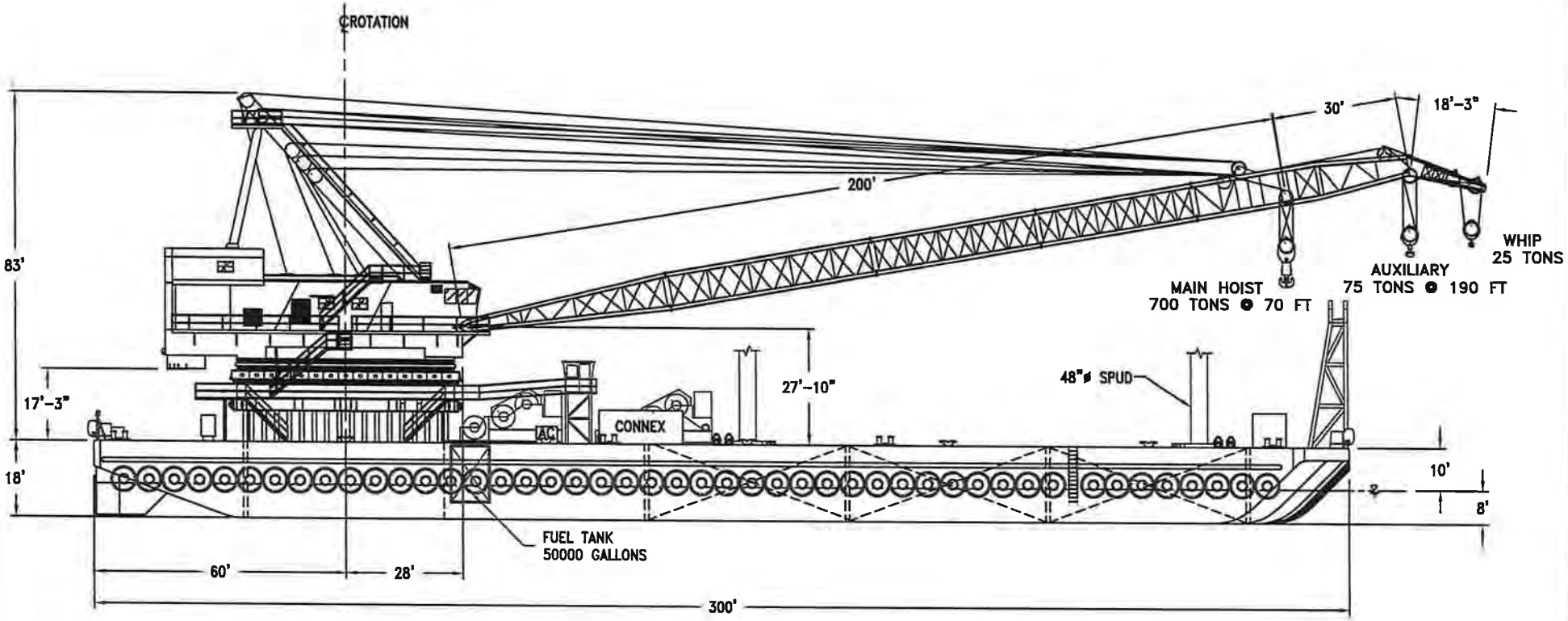


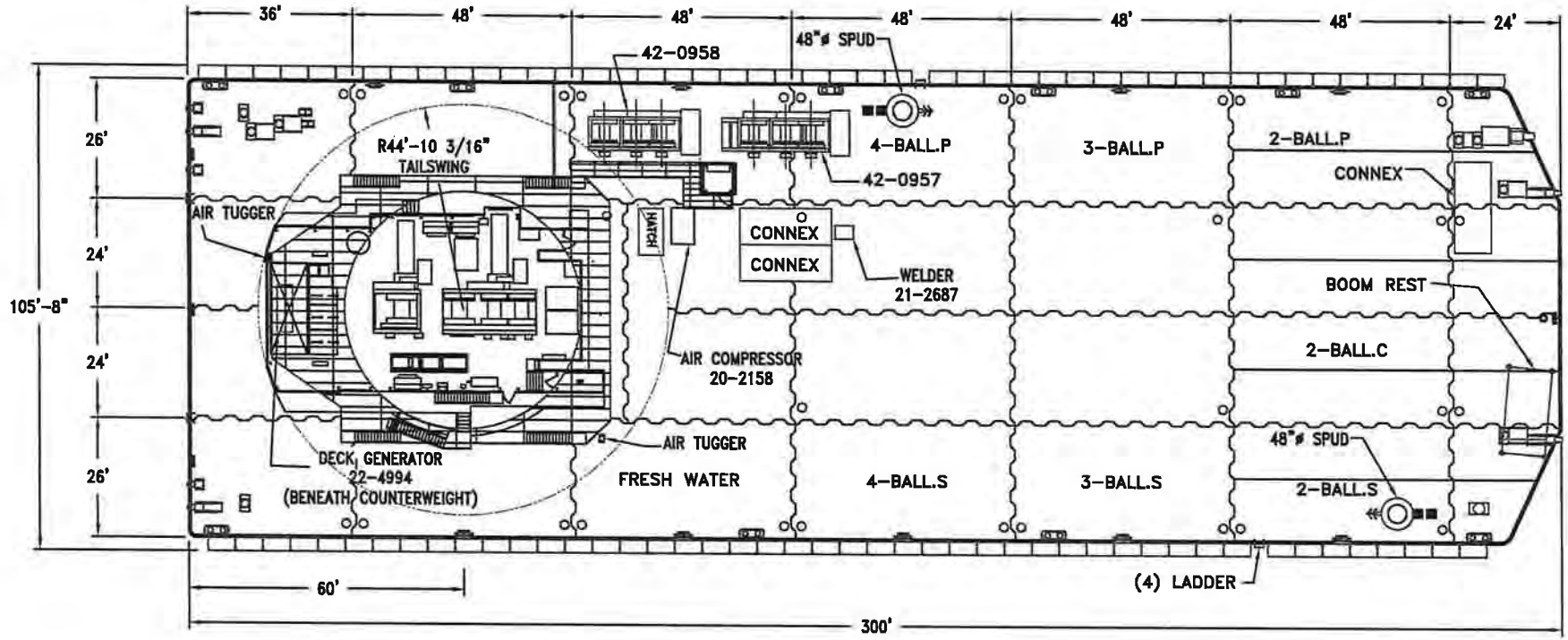
OUTBOARD PROFILE

GENERAL CONSTRUCTION COMPANY
19472 POWDER HILL PL * POULSBO, WA * 98370-7466
(360) 779-3200 * FAX (360) 779-3132

D.B. GENERAL (700 TON) - #53-0736

ISSUED: JAN 2010

FC-53-0736-2



DECK PLAN

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D.B. GENERAL (700 TON) - #53-0736

ISSUED: JAN 2010

FC-53-0736-3

GENERAL CONSTRUCTION COMPANY

D.B. Los Angeles

300 Ton Floating Crane

Capabilities

- Piledriving
- Heavy Lifting
- Duty Cycle – Dredging
- Pipe Lay

Specifications

- Main Crane: American 356
- Capacities: 300 tons @ 50′ radius over the stern
  245 tons @ 50′ radius fully revolving
  9 tons @ 170′ radius (auxiliary/whip)
- Boom: 173′ to main fall (203′ available)
  177′ to auxiliary line (207′ available)
  181′ to whip line (211′ available)
- Barge Size: 210′ x 68′ x 15′
- Classification: USCG
- Draft (std.): 5′-0″
- Spuds: Two 28″ square x 90′ long
- Anchors: 6-point moorage
- Bunkers: 9,500 gallons diesel fuel
  3,000 gallons fresh water

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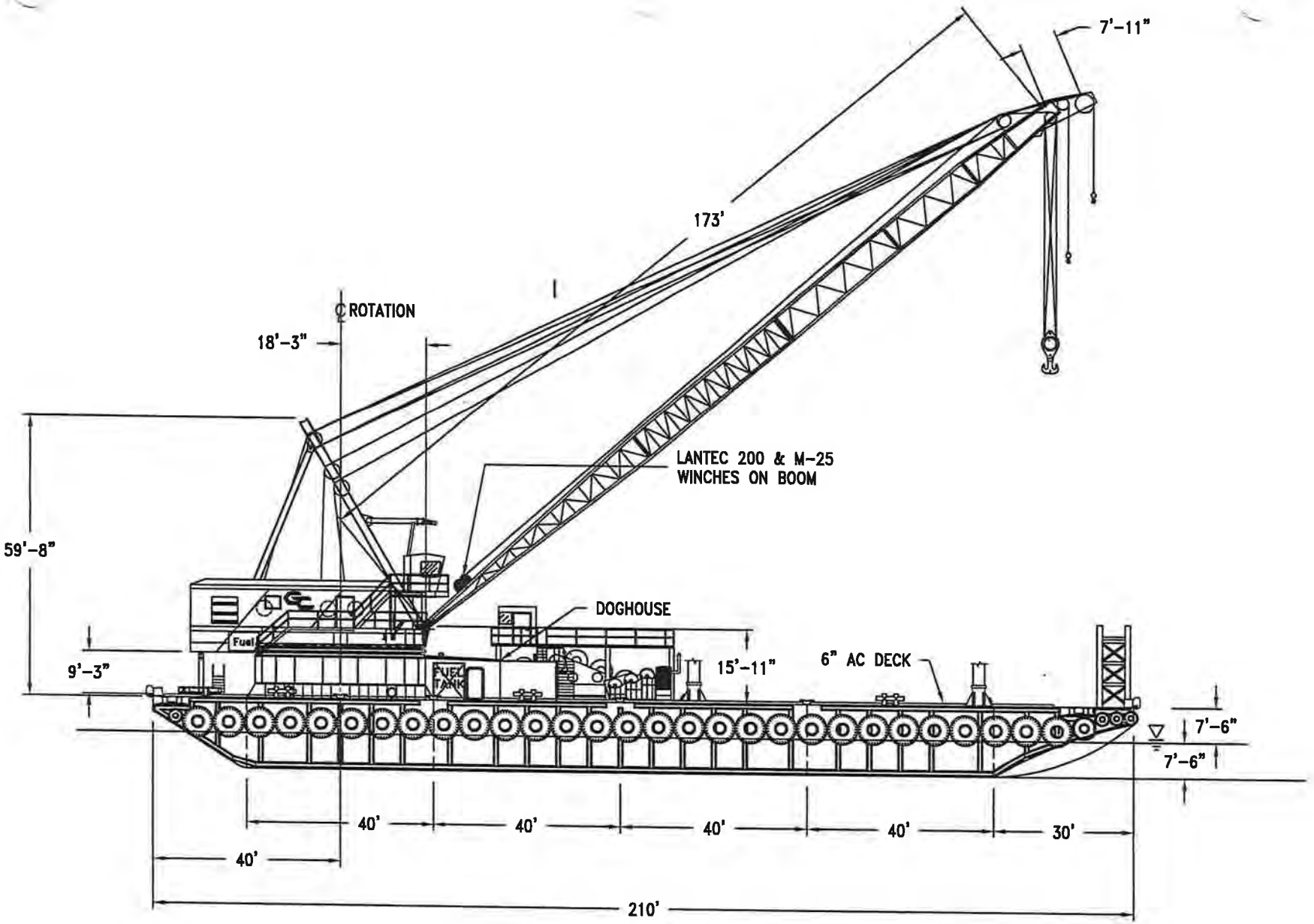

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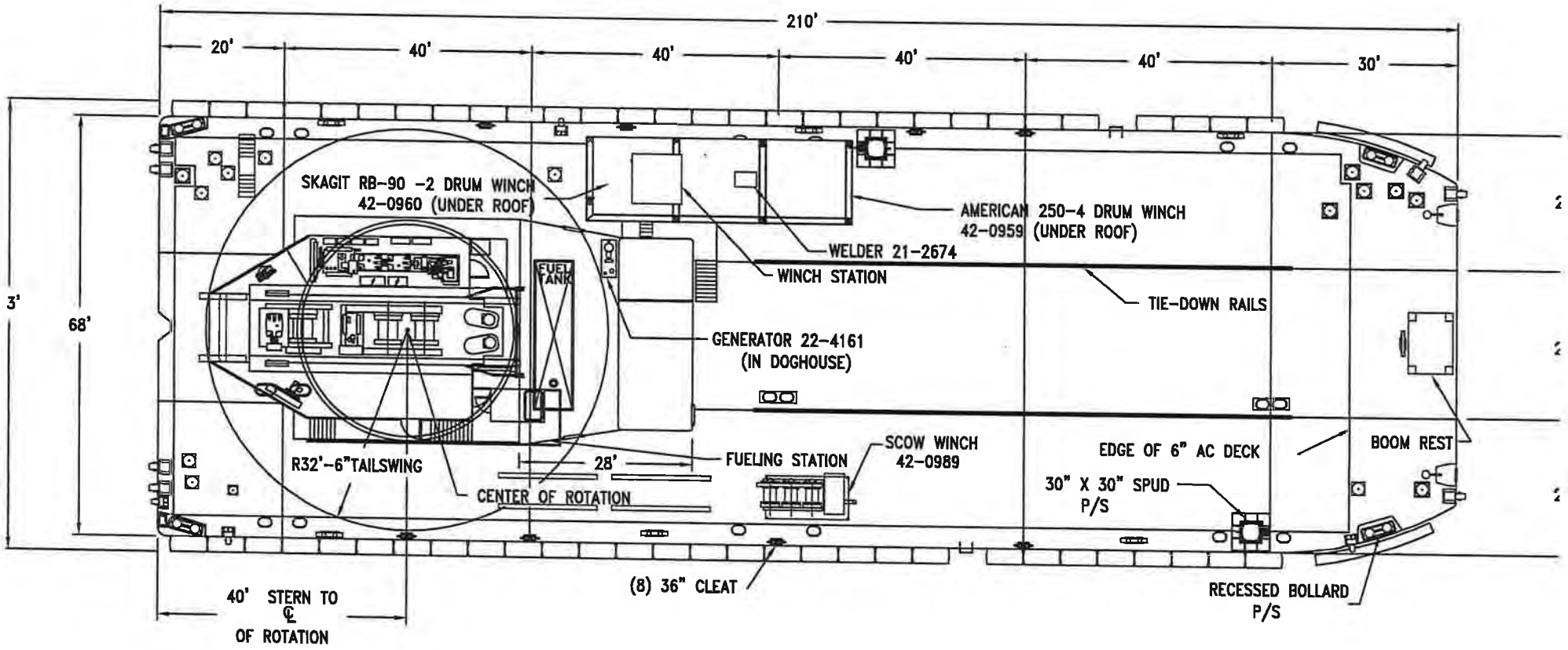
D.B. LOS ANGELES (300 TON) - #53-0737

ISSUED: - JAN 2010
FC-53-0737-2



DECK PLAN

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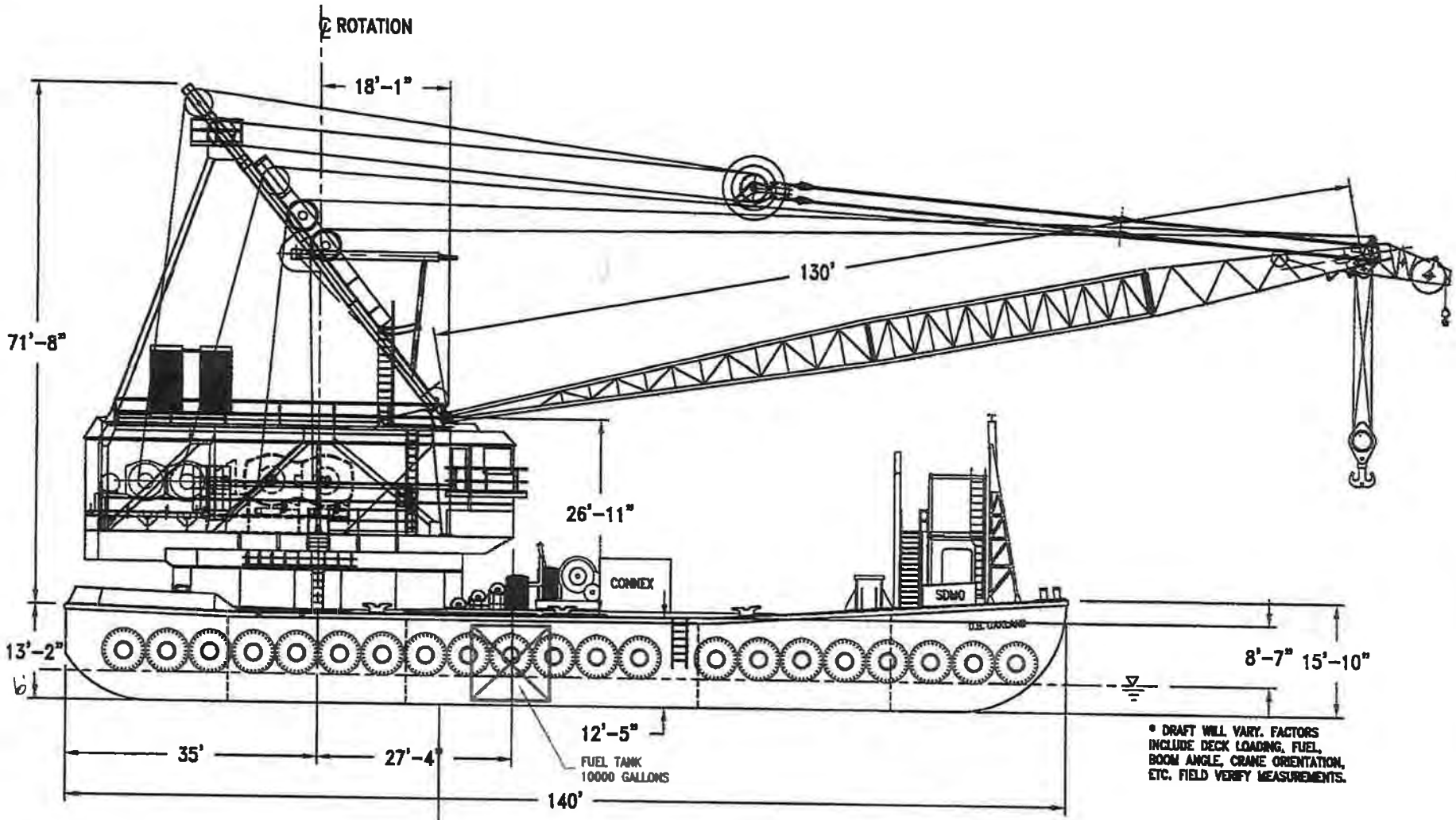
DB LOS ANGELES (300 TON) - #53-0737

ISSUED: - JAN 2010

FC-53-0737-4



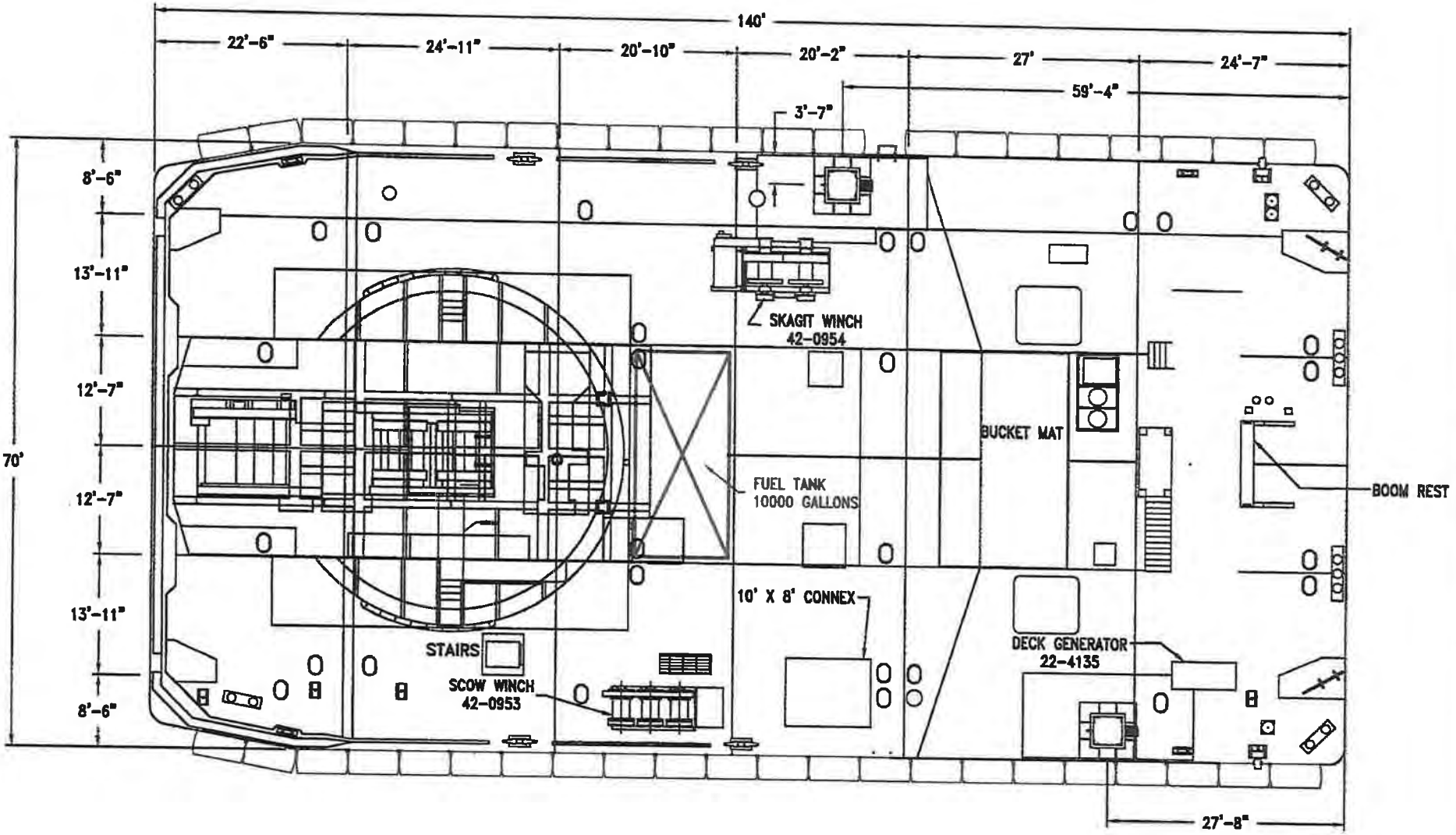
OUTBOARD PROFILE

GENERAL CONSTRUCTION COMPANY
3838 WEST MARGINAL WAY S * SEATTLE, WA * 98106
(206) 938-6750 * FAX (206) 938-6766

D.B. OAKLAND (210 TON) - 53-0734

ISSUED: - OCT 2010

FC-53-0734-2/6



DECK PLAN

GENERAL CONSTRUCTION COMPANY
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(206) 938-6750 • FAX (206) 938-6766

D.B. OAKLAND (210 TON) - 53-0734

ISSUED: - OCT 2010
FC-53-0734-3/6

GENERAL
CONSTRUCTION
COMPANY

D.B. Pacific

180 Ton Floating Crane

Capabilities

- Piledriving
- Heavy Lifting
- Duty Cycle – Dredging
- Offshore Construction & Service
- Pipe Lay

Specifications

- Main Crane: American M-25A
- Capacities: 180 tons @ 44′ radius fully revolving
  42 tons @ 130′ radius fully revolving
- Boom: 120′ to main fall (200′ available)
  126′ to whip line (206′ available)
- Barge Size: 250′ x 72′ x 15′
- Classification: ABS+A1, USCG
- Draft (std.): 7′-0″
- Spuds: Not available
- Anchors: 6-point moorage
- Deck Loading: 1,800 psf uniformly distributed
- Bunkers: 35,000 gallons diesel fuel
  3,000 gallons fresh water

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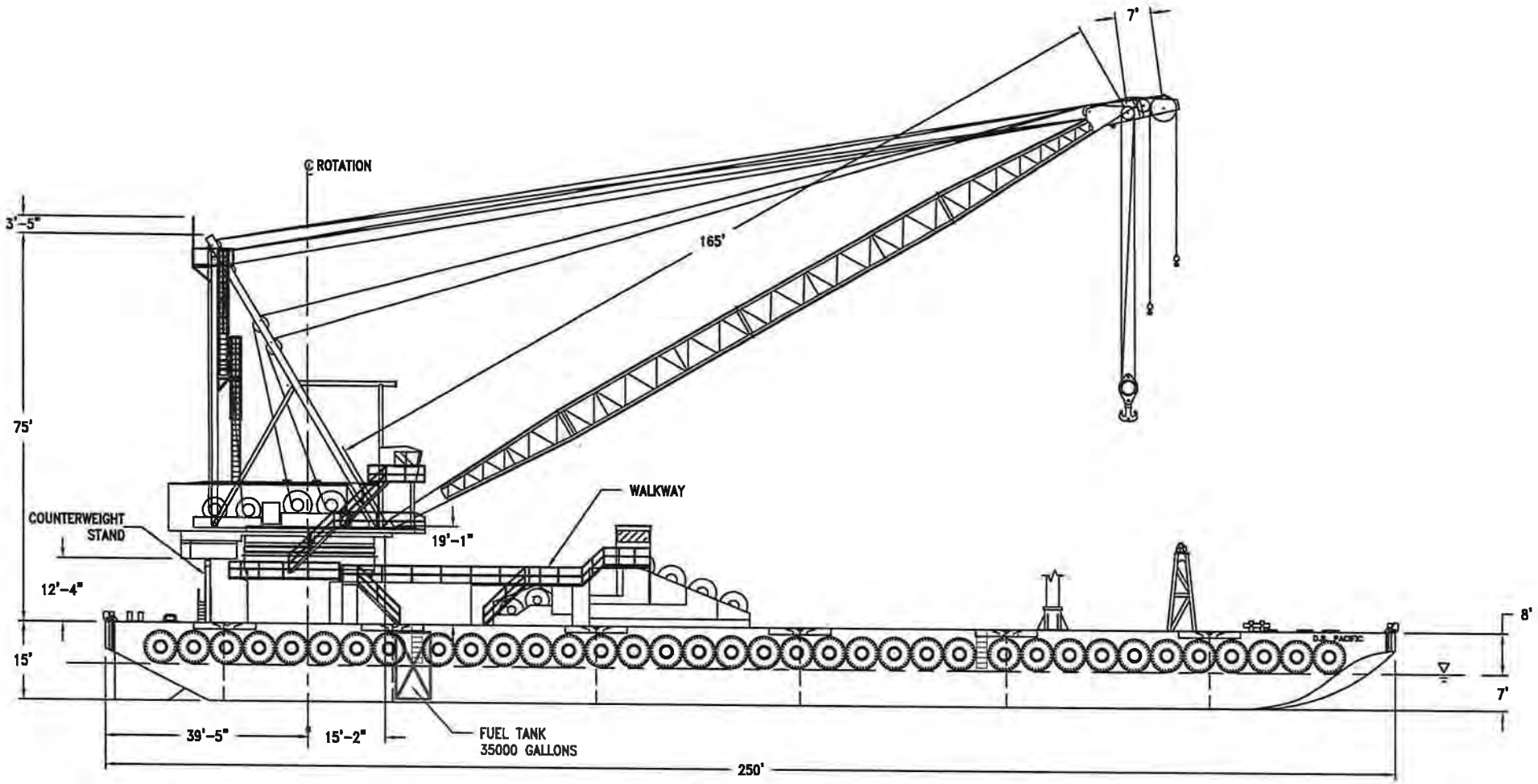

OUTBOARD PROFILE

GENERAL CONSTRUCTION COMPANY
19472 POWDER HILL PL * POULSBO, WA * 98370-7466
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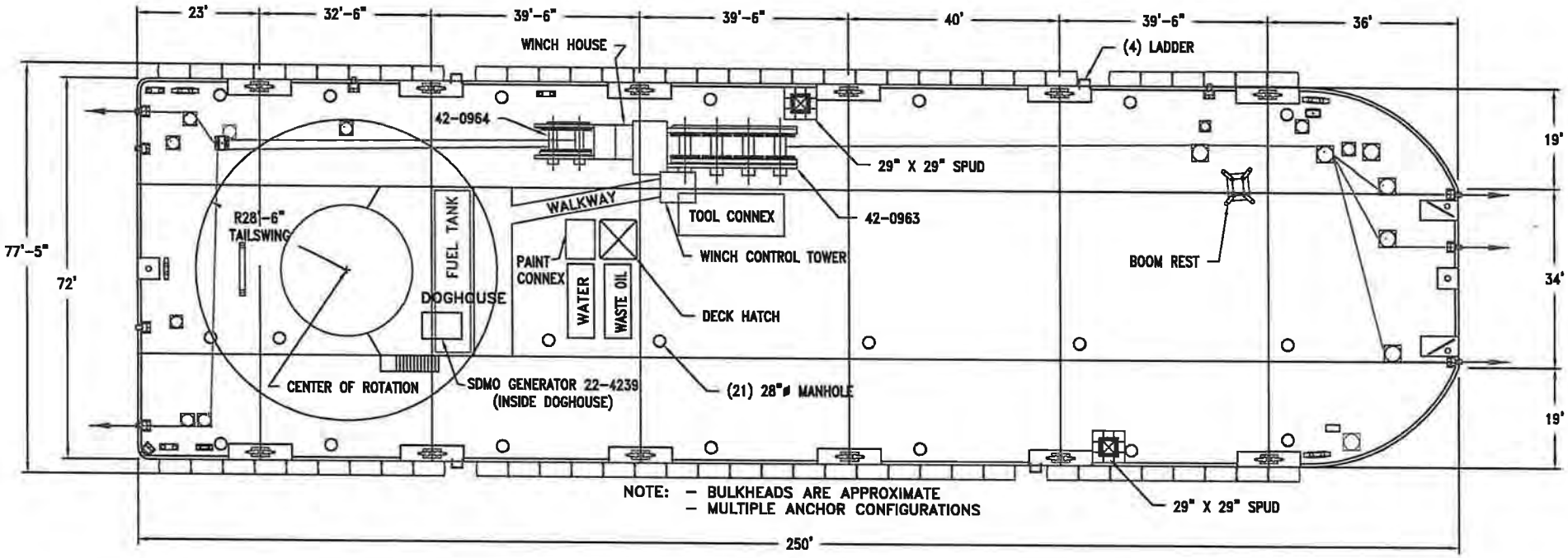
D.B. PACIFIC (180 TON) - #53-0739

ISSUED: - JAN 2010

FC-53-0739-4



DECK PLAN

GENERAL CONSTRUCTION COMPANY
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D.B. PACIFIC (180 TON) - #53-0739

ISSUED: - JAN 2010

FC-53-0739-4

GENERAL
CONSTRUCTION
COMPANY

D.B. SEATTLE

165 TON FLOATING CRANE

CAPABILITIES

- Clamshell Dredging
- Piledriving
- Rock Jetties and Breakwaters
- Heavy Lifting

SPECIFICATIONS

- Main Crane: American M-25A
- Capacities: 165 tons @ 50′ radius over stern
  150 tons @ 50′ radius fully revolving
  50 tons @ 90′ duty-cycle (150′ boom)
- Clamshell: 27 CY Atlas environmental bucket
  14 CY Hawco heavy digging bucket
- Boom: 165′ to main fall (210′ available)
  177′ to whip line (222′ available)
- Barge Size: 150′ x 70′ x 12.5′
- Classification: USCG
- Draft (std.): 7′-0″
- Spuds: Two 28″ square x 90′ long
- Bunkers: 45,000 gallons diesel fuel
  2,350 gallons fresh water

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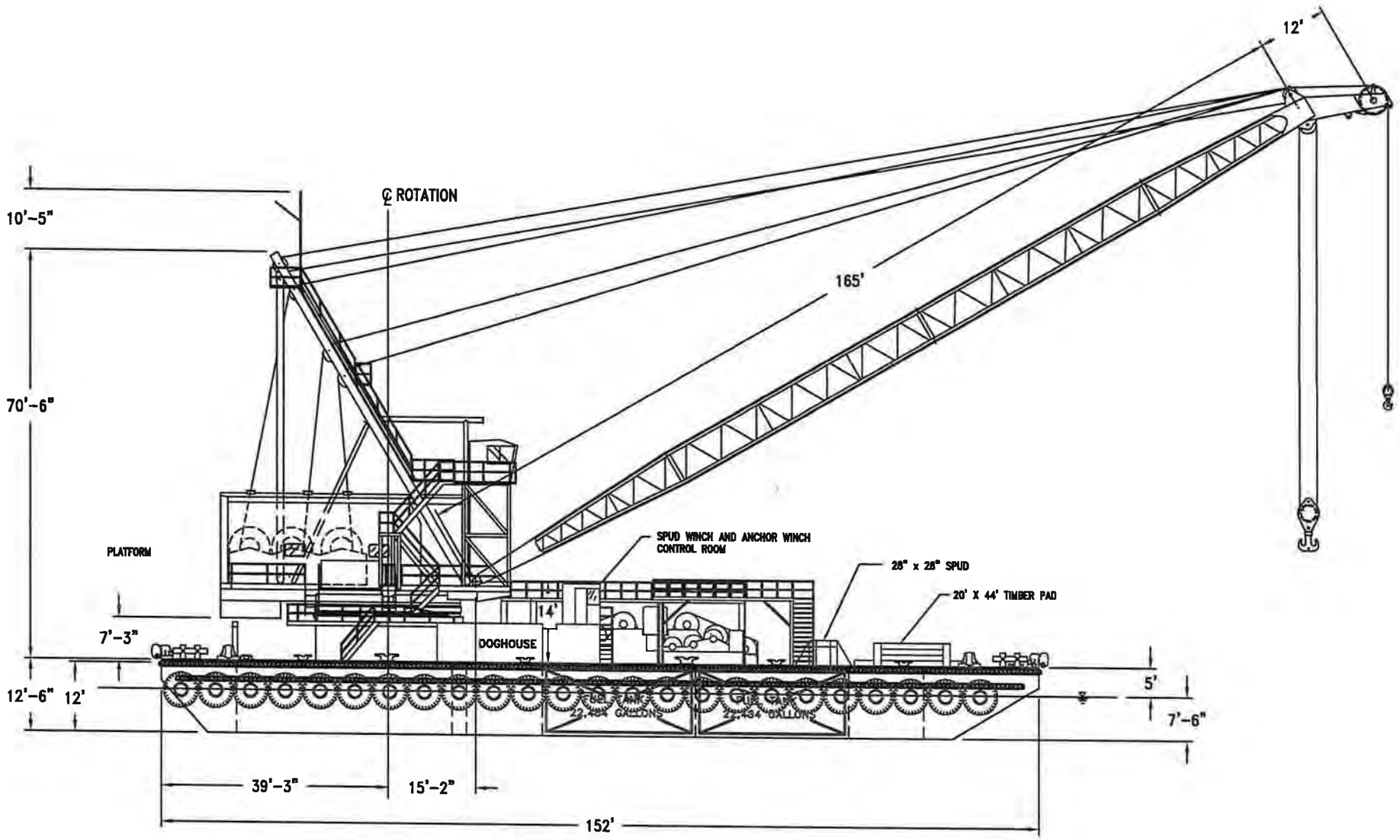

OUTBOARD PROFILE

GENERAL CONSTRUCTION COMPANY
19472 POWDER HILL PL * POULSBO, WA * 98370-7466
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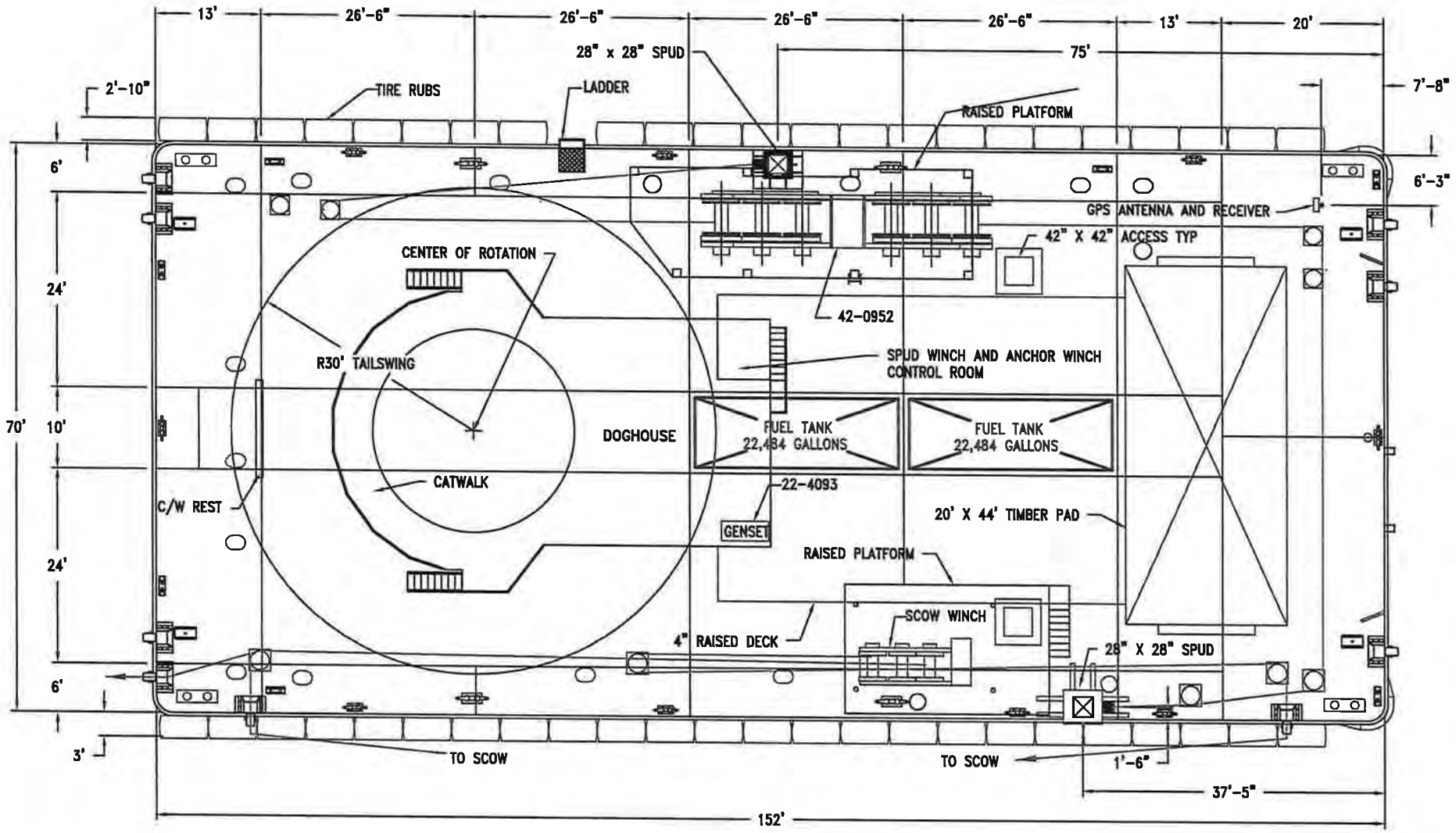
D.B. SEATTLE (165 TON) - #53-0733

ISSUED: - JAN 2010
FC-53-0733-2



NOTE: MULTIPLE ANCHOR CONFIGURATIONS

DECK PLAN

GENERAL CONSTRUCTION COMPANY
19472 POWDER HILL PL * POULSBO, WA * 98370-7466
(360) 779-3200 * FAX (360) 779-3132

D.B. SEATTLE (165 TON) - #53-0733

ISSUED: JAN 2010

FC-53-0733-3

GENERAL CONSTRUCTION COMPANY

D.B. VANCOUVER

140 TON FLOATING CRANE

CAPABILITIES

- Piledriving
- Clamshell Dredging
- Heavy Lifting
- Crane Service

SPECIFICATIONS

- Main Crane: American R-305
- Capacities: 140 tons @ 40′ radius over stern
  105 tons @ 40′ radius fully revolving
  45 tons @ 95′ radius (2-part whip)
  22 tons @ 140′ (whip w/150′ boom)
- Boom: 115′ to main fall (150′ available)
  121′ to whip line (156′ available)
- Barge Size: 210′ x 60′ x 13.5′
- Classification: USCG
- Draft (std.): 5′-10″
- Spuds: Two 28″ square x 90′ long
- Deck Loading: 1,500 psf uniformly distributed
- Bunkers: 7,600 gallons diesel fuel

© 2007 General Construction Company, 19472 Powder Hill Place N.E., Poulsbo, WA 98370 ♦ Phone (360) 779-3200 ♦ Fax (360) 779-3132

Please contact Pat Boyd-Equipment Manager at (206) 938-6758 or pat.boyd@kiewit.com for load charts, deck configuration, and availability.

www.generalconstructionco.com

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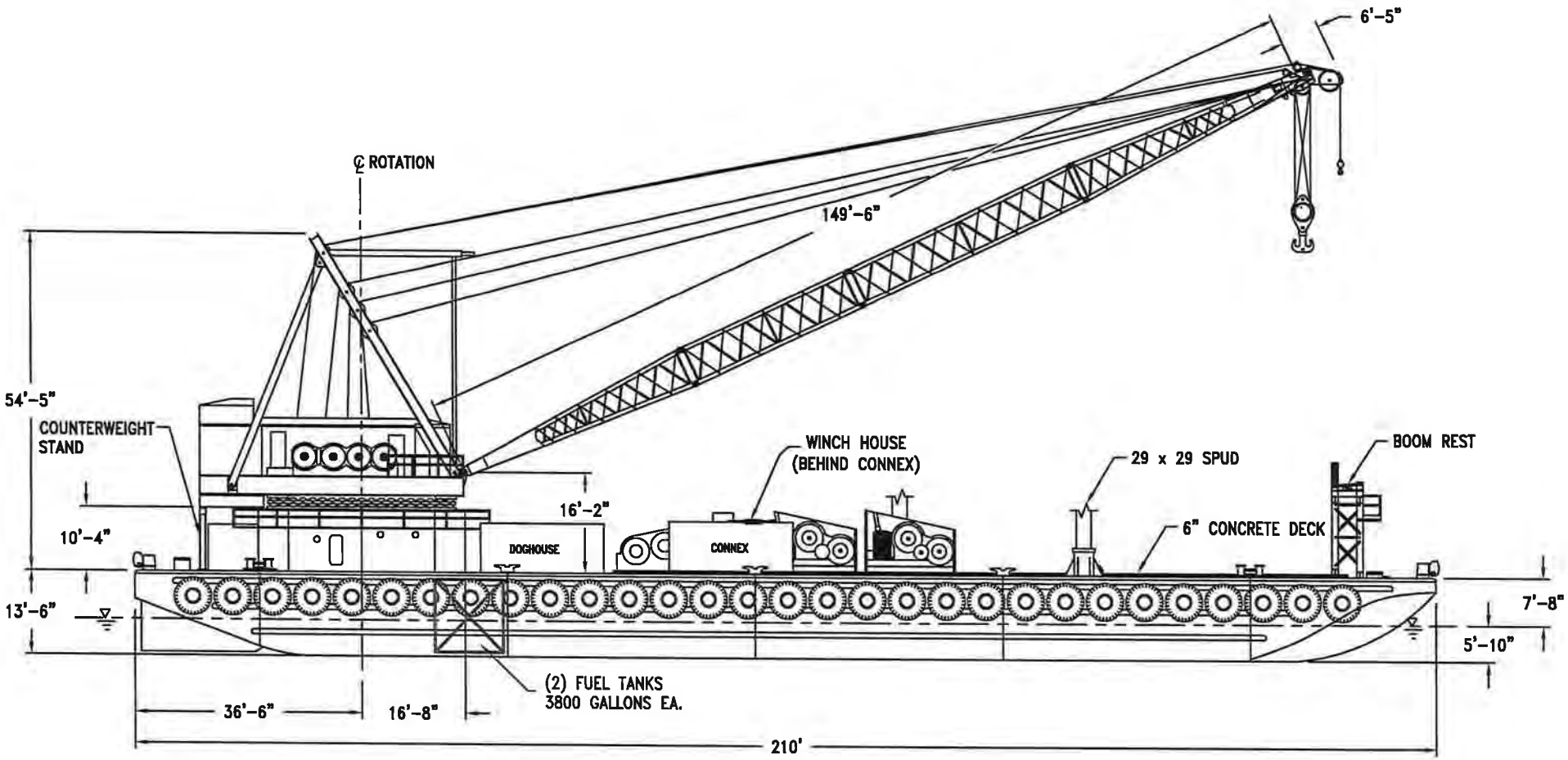


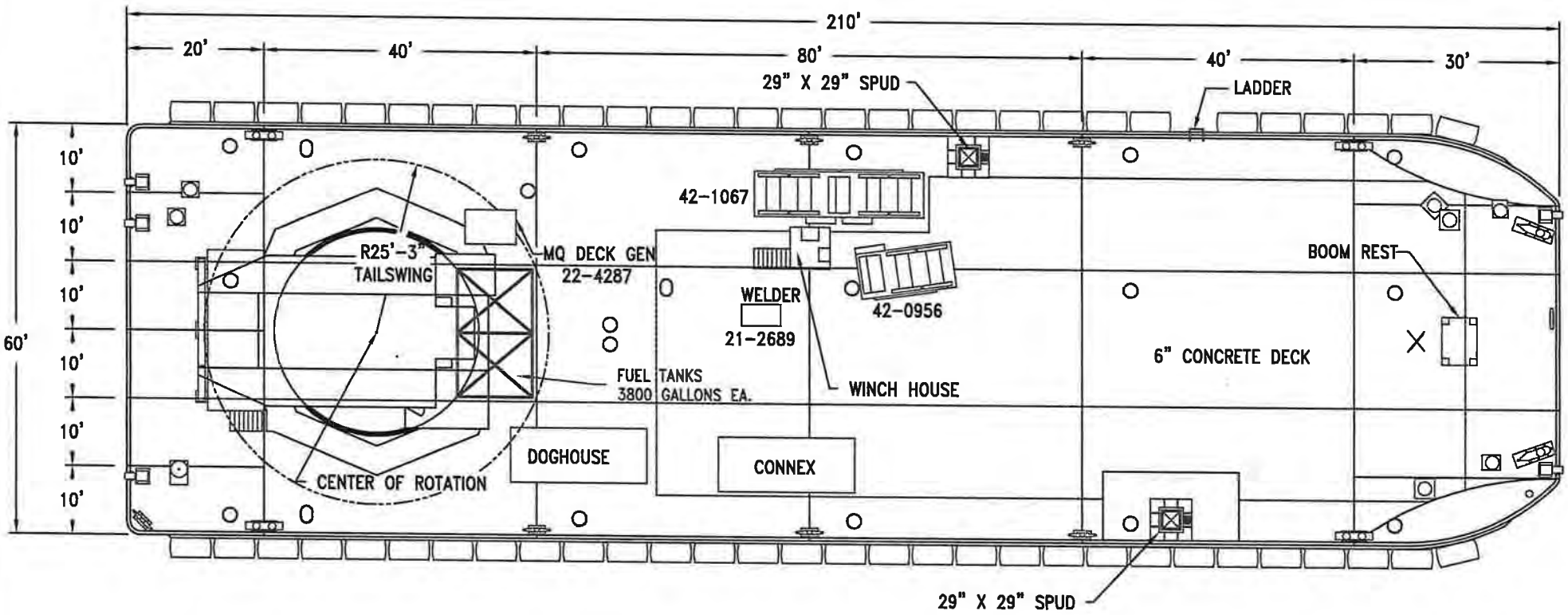
OUTBOARD PROFILE

GENERAL CONSTRUCTION COMPANY
19472 POWDER HILL PL * POULSBO, WA * 98370-7466
(360) 779-3200 * FAX (360) 779-3132

D.B. VANCOUVER (140 TON) - #53-0738

ISSUED: - JAN 2010

FC-53-0738-2

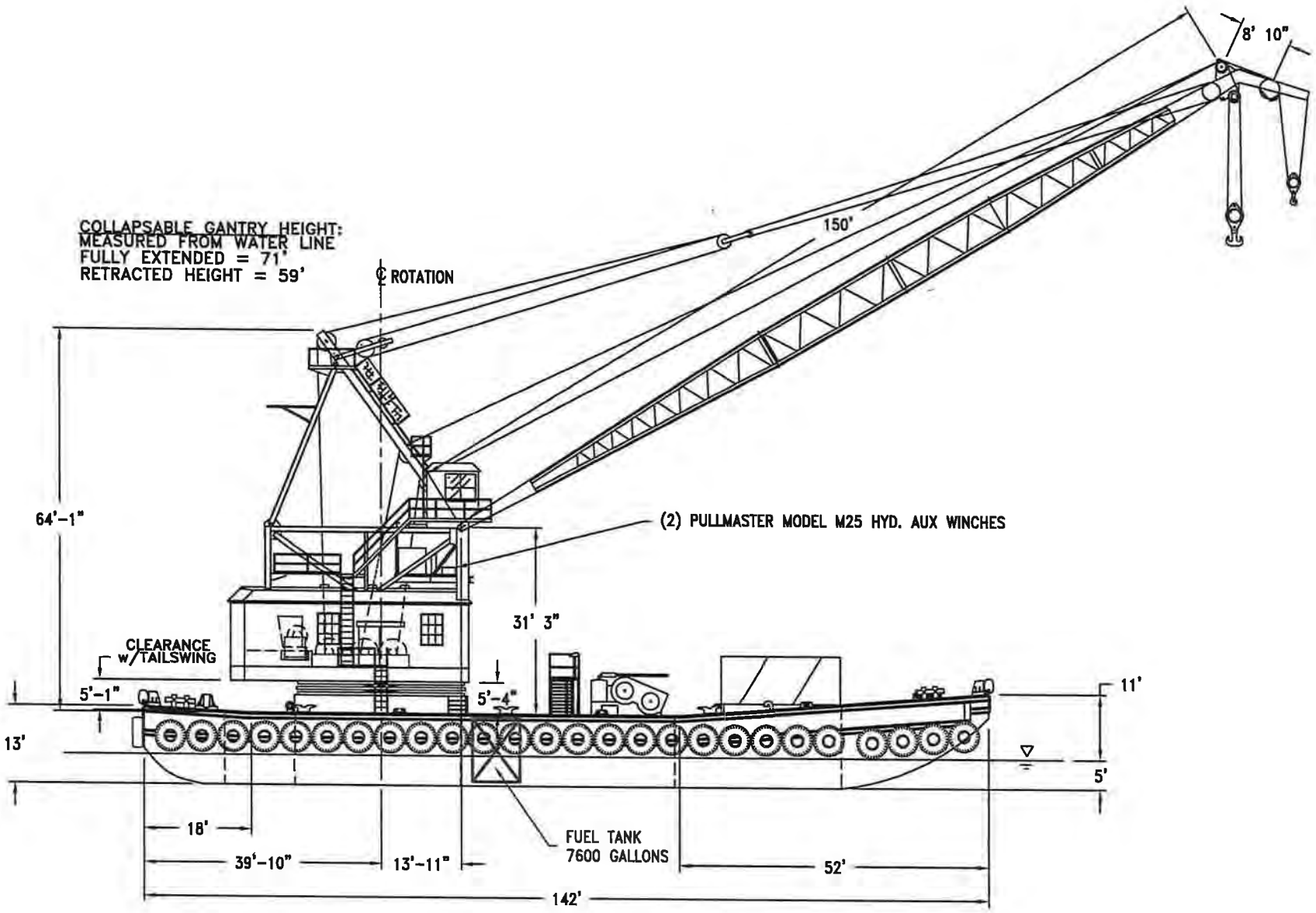


DECK PLAN

GENERAL CONSTRUCTION COMPANY
19472 POWDER HILL PL * POULSBO, WA * 98370-7466
(360) 779-3200 * FAX (360) 779-3132

D.B. VANCOUVER (140 TON) - #53-0738

ISSUED: - JAN 2010
FC-53-0738-3



OUTBOARD PROFILE

GENERAL CONSTRUCTION COMPANY
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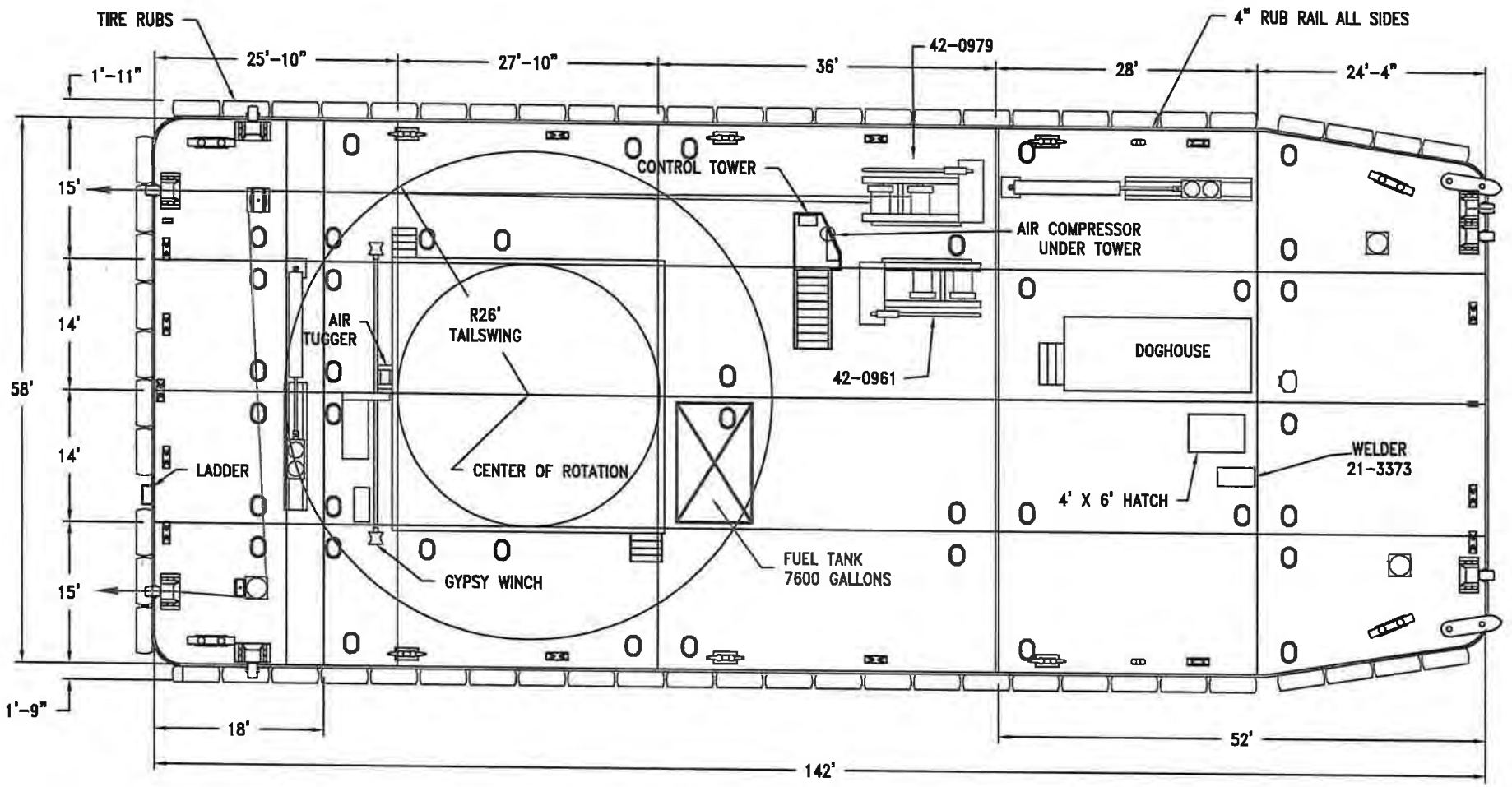
(360) 779-3200 * FAX (360) 779-3132

D.B. COLUMBIA (133 TON) - #53-0732

ISSUED: - JAN 2010

FC-53-0732-3



DECK PLAN

GENERAL CONSTRUCTION COMPANY
19472 POWDER HILL PL * POULSBO, WA * 98370-7466
(360) 779-3200 * FAX (360) 779-3132

D.B. COLUMBIA (133 TON) - #53-0732

ISSUED: - JAN 2010

FC-53-0732-3

GENERAL CONSTRUCTION COMPANY

D.B. ALAMEDA

100 TON FLOATING CRANE

CAPABILITIES

- Piledriving
- Duty Cycle
- Clamshell Dredging
- Heavy Lifting
- Crane Service

SPECIFICATIONS

- Main Crane: Dravo-Wellman 413D
- Capacities: 100 tons @ 55′ radius over stern
  80 tons @ 50′ radius fully revolving
  30 tons @ 120′ radius 2-line whip
  15 tons @ 160′ single whip
- Boom: 160′ to main fall
- Barge Size: 142′ x 58′ x 12′
- Classification: USCG
- Draft (std.): 5′-10″
- Spuds: Two 28″ square x 90′ long
- Bunkers: 6,500 gallons diesel fuel

© 2007 General Construction Company, 19472 Powder Hill Place N.E., Poulsbo, WA 98370 ♦ Phone (360) 779-3200 ♦ Fax (360) 779-3132
Please contact Pat Boyd-Equipment Manager at (206) 938-6758 or pat.boyd@kiewit.com for load charts, deck configuration, and availability.
www.generalconstructionco.com

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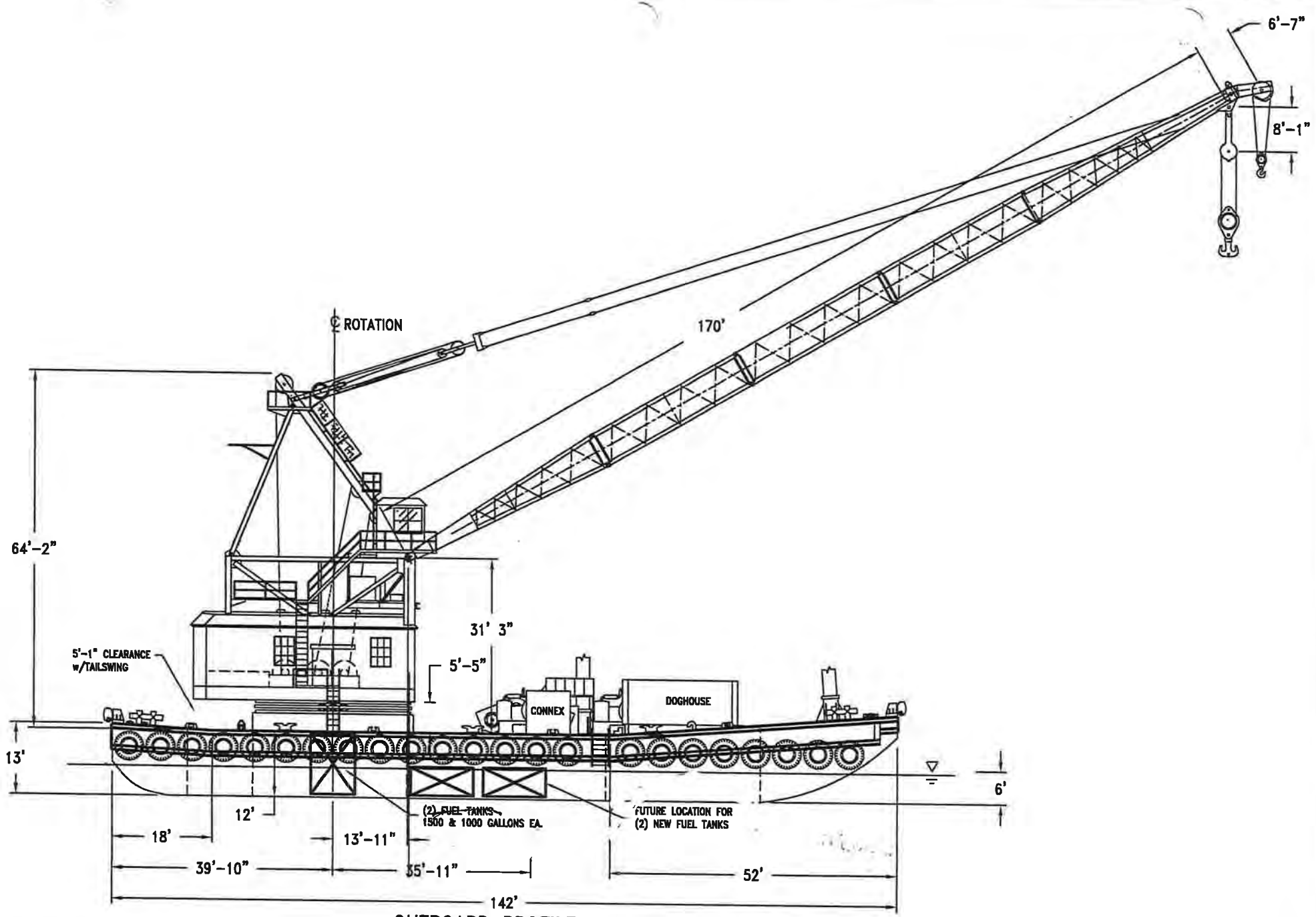


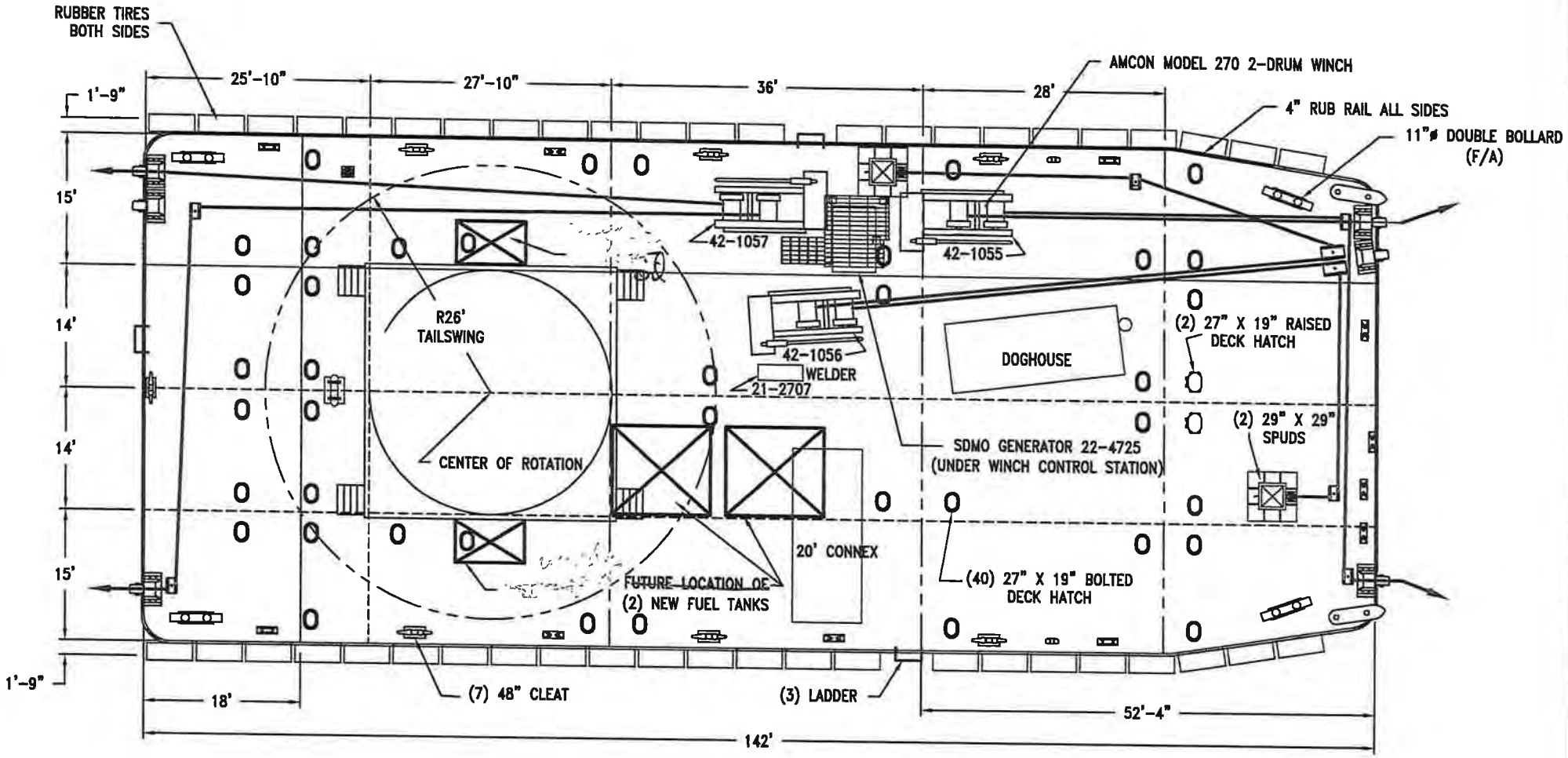
OUTBOARD PROFILE

GENERAL CONSTRUCTION COMPANY
19472 POWDER HILL PL * POULSBO, WA * 98370-7466
(360) 779-3200 * FAX (360) 779-3132

D.B. ALAMEDA (100 TON) - #53-0754

ISSUED: - JAN 2010

FC-53-0754-2

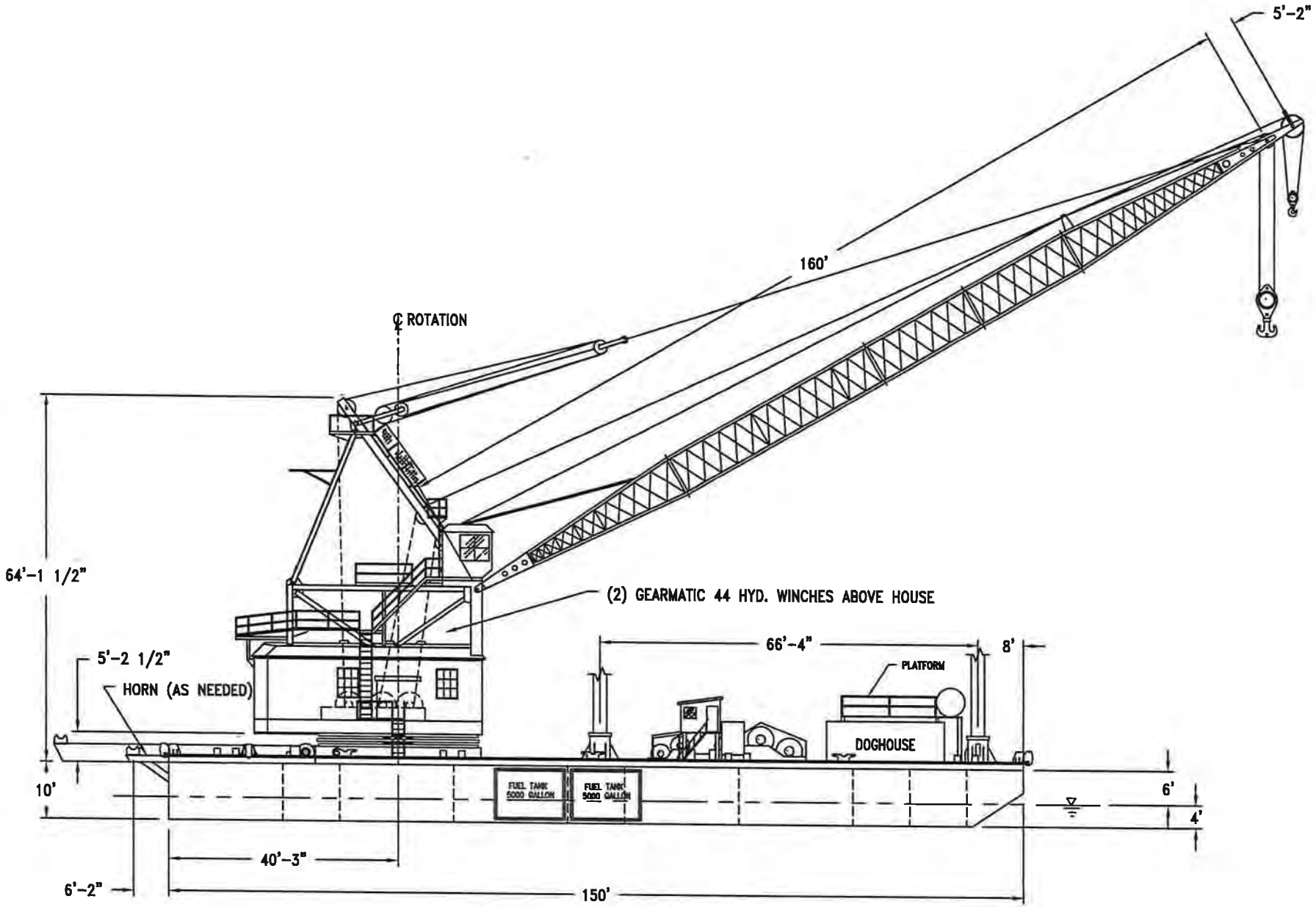


GENERAL CONSTRUCTION COMPANY
19472 POWDER HILL PL * POULSBO, WA * 98370-7466
(360) 779-3200 * FAX (360) 779-3132

D.B. ALAMEDA (100 TON) - #53-0754

ISSUED: - JAN 2010

FC-53-0754-3



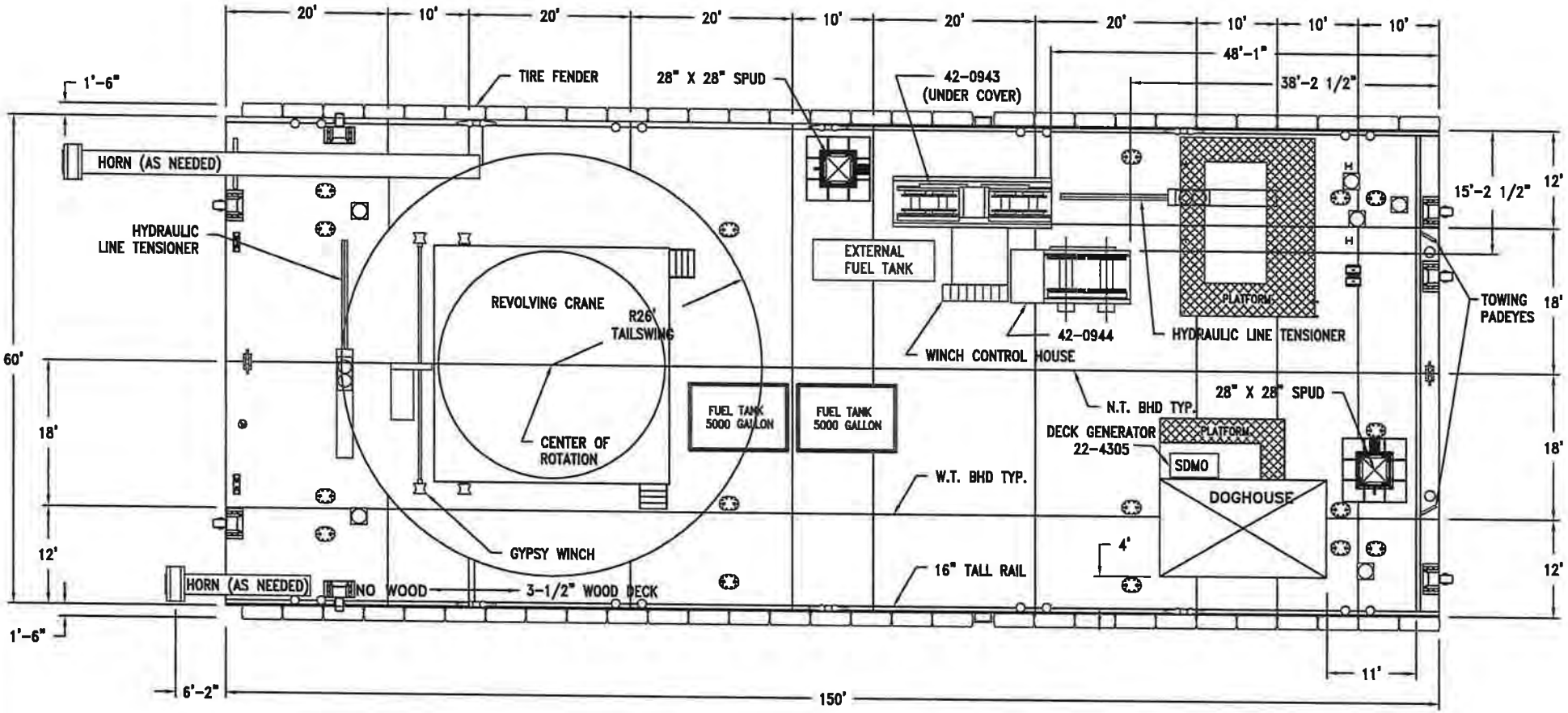
OUTBOARD PROFILE

GENERAL CONSTRUCTION COMPANY
19472 POWDER HILL PL * POULSBO, WA * 98370-7466
(360) 779-3200 * FAX (360) 779-3132

D.B. OLYMPIA (100 TON) – #53-0706

ISSUED: – JAN 2010

FC-53-0706-3



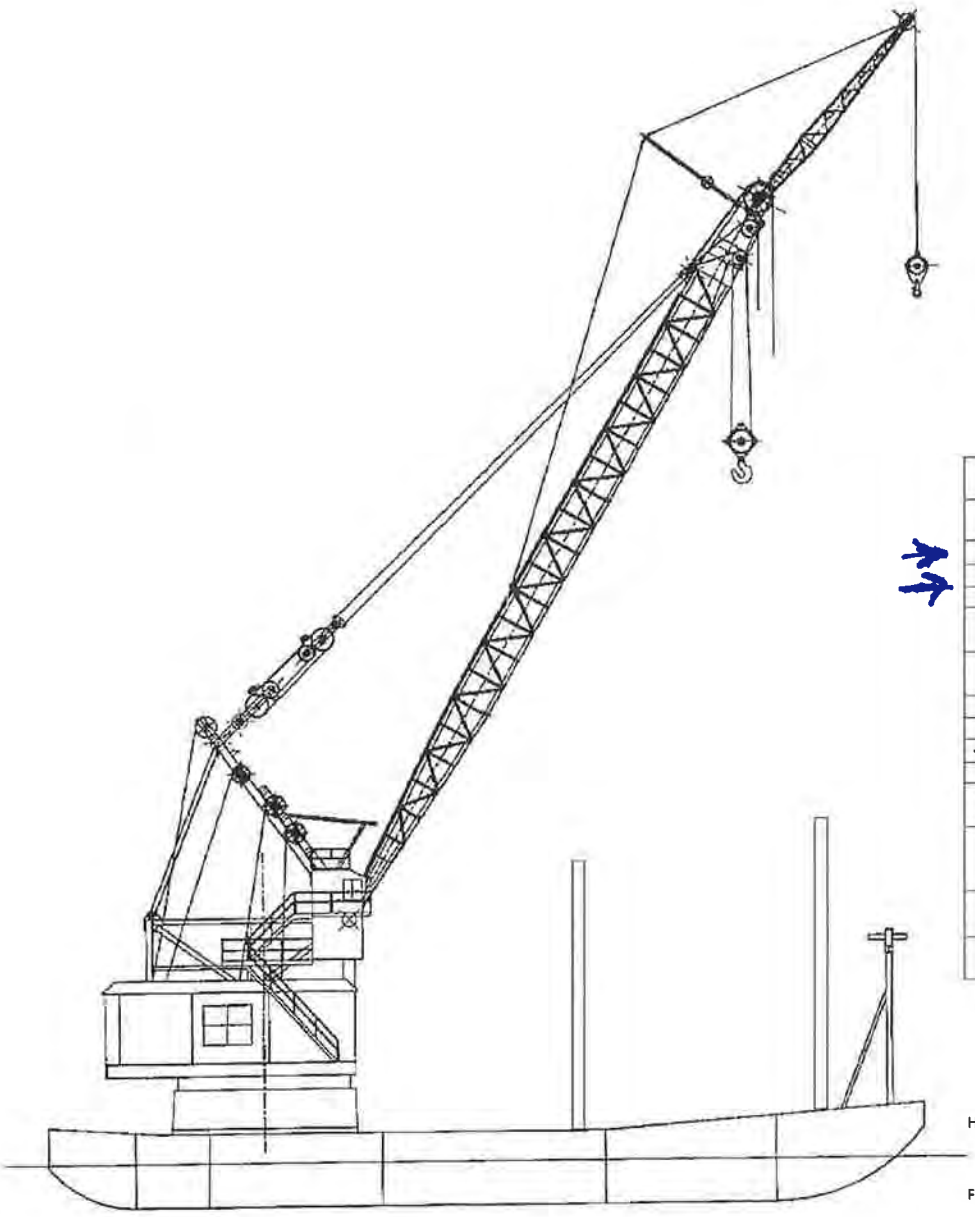
DECK PLAN

GENERAL CONSTRUCTION COMPANY
19472 POWDER HILL PL * POULSBO, WA * 98370-7466
(360) 779-3200 * FAX (360) 779-3132

D.B. OLYMPIA (100 TON) - #53-0706

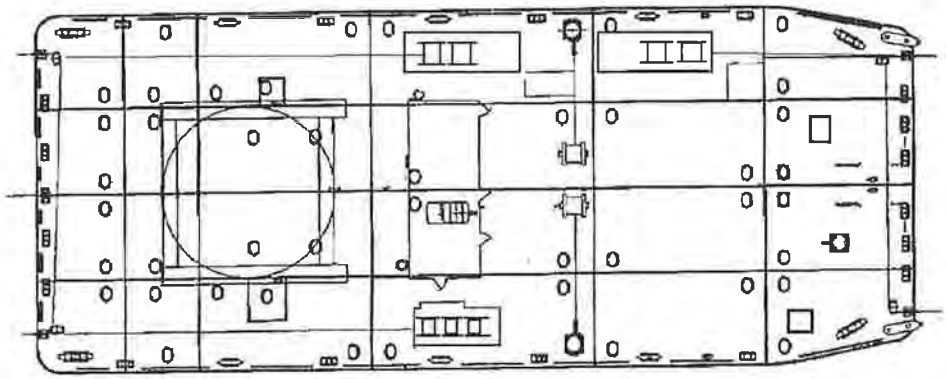
ISSUED: - JAN 2010
FC-53-0706-3

HICKEY MARINE ENTERPRISES
DERRICK BARGE "SEA HORSE"



ELEVATIONS TAKEN WITH FUEL TANKS FULL

	FROM DECK	FROM WATER @ 5' FREEBOARD
CENTER SPUDS (ON PIN)	74'	79'
AFT SPUD (ON PIN)	79'	89' 3"
BOOM GANTRY	70'	75'
HEEL PIN	35' 2"	40' 2"
TOP OF CAB WITH HANDRAIL	47' 6"	52' 6"
TOP OF CAB W/O HANDRAIL	44' 3"	49' 3"
OPERATOR EYE LEVEL	41'	46'
CENTER PIN TO BOW	107'	
CENTER PIN TO STERN	35'	
CENTER PIN TO SIDE	29'	
HEEL PIN TO CENTER PIN (HORIZONTAL)	15'	
(DISTANCE) MULTI – PART SHEAVES TO POINT SHEAVES	10'	
STANDARD BOOM LENGTH	125' UTILIZING MULTI-PART	135' MAIN BOOM POINT SHEAVES
OPTIONAL BOOM ATTACHMENTS	20' MIDSECTION	40' JIB



Hull:	142' x 58' x 12' 7' Draft	
	Beam 58'-6" with rub rails. 62' edge of tires	
Fuel Capacity:	20,000 gallons	
Mainlines :	2" x 425' with 135' boom. 440' for rear drum.	
	2" x 385' with 115' boom. 400' for rear drum.	
Tag Line:	¾" x 500'	
Boom and Heavy Lift:	1 1/8"x 1900'	
Spuds :		
Center	1 ¼ " x 550'	
Aft	1" x 550'	
Atlas 10yd Clamshell :	2" x 125'	45,000lbs
Atlas 14yd Clamshell :	2" x 135'	32,000lbs
Atlas 10yd Re- handle:	1 ¼" x 70'	20,000lbs
21yd CA:	2" x 80'	30,000lbs
14yd CA:	1 ¼" x 70'	17,000lbs
3-Drum fleeting Lines:	1" x 900'	

D.B. SEA VULTURE 60' X 112' X 10'

38' 5" TOP OF GANTRY TO DECK

11' 10" CENTER OF HEEL PIN TO DECK

26' 6" CENTER PIN TO BOW

30' CENTER PIN TO EDGE OF BARGE

23' CENTER PIN TO OUTSIDE EDGE OF COUNTERWEIGHT

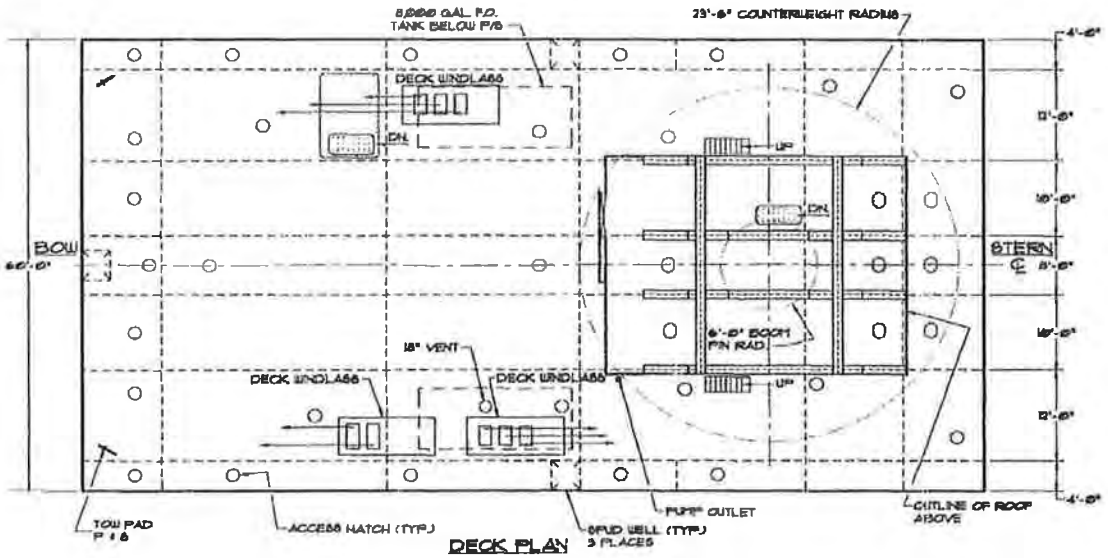
85' 6" CENTER PIN TO STERN

12' 6" COUNTERWEIGHT CLEARANCE TO SPUD

20' 6" HEEL PIN TO BOW

SPUDS: 77' ON PIN – WATER TO TOP 83' OVERALL PLUS 3' POINT

SHORT SPUDS: 48' ON PIN – WATER TO TOP 55' OVERALL PLUS 2' 6" POINT



DECK PLAN

Hickey Marine Enterprises, Inc.

D.B. SEA HAWK

CERTIFICATION: ABS LOADLINE

HULL DIMENSIONS: 110' X 44' X 10'

PERFORMANCE: 50 Ton LIFT CAPACITY

BOOM LENGHTS: 100' – 150'

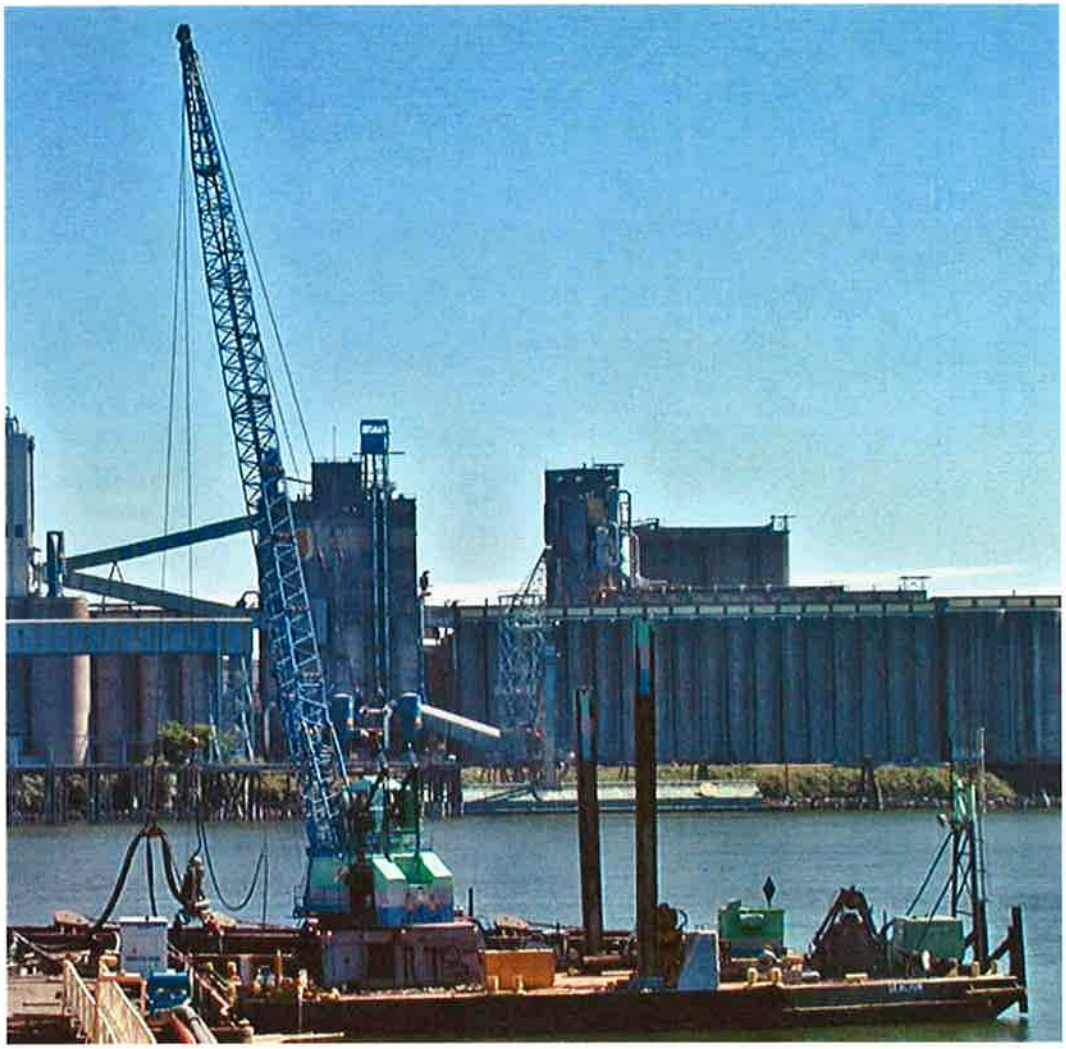
spud H. 75' to water

OPERATION: D.B. SEA HAWK is equipped to perform dredging and pile driving operations.

DECK EQUIPMENT: Two 75' spuds, 3 drum Skagit deck winch, 100kw generator, APE 100 vibratory hammer, Vulcan 06 impact hammer. Clamshell buckets ranging from 3cy to 5cy.

FUEL CAPACITY: 6,000 GALLONS

6801 NW Old Lower River Road, Vancouver, WA 98660
Office (360) 695-4553 Fax (360) 695-3295
Email – djamiesonhme@comcast.net



SEA LION

The Derrick Barge Sea Lion is a Manitowoc 60 Ton mounted crane on a 103' x 50'x 8' barge. Main draw-works power is provided by a Cummins diesel 300 HP She is set up with two winch controlled spuds. She was rebuilt in 1970. She has a minimum Height of 34.5' along with Minimum draft of 3' and Maximum draft of 5'. She has a 4,000 gallon fuel capacity which is separate from the hull. Clamshell Buckets available: 3 cy Yaun digging, 3.5 cy Esco digging, 3 cy Erie heavy duty digging, and 5 cy Yaun re-handle.

Spud Height 75' to WATER

JT Marine, Inc. Vessels

From http://jtmarineinc.com

DB Taylor

DB Astoria

Tug Stacy T

Tug Christy T

MANSON CONSTRUCTION CO.

Serving the Nation's Waterways Since 1905

Fleet

Derrick Barges/Clamshell Dredges "Derrick #24"

"Derrick #24" Specifications

Dimensions

Length:
200 ft / 60.9 m

Beam:
84 ft / 25.6 m

Depth:
13 ft / 3.96 m

Draft:
6 ft / 1.8 m

Operating Parameters

Maximum Linepull w/ boom extended 65 ft (19.8 m):
800,000 lb / 3,558 kN

Fuel:
40,000 gal / 151,400

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Phone: (206) 762-0850 • Fax: (206) 764-8590 • email@mansonconstruction.com • www.mansoncontruction.com

MANSON GULF DERRICK BARGE E.P. PAUP 1000/800 TON CAPACITY

MAIN HOIST
SWL 1000 ST over the stern @ 90′ Radius
SWL 800 ST full revolving @ 90′ Radius
Max Hook Height ..... 210′

AUXILIARY HOIST
SWL 300 ST
Max Hook Height ..... 240′

WHIP HOIST
SWL 25 ST / 50 ST 2 part
Max Hook Height ..... 260′

UTILITY DECK CRANE
Make ..... Manitowoc
Model 777
Type ..... Crawler
Capacity ..... 150 Tons
Boom 120ft

VESSEL SPECIFICATIONS
Registry ..... US Flag
Class ..... ABS/Solas
Length 380ft
Width 105ft
Depth 25ft
Est. minimum operating draft 10ft
VHF/SSB and Satellite Phone/Data Communications
Quarters Capacity ..... 156 person
Fuel Storage ..... 300,000 + gallons
Potable Water Storage ..... 430,000 + gallons
Water Maker ..... 10,000 gpd
Helideck

8 POINT MOORING CAPACITY
Wire Rope ..... 6,000ft of 2 inch
Anchor type 10 ton Delta Flipper

Manson Gulf LLC • 392 Old Bayou Dularge Road • Houma, LA 70363 • Phone: 985-580-1900 • Fax: 985-580-1901

Derrick Barges/Clamshell Dredges "Wotan"

"Wotan" Specifications

Dimensions

Length:
299 ft / 91.1 m

Beam:
90 ft / 27.4 m

Depth:
20 ft / 6.1 m

Draft:
8 ft / 2.44 m

Bucket Size:
5 yd^3 / 3.8 m^3

Operating Parameters

Maximum Linepull w/ boom extended 60 ft (18.3 m):
1,000,000 lb / 4,448 kN

Machinery & Power

Total Power:
1,944 hp / 1,450 kW

Fuel:
134,000 gal / 507,190 l

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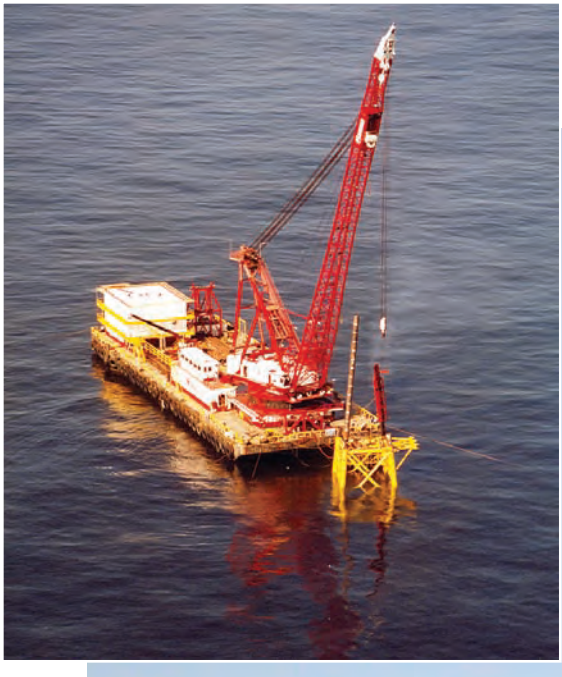

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Phone: (206) 762-0850 • Fax: (206) 764-8590 • email@mansonconstruction.com • www.mansoncontruction.com

From: Stilwell, Mark [Mark.Stilwell@portofportland.com]
Sent: Thursday, March 08, 2012 4:44 PM
To: Krcma, Karl
Cc: Williams, Kathryn; Rabby, Jennifer; Anderson, Doyle
Subject: Emailing: 0000B5C5000.tif
Attachments: 0000B5C5000.tif

Karl,

My name is Mark Stilwell, I'm the Captain of the Dredge OREGON for the Port of Portland. My Manager, Doyle Anderson asked me to forward this information on to you, regarding the Dredge OREGON. There are Three pages attached.

The page with the particulars about the Dredge, states we have 106 foot spuds. We have one new spud that's in use at this time that is 110 foot long. With the 110 foot spud pinned up and lifted to the highest point, our normal transit mode, we would need 103 feet leaving us a couple foot of clearance.

If we lower the spud below the bridge to say about 20 foot of draft, we would need about 93 feet of clearance, (again with 20 foot of draft), transit under the bridge, lift the spuds and continue on.

Is the channel going to be maintained @ 20 foot or so?? If the channel fills in to say fifteen feet, the scenario changes again. (98 feet)

The River Data sheet asks about a fifteen or twenty year plan, at this time there is nothing scheduled. I do know that there has been talk of work around Hood River.

Dry docking could be another issue for us as well. I don't know the particulars regarding the old sundial dry dock.

If any questions please feel free to call me 503-593-5204

Good Day
Mark

The message is ready to be sent with the following file or link attachments:

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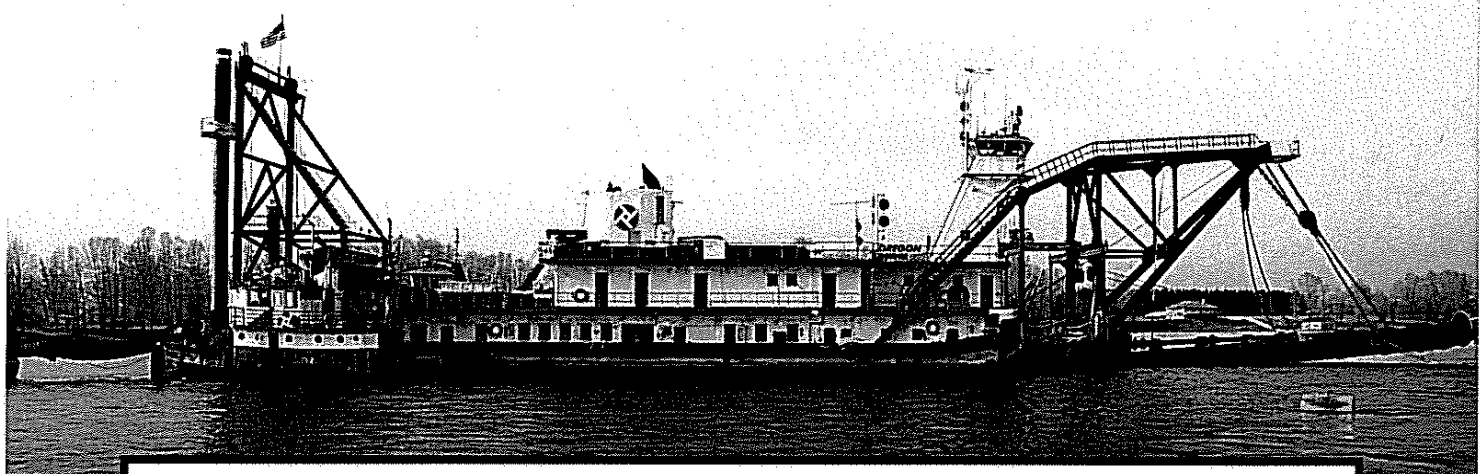
Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of file attachments. Check your e-mail security settings to determine how attachments are handled.



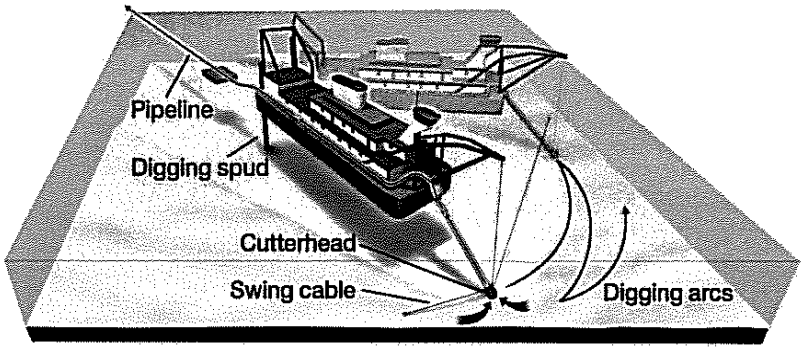
DREDGE *OREGON*

In 1891, to maintain Portland's position as a West Coast commercial center, the Oregon Legislature created the Port of Portland and empowered it to dredge and maintain the Columbia River channel at a depth of 25 feet. The Port leased its first dredge from the city of Portland and launched a partnership with the U.S. Army Corps of Engineers that still exists. Today, the Port owns the Dredge *Oregon*, a nonpropelled, cutter (suction) dredge with steel superstructure and hull. It can dredge 2,000 to 3,000 cubic yards of material per hour with a direct-drive diesel-powered engine. The Dredge *Oregon* works in the lower Columbia and Willamette rivers.

30-inch Pipeline Dredge *Oregon*

Type: 30-inch hydraulic pipeline dredge, nonpropelled, sreel hull and superstructure, cutter (suction)
Built: 1965, Bauer Dredging Co.
Rebuilt: 1979, Northwest Marine Iron Works, Inc.

Length, overall	265 feet
Length of hull	180 feet
Beam, overall	52 feet
Suction pipe, inner diameter	33 inches
Discharge pipe, inner diameter	30 inches
Dredging depth	85 feet maximum, 12 feet minimum
Width of cut	450 feet maximum, 100 feet minimum
Pumping engine	L.S.V. 16 Cooper Bessemer Diesel, 4,950 hp @ 360 rpm
Auxiliary generator	2 each J.S. 8 Cooper Bessemer, 1,400 hp, 1,200 kw
Cutter motor	800 hp
Swing motor	150 hp
Spud motor	150 hp
Suction mouth	Open elliptical
Spuds	1 pair, 106 feet long, fabricated steel with cast steel points
Fuel capacity	82,000-gallon No. 2, diesel average
Average diesel oil consumption	4,200 gallons per day
Total crew	44 men and women, including shore crew
Draft	11 feet
Present value	$12 million



PORT OF PORTLAND

From: Preisinger, Rachel A CIV PSNS, 2300 [rachel.preisinger@navy.mil]
Sent: Thursday, March 15, 2012 3:31 PM
To: Geiger, Peter
Subject: RE: River User Data Sheets

Hi Pete,

Here is the weight information for each of the barges and their maximum shipments.

Vessel: Dead Weight Tonnage (DWT) of Combined Barge/Shipment:

Beluga -- 2,261 long tons
Edgecumbe -- 2,191 long tons
Barge 40 -- 3,485 long tons
Barge 60 -- 2,137 long tons
Future Barge 1 -- 7,460 long tons
Future Barge 2 -- 9,480 long tons

I will hopefully send you the data sheets on the escort vessels tomorrow.

Rachel Preisinger
C/2312.2
PSNS&IMF

**********NMCI E-mail -- do not send N2PI through this account**********

-----Original Message-----
From: Geiger, Peter [mailto:Geiger@pbworld.com]
Sent: Wednesday, March 14, 2012 15:52
To: Preisinger, Rachel A CIV PSNS, 2300
Cc: Krcma, Karl
Subject: RE: River User Data Sheets

Hi Rachel - please just send the weight information by itself. We have a spreadsheet that compiles all of this for all of the river users (over 50 companies/entities). Also don't forget about any data on escort vessels that you can share.

Thanks!

PETE GEIGER
Parsons Brinckerhoff
503.274.8772

-----Original Message-----
From: Preisinger, Rachel A CIV PSNS, 2300 [mailto:rachel.preisinger@navy.mil]
Sent: Wednesday, March 14, 2012 3:38 PM
To: Geiger, Peter
Subject: RE: River User Data Sheets

Hi Pete,

Almost done. Waiting on the last few weights from the barge engineers.
When I get those, would you like me to resend you the updated data sheets for the six barges?
Or would you prefer that I send you the weight information by itself?

Rachel Preisinger
C/2312.2
PSNS&IMF

**********NMCI E-mail -- do not send N2PI through this account**********

-----Original Message-----
From: Geiger, Peter [mailto:Geiger@pbworld.com]
Sent: Tuesday, March 13, 2012 11:46
To: Preisinger, Rachel A CIV PSNS, 2300
Cc: Krcma, Karl
Subject: RE: River User Data Sheets

Thanks Rachel - Sooner would be better but we will take whatever we can get when we get it.
We are very grateful for the cooperation and data that PSNS has provided us.

PETE GEIGER
Parsons Brinckerhoff
503.274.8772

-----Original Message-----
From: Preisinger, Rachel A CIV PSNS, 2300 [mailto:rachel.preisinger@navy.mil]
Sent: Tuesday, March 13, 2012 11:28 AM
To: Geiger, Peter
Subject: RE: River User Data Sheets

I am actually working on it right now and am waiting for the various pieces of information to come in. I am hoping to be able to send it to you by the end of this week. Will that work for you, or do you need it sooner?

Rachel Preisinger
C/2312.2
PSNS&IMF

**********NMCI E-mail -- do not send N2PI through this account**********

-----Original Message-----
From: Geiger, Peter [mailto:Geiger@pbworld.com]
Sent: Tuesday, March 13, 2012 11:24
To: Preisinger, Rachel A CIV PSNS, 2300
Subject: FW: River User Data Sheets

Rachel - I have not heard anything from Rick regarding my follow-up questions below. I s this something you could address for me?

Thanks!

PETE GEIGER
Parsons Brinckerhoff
503.274.8772

-----Original Message-----
From: Geiger, Peter
Sent: Friday, March 09, 2012 9:06 AM
To: 'Schoenberg, Richard A CIV Code 2312, Code 2312.2'
Subject: RE: River User Data Sheets

Rick - Two additional questions/ data requests have come back after the review of this information; I am hoping you can answer them simply and
quickly:

1) What is the dead weight tonnage (DWT) of each of the packages/barge combination? The bridge engineers would like this for impact analysis on the new bridge piers. If is difficult or time consuming, please present as an approximate range or at least the approximate largest DWT.

2) What is the size of the Navy or USCG escort vessels that accompany each shipment?

Thanks for your prompt attention to this additional data request.

PETER GEIGER
Parsons Brinckerhoff
503.274.8772

-----Original Message-----
From: Schoenberg, Richard A CIV Code 2312, Code 2312.2 [mailto:richard.a.schoenberg@navy.mil]
Sent: Friday, March 02, 2012 4:31 PM
To: Geiger, Peter
Subject: River User Data Sheets

Peter,
Attached are the river user data sheets, one each for four current barges and two future barges. I may have to send these files one at a time because of a computer system constraint.
In para. 8 we indicate the months in which we ship and explain in further detail in para. 12 the general shipping schedule and the estimated frequency of the particular barge.
In para. 13 we indicate the air draft and the air clearance for the laden barge.

If you need further information, please contact me or Rachel Preisinger.

Rick Schoenberg
Code 2312.2
360 476 8544

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CORPS OF ENGINEERS, PORTLAND DISTRICT
PO BOX 2946
PORTLAND OR 97208-2946

REPLY TO
ATTENTION OF

Planning, Programs and Project
Management Division

FEB 23 2012

Ms. Heather Wills
Columbia River Crossing
700 Washington Street, Suite 300
Vancouver, Washington 98660

Dear Ms. Wills,

This letter is in response to the Columbia River Crossing (CRC), Interstate 5 (I-5) Project boat survey request for information regarding the Corps Dredges Yaquina and Essayons and our navigational needs upstream of the proposed new I-5 bridge project.

We determined that the proposed bridge height outlined in the Record of Decision would have serious impacts on our federal missions to maintain the navigation channel and provide emergency dredging upstream of the new bridge. After considering dredging requirements and potential future water release impacts to the Columbia River, we determined that the minimum prism needed for the new bridge is a height of 116 feet Columbia River Datum (121.4 NAVD88) for a width of 400 feet. A more detailed explanation of our requirements is enclosed.

We will forward a copy of this letter to Rear Admiral Keith Taylor, Commander 13th District United States Coast Guard, Jackson Federal Building, 915 Second Avenue, Seattle, WA 98174-1067, John McAvoy, FHWA, 610 East 10th Street, Vancouver, WA 98661; and Dave Hendricks, Multnomah County Drainage District No. 1, 1880 NE Elrod Dr., Portland, Oregon 97211.

We look forward to resolving these navigation concerns to ensure the CRC project does not have any unacceptable impacts to our federal projects. Please feel free to contact me at (503) 808-4500 or Ms. Marci Johnson of my staff at (503) 808-4765 or via e-mail at marci.e.johnson@usace.army.mil.

Sincerely,

John W. Eisenhauer, P.E.
Colonel, Army Corps of Engineers
District Commander

Enclosure

Printed on Recycled Paper

US Army Corps of Engineers ®
Portland District

U. S. Army Corps of Engineers Federal Navigation Channel Maintenance Needs
Columbia River Crossing (I-5 Interstate Bridge at Vancouver, WA)
February 2012

Summary:
Minimum prism needed for new bridge is height 116 feet Columbia River Datum (CRD) (equal to 121.4 feet NAVD88) for width 400 feet (channel width of 300 feet plus 50 feet on each side of the channel).

Authorized project:

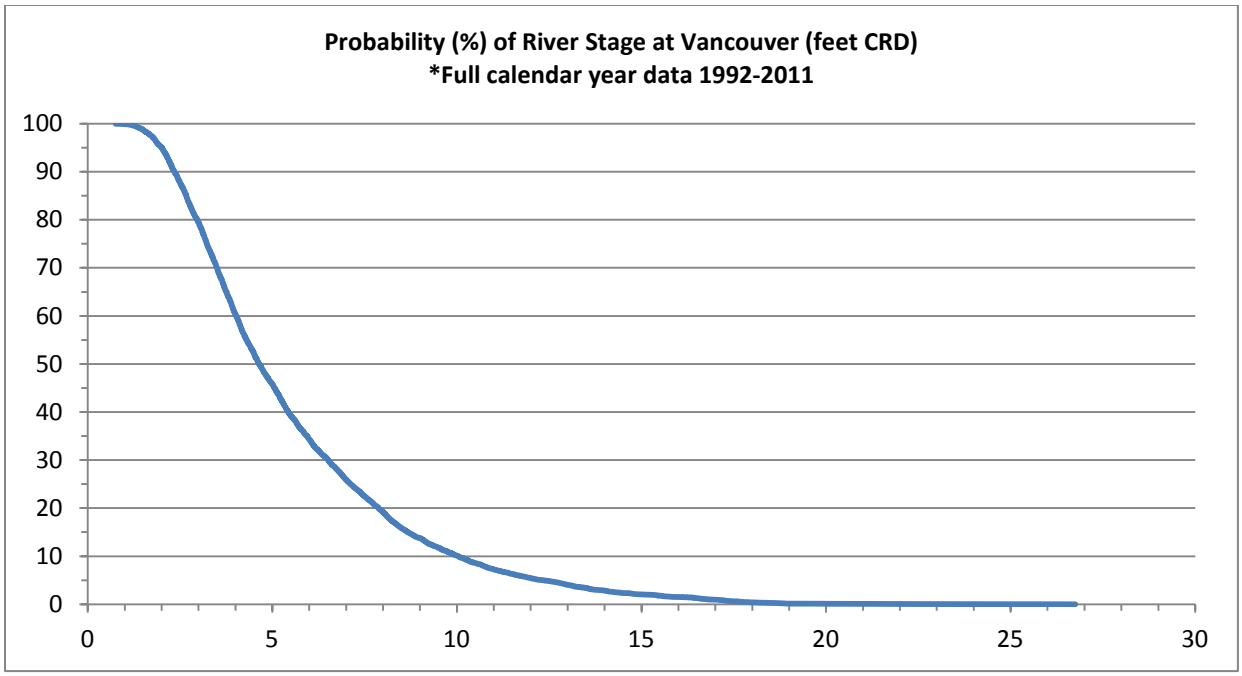
- The federal Navigation Channel immediately upstream of the Columbia River Crossing is authorized to 27 feet deep and 300 feet wide from Vancouver, WA, to The Dalles, OR. This channel supports the Columbia-Snake river system and transportation of 10 million tons of cargo annually. It is the largest wheat/barley export gateway in the U.S. and the third largest grain export gateway in the world.

Minimum bridge prism reasoning:

- The Corps' Dredge *Yaquina* performs annual channel maintenance dredging. The minimum prism needed for the new bridge is the vertical clearance required for this dredge to pass safely under the bridge at a specified river water level above CRD, and the horizontal clearance required for maintenance of the channel under the bridge.

Vertical clearance discussion:

- According to the USCG-licensed captains of the Dredge *Yaquina*, a 100-foot minimum vertical clearance from top of water to bottom of bridge is required (draft of 9 feet below the waterline gives a height of 92 feet above the waterline, plus an 8-foot minimum safety gap).
- The environmentally protective in-water work period as established by Federal and State agencies has changed in the past, and could continue to change as new species are listed, requiring work to be done during periods of higher river flow and stage.
- Year-round river flow levels must be considered as emergency operations could be required at any time. The probability of a river stage is shown below, using available data from the past 20 years.



- The uncertainty of future water levels must be considered. As part of the Columbia River Treaty Review, the Corps is collecting new data and performing studies to evaluate maintaining or potentially changing current levels of regulation for flood risk protection in this region of the Columbia River basin. The National Marine Fisheries Biological Opinion for the Federal Columbia River Power System also requires the Corps to spill water at its Columbia River dams to support salmon survival. These factors may lead to future operations resulting in elevated river levels (closer to ordinary high water) for longer durations compared with the past 20 years. Current Regulatory ordinary high water level at the Columbia River Crossing is 16 feet CRD (equivalent to 21.4 feet NAVD88).
- Bridge lift records show the lift height in feet above zero at the bridge pier elevation (39 feet CRD). Recent records show that the median lift for the Dredge *Yaquina* is 100 feet (equal to 139 feet CRD). The maximum lift shown was 136 feet (175 feet CRD). The minimum lift shown was 90 feet (129 feet CRD). Water levels shown on bridge records corresponding to these lifts ranged from 1 to 12 feet CRD.

Vertical clearance conclusion: A minimum vertical height of 116 feet CRD (121.4 feet NAVD88) is required. Year-round river level data from the past 20 years indicate that river levels were at or below 16 feet CRD approximately 98 percent of the time. Future river operations will likely increase river levels up to ordinary high water (16 feet CRD) for longer periods. Adding the 100-foot vertical clearance from waterline to bridge required for the Dredge *Yaquina* to 16 feet CRD yields a minimum vertical bridge height requirement of 116 feet CRD (121.4 NAVD88).

Horizontal clearance discussion:

- The Corps practices advanced width maintenance dredging (dredging up to 50-100 feet outside the channel width) to provide an area outside the channel for unstable side slope sloughing so that the full channel width remains clean.

Horizontal clearance conclusion: A horizontal width of 400 feet CRD is required at the vertical height specified above. This width includes the channel width (300 feet) plus 50 feet additional width on each side of the channel for advanced width maintenance dredging.

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Portland District's vessels

- **Hopper dredges**
- **Survey vessels**

The Portland District's hopper dredges *Yaquina* and *Essayons* work to ensure a safe "highway" for ships and other vessels. The hopper dredge is a specialized sea-going vessel designed to dredge and transport dredged material from ocean bars, swiftly flowing rivers and isolated harbors to open-water disposal areas. A hopper dredge works somewhat like a vacuum cleaner.

- **Essayons**
- **Yaquina**

The U.S. Army Corps of Engineers' hopper dredge *Yaquina* was delivered to the Portland District in 1981. The *Yaquina,* operated by a merchant marine crew, helps to maintain the entrance bars, rivers and harbors on the coasts of California, Oregon and Washington. Its size makes the Yaquina particularly well-suited for dredging small, shallow coastal entrances.

The *Yaquina's* crew consists of 40 civil-service mariners. The crew is divided into two operating tours, each of 20 men and women normally alternating on an 8-day-on/6-day-off schedule, working 10-hour days. Sophisticated instrumentation allows constant production monitoring and enables the dredge crew to maintain peak dredging efficiency 24 hours a day. The dredge normally works continuously, tying up eight hours or less per week for fuel, water, supplies and maintenance.

The *Yaquina* was designed by the U.S. Army Corps of Engineers and constructed by the Norfolk Shipbuilding and Drydock Corporation of Norfolk, Virginia, in 1981.

Click here for more about the Yaquina

Specifications

Hull

Length (overall): 200’

Beam: 58’

Height (keel-to-mast): 100’

Minimum height clearance: 90’

Draft

Light: 8’

Loaded: 16’

Displacement: 2,001 long tons

Dredging depth

Normal: 45’

Extended dragarms: 55’

Minimum disposal depth: 5’ keel clearance

(Calm conditions - minimum 18’ depth of water required at zero tide)

Main propulsion engines

2 Tier II MTU 8V4000 M60: 1,140 horsepower each

Ship service generator engines

Two Tier II MTU 12V2000 P82: 805 horsepower each

Dredge pumps

Pumps, two Caterpillar D-379 (565 horsepower): centrifugal

Intake: 18”

Discharge: 16”

Pump engines: 565 h.p.

Pumps will be replaced in 2012 with two Tier II MTU 12v 2000 P12

Speed

Light: 10.5 knots

Loaded: 10 knots

From: Jason Pond [jason@greenberry.com]
Sent: Tuesday, March 27, 2012 3:21 PM
To: Krcma, Karl; jpond@greenberry.com
Cc: Lindsay, Shawn M.
Subject: RE: CRC US Coast Guard Bridge Permit Data Request

See my responses in RED below

Sincerely,

Jason

GREENBERRY
Jason Pond
Chief Executive Officer
Cell:541-760-0266
Main:541-757-8458
FAX:541-757-9649
www.greenberry.com

"3 Million Safe Work Hours And Counting"

From: Krcma, Karl [mailto:Krcma@pbworld.com]
Sent: Tuesday, March 27, 2012 3:11 PM
To: Jason Pond; jpond@greenberry.com
Cc: Lindsay, Shawn M.
Subject: RE: CRC US Coast Guard Bridge Permit Data Request

Jason,

Thanks for sending the information.
I have some questions concerning your responses.

1) Is the information supplied for proposed shipments or actual historic shipments? Ideally we would like to obtain information for both historic and proposed shipments.
See my answer to question 4 below

2) The air gap (item #6) refers to the safety clearance between the top of the load and the lowest part of the bridge. This is added to the air draft to obtain the total clearance required. Does the 165 feet already include the safety tolerance?
See my answer to question 4 below

3) Item #10 refers to passage underneath the I-5 in Oregon Slough (North Portland Harbor). This is generally lower draft vessels since the existing bridge clearance in Oregon Slough is only 35 feet above Columbia River Datum. In your response, what shipments do the once a month frequency refer to under Item #10?
We have only been at this facility since November of 2010, so I don't have a lot of historical data. That being said, we just were awarded a contract to fabricate a large ship unloader and ship it to the Port of Portland,

where it will be unloaded and erected and in one large pre-assembled piece. I am not sure which route the barge company will take.

4) Are the photos that you attached the same Parker Drill Rig that Thompson Metal Fab worked on? If so, Thompson Metal Fab has already supplied air draft data for that shipment (approximately 133 to 144 feet)
Yes, they are. We both did a ton of work on the project. Thompson is our direct competitor, though, and they don't exactly go out of their way to let people know they were not the only firm that did a large portion of the work.

Please give me a call to discuss further.

Thanks,
Karl

Karl Krcma, P.E.
Ports & Marine Division
Parsons Brinckerhoff
400 S.W. Sixth Avenue, Suite 802
Portland, OR 97204-1628
503-274-8772 (office)
503-417-1365 (direct)

krcma@pbworld.com
www.pbworld.com

From: Jason Pond [mailto:jason@greenberry.com]
Sent: Tuesday, March 27, 2012 10:02 AM
To: Krcma, Karl; jpond@greenberry.com
Cc: Lindsay, Shawn M.
Subject: RE: CRC US Coast Guard Bridge Permit Data Request

Karl:

Attached is the requested form and some additional info.

Jason

GREENBERRY
Jason Pond
Chief Executive Officer
Cell:541-760-0266
Main:541-757-8458
FAX:541-757-9649
www.greenberry.com

"3 Million Safe Work Hours And Counting"

THOMPSON METAL FAB, INC.
3000 SE HIDDEN WAY • P.O. BOX 5276 (98668) • VANCOUVER • WA 98661
PH 360.696.0811 PORTLAND 503.283.4494 • FX 360.693.1017

March 18, 2011

Congresswoman Herrera Beutler
750 Anderson Street
Suite B
Vancouver, Washington 98661

RE: Columbia River Crossing – Minimum River Passage Height

Dear Congresswoman Herrera Beutler,

Thompson Metal Fab, Inc. (TMF), situated in the old Kaiser Shipyards on the north bank of the Columbia River, has over 70 years of experience in the fabrication and shipping of numerous heavy industrial as well as marine-related projects. Our company employs over 350 direct labor jobs in its construction of large infrastructure projects, as well as hundreds of indirect jobs in support of our operations. Our facility, located at Columbia Business Center in Vancouver, Washington is unique in its flexibility to construct large industrial projects. Our "roll-on/roll-off" barge slip for river transportation is the only one of its kind on the west coast. The combination of a heavy industrial construction facility and a support yard with marine transportation capability is an important asset to the region's industrial job base and potential to attract large job producing projects. This capability has given TMF the ability to stay competitive in a business that has largely moved overseas.

Currently the lift span on the interstate bridge is 178' at maximum clearance. It is critical to TMF and the region's industrial competitiveness to maintain a minimum of 125' clearance from zero datum in the new design for the Columbia River Crossing Bridge. Any less clearance will inhibit, not only our ability to attract industrial job-producing projects, but additional users such as the Army Corps of Engineers who depend on structures delivered by barge to support our region's dams and ports east of I-5.

Attached is a partial list of TMF projects that have utilized barge transportation over the past three decades (photos are attached as indicated).

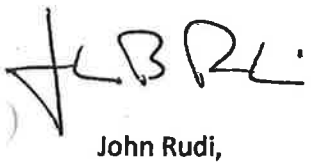
The Columbia Business Center was formerly Kaiser Ship Yard in the 1940s producing Liberty ships for the war effort. From the mid 1950s to 1960, the area was also used for the construction of a number of large offshore oil drilling platforms to support arctic drilling. Nearly every one of these projects required maximum bridge clearance.

A large number of general contractors, fabricators, and other industrial companies utilize the Columbia Business Center's barge facility for river and ocean transportation. Many of these projects also require the highest bridge clearance possible.

The new bridge design may be our region's only chance to ensure future generations the same strategic industrial competitiveness we have now. Do not restrict future jobs and commerce by lowering the passage height of the Columbia River Crossing by less than 125'. The design decisions you make today will possibly last the next 100 years. Please do not choke off the region's future east of I-5 to save a few dollars today.

Thank you for reviewing our information. You and/or your representatives are welcome to tour our facility at any time. If you have any questions, please feel free to contact me.

Sincerely,



John Rudi,
President
Thompson Metal Fab Inc.
360-696-0811
jrudi@tmfab.com

- **Alaska Ferry Conversion.** In 1973, TMF supplied an exhaust funnel, a solarium structure, and modular subcomponents for the passenger ferry that travels the Inland Passage to Alaska. TMF fabricated the components for this major renovation (the ferry was cut in half and lengthened), and delivered them by barge to the shipyard.

- **Georgia Pacific (Toledo, Oregon) 1,680' Wood Chip Material Handling System.** In 1975, TMF fabricated six 280' tube conveyor sections and all support towers for this project. The completed fabrications were transported by barge to Toledo, Oregon and installed. (See attached photo).

- **Conversion of Barges to Chips & Coke/Soda Ash for Pulp and Paper Mills.** TMF worked on these projects from 1979 to 1981. The converted barges were fabricated to ABS and USCG standards. These projects were installed at our adjacent dock and barge facilities on the Columbia River.

- **ARCO Operation Center Housing Expansion (North Slope, Alaska).** In 1985, TMF fabricated modular super-structures, with bases and decking housing modules, which measured 40' in width by 65' in height by 80' in length. The completed modules were loaded onto a barge standing 65' high and were transported to the North Slope in Alaska. (See attached photo).

- **Newport Bay Floating Restaurant.** In 1986, TMF fabricated a one-piece floating platform to support the waterside restaurant. It was fabricated in the TMF shop and then constructed at the Columbia Business Center barge slip. It was then finally transported to it's final destination in downtown Portland, Oregon.

- **I-90 East Channel Bridge.** In 1986, TMF fabricated trapezoidal tub girders that varied from 98' to 198' in length and weighed between 60 and 200 tons each. TMF pre-assembled the deck on the girders in the Columbia Business Center and the completed components were then loaded on a barge. These were transported to Lake Washington in Seattle and erected off the barge.

- **210' Dry Dock.** In 1987, TMF fabricated a complete 210' dry dock. This included the steel walls and decks, as well as all ballast tanks and piping.

- **Conoco Milne Point Project (North Slope, Alaska).** In 1987, TMF supplied 3,400 tons of fabricated modular steel structures. The completed fabrications required three ocean-going barge loads.

- **Pacific Marine (Honolulu, Hawaii).** In 1989, TMF fabricated a 365-ton SWATH (Small Waterplane Area Twin Hull) excursion vessel. The fabrication consisted of twin cigar-shaped hulls that were 9' in diameter and 132' in length with vessel beams measuring 53'. TMF's location adjacent to the Columbia River proved valuable for launching the vessel. After sea trials, the *Navatek* vessel headed to Hawaii and is still operating today.

- **Parker Drilling Rig 245 - Mobile Oil Drilling.** In 1990, TMF fabricated a self-propelled mobile oil drilling rig. The drilling module was 43' wide by 78' high by 150' long and it weighed 3,000 tons. The utility module was 40' wide by 58' high by 130' long and it weighed 1,500 tons. The cutting module was 30' wide by 30' high by 40' long and it weighed 350 tons. The completed drilling rig was transported by ocean-going barge from TMF's facility to the North Slope in Alaska. (See attached photo).

- **Powell River Paper Company.** In 1991, TMF supplied the fabricated steel for a Chlorine Dioxide Module that measured 35' wide by 76' high by 35' long with a weight of 350 tons. The module was transported by barge in the vertical position (76' high) from TMF's facility to Power River Paper Company in British Columbia, Canada.

- **US Army Corps of Engineers John Day Dam - Upstream Navigation Lock Gate.** This gate was fabricated in 1991 at our location. The gate measured 28' by 80' by 120' and it weighed 105 tons. It was transported standing up (80' high) for installation. (See attached photo).

- **Trapezoidal Steel Tub Bridge Girders for Seattle West Access.** The girders were fabricated at our location in 1992 and transported by barge to Seattle, Washington for erection.

- **Port of Sacramento 1,100' Bulk Material Handling System.** In 1993, TMF fabricated the 275' tube conveyor sections and all support towers. The completed fabrications were transported by barge to the Port of Sacramento.

- **Orthotropic Tub Girders - Nimitz Freeway.** The Cypress Contract "E" consisted of 13 steel curved tub bridge girders for the reconstruction of the Nimitz Freeway in the San Francisco/Oakland Bay area. The total project weighed 6,000 tons. The largest tub girders weighed 450 tons and measured 50' wide by 250' in length. The completed tub girders required 4 ocean-going barges that delivered the tub girders directly to the job site. (See attached photo).

- **Steel Trusses - Portland Expo Center.** In 1995, trusses were fabricated at our location for the expansion of the Portland Expo Center. The completed trusses were transported by barge to the job site in Portland, Oregon.

- **Bridge Fabrication - 1st Avenue & Duwamish Bascule Bridge Replacement.** In 1996, the complete truss section for this project was fabricated and assembled, along with the finish paint, at TMF's facility. This it was transported by barge to the job site in Seattle, Washington. (See attached photo).

- **Tri-Met Pedestrian Bridge.** In 1996, the pedestrian bridge that crosses the Sunset Highway at Highway 217 was fabricated at our location. The completed fabricated sections were

transported by barge to a nearby location and off-loaded. They were then heavy-hauled overland to the job site.

- **Nordic - Calista.** In 1997, TMF fabricated Modular Mobile Oil Drilling Rig 3. The rig included 850 tons of fabricated steel and it was 45' wide by 78' high by 110' long with complete turnkey assembly. The rig was transported by barge to the North Slope in Alaska. (See attached photo).

- **Pre-Heater Tower for La Farge Cement Plant.** In 1997, TMF fabricated this project and it was then transported by barge from the TMF facility to Richmond, British Columbia in Canada.

- **Golmar Explorer Recovery Ship Conversion to Oil Drilling Vessel.** In 1997, TMF fabricated 2 double-bottom sections, 4 thruster tubs, vessel exhaust stacks, and manifold systems for this project. The completed components were transported by barge from the TMF facility to Cascade General Shipyard.

- **PGE Trojan Decommission Nuclear Reactor Project.** In 1998, TMF fabricated a 120-ton transport support structure and 5" thick shielding component enclosures. The completed fabrications were transported by barge from TMF to the job site and the decommissioned reactor was transported from the job site by barge to the final storage site at the Richland, Washington Hanford site.

- **Esperanza 124 MW Power Barge.** In 1999, TMF fabricated and assembled this barge at our facility. It measured 105' in width by 16' in depth by 284' in length with a weight of 1,800 tons. The completed barge was loaded on top of a 400' by 100' barge and transported to Cascade General Shipyard in Portland, Oregon for final assembly and functional operation testing.

- **Removable Spillway Weir Structure for the Army Corps of Engineers - Lower Granite Lock and Dam.** In 2001, this removable spillway weir was designed to move juvenile fish more efficiently downstream through the dam spillways. The weir was 83' wide by 61' in depth by 115' in length and it weighed approximately 1,000 tons. The weir was completely fabricated at TMF and then transported by barge to Cascade General for repositioning. Then, finally, it was delivered to the job site on the Snake River for installation. (see attached photo).

- **Boeing Delta IV Launch Table.** In 2003, TMF fabricated a 580-ton launch table. It measured 98' in length by 33' in height by 46' in width. This project also included large 50 to 120-ton flame deflector components. The launch table and flame deflectors were fully assembled at the TMF facility and transported by barge to Vandenberg Air Force Base in California and then off-loaded and installed at the launch site.

- **Richmond/San Rafael Bridge.** In 2004, TMF supplied 10,000 tons of structural bridge steel for the sub-structure portion of the Richmond/San Rafael Bridge in California. This seismic retrofit

project was fabricated over a 3-year time period. The larger components were transported by barge directly to the job site in the San Francisco/Oakland Bay area.

- **Removable Spillway Weir Structure for the Army Corps of Engineers - Ice Harbor Lock and Dam.** In 2005, this removable spillway weir was designed to move juvenile fish more efficiently through the dam spillways. The unit measured 70' in width by 68' in height by 105' in length and it weighed approximately 950 tons. The weir was completely fabricated at TMF and transported by barge to Cascade General for repositioning and then transported directly to the job site on the Snake River for installation. (see attached photo).

- **Samuel Engineering - Alaska Gold Mining Project.** In 2005, TMF fabricated hoppers, grizzly grates, ball mill chutes, structural supports, modification of the ball mill, and other mining equipment for this project. TMF's facility was used for the marshaling yard and then all of the equipment and fabrications was transported by barge to the mining site in Nome, Alaska.

- **San Francisco/Oakland Bay Bridge Replacement.** In 2006, TMF fabricated two steel orthotropic tub girders that each weighed more than 1,600 tons and measured over 200' in length and 80' in width. The girders were transported by barge directly to the Bay Area for erection.

- **OHSU Portland Aerial Tram.** In 2006, TMF fabricated the center support towers, the lower station and the upper station for the tram project. The major components were transported by barge from TMF to the job site in Portland, Oregon where they were off-loaded and erected.

- **Caltrans - East Tie-In.** TMF was selected by Caltrans (owner) to work with TY-Linn (designer), CC Meyers (contractor), and DCCI (erector) to fabricate 3,100 plus tons of temporary detour steel for the Oakland Bay Bridge at Yerba Vista Island. This project was completed on an extremely "fast track" basis. TMF met, or exceeded, all schedule requirements while maintaining all Caltrans' requirements. The major large components required four barge loads to be transported from TMF to the job site in California. This project was completed in June 2009.

- **Parker Drilling Company/British Petroleum Liberty Oil Drilling Rig (Alaska).** This oil drilling rig was delivered from our facility to the North Slope Alaska in July 2009. TMF furnished approximately 5.5 million pounds of fabricated steel and rig-up support. The rig consisted of three large modules. The Drill Module was 58' wide by 98' high (transport height) by 68' long and weighed 900 tons. The Pipe Barn Module was 158' wide by 45' high by 170' long and it weighed 2,560 tons. Finally, the Drill Service Module was 50' wide by 48' high by 177' long and it weighed 2600 tons. (see attached photo).

- **Parker Drilling AADU Oil Drilling Rigs (272 and 273).** These are currently in the process of being delivered to the North Slope in Alaska. Each drilling rig was comprised of three main modules. The Mud Modules weigh 600 tons; the Drill Modules weigh 700 tons; and the Utility Modules weigh 450 tons (6 modules total). The size of the Mud and Utility modules is 48' wide by 55'

high by 90' long. The Drill Module was 76' high with the mast in the lay-down position. After being loaded on an ocean-going barge, the tie-down blocking added 23' feet to the overall height. Therefore, the final height of the unit on the barge was 99 feet.

- **Doyon Oil Drilling Rig 25.** TMF furnished over 4 million pounds of steel and aluminum fabrication and served as the primary contractor for this job. TMF managed all rig-up yard activities, including mechanical, electrical, and functional checkout. The rig consisted of 6 individual complexes:
    - -The Power Complex weighed 550 tons and was 56' long by 40' wide by 42' high.
    - -The Drill Complex weighed 560 tons and was 96' long by 37' wide by 40' high.
    - -The Pipe Complex weighed 560 tons and was 68' long by 47' wide by 25' high.
    - -The Mud Complex weighed 550 tons and was 68' long by 40' wide by 49' high.
    - -The Pump Complex weighed 560 tons and was 64' long by 40' wide by 52' high.
    - -The Casing Complex weighed 500 tons and was 60' long by 56' wide by 40' high.

  There was also a Rig Mast that was 148' long (when fully extended) by 26' wide (at the base) by 25' high. The overall footprint of this project was 265' by 150' and it weighed 6.2 million pounds.

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OVERALL: 120' Top of load
50'
50'
20'
On 6/23/2009, River elevation at 6.8 ft.

L-15-2009

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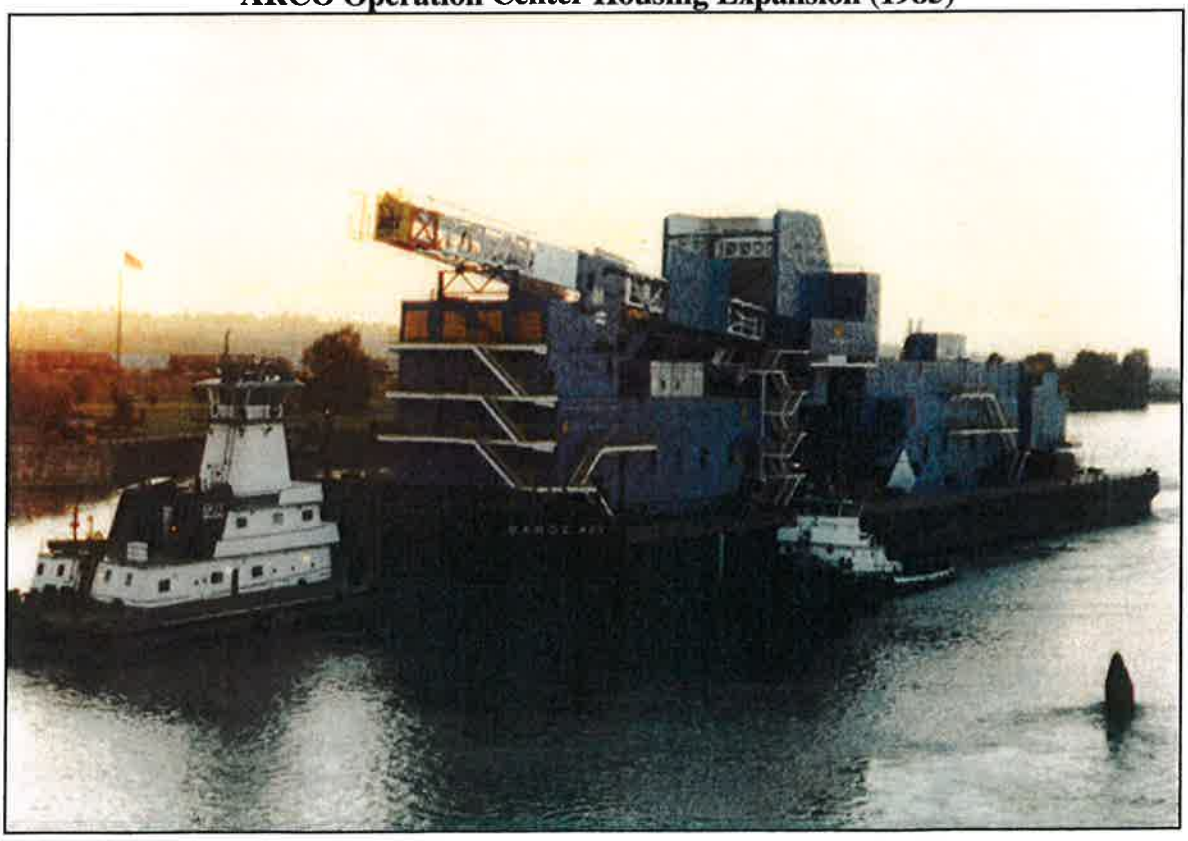
THOMPSON METAL FAB, INC.

3000 S.E. Hidden Way
Vancouver, Washington 98661

Thompson Metal Fab, Inc. (TMF) has over 70 years of experience in the fabrication of marine related projects.

Georgia Pacific (Toledo, Oregon)—1,680 Foot Wood Chip Material Handling System (1975)

ARCO Operation Center Housing Expansion (1985)



Parker Drill Rig 245 (1990)

Up-Stream Navigational Lock Gate (1991)

Orthotropic Tub Girder Fabrication—Nimitz Freeway (1995)

Bridge Fabrication—1st Avenue & Duwamish (1996)

Nordic – Calista Modular Mobile Oil Drilling Rig 3 (1997)

1,000 Ton Removable Spillway Weir for Lower Granite Dam (2001)

950 Ton Removable Spillway Weir for Ice Harbor Lock and Dam (2005)

Parker Drilling/British Petroleum Liberty Oil Drilling Rig (2009)

American Cruise Lines Vessels

From http://www.americancruiselines.com/

Queen of the West

American Spirit

From: Paul Taiclet
To: Petereit, Ralph
Subject: RE: Columbia River User Data Request - Queen of the West
Date: Monday, March 12, 2012 4:32:15 AM

Good morning Ralph,

Below is the information regarding American Cruise Lines Vessels that are operating or will operate in the future under the I5 Bridge. American Cruise Lines cruises from March – December offering week long cruises from Portland to Astoria to Clarkston, WA and the reverse. In a typical month we sail under the bridge 8 to 12 times.

American Spirit -- LOA 214'-6", Beam 45'-8", Draft 6'-3", Air Draft 45'-0" (Overnight Passenger Vessel, USCG Subchapter K, O.N. 1167737)
Queen of the West--LOA 230'-0", Beam 50'-0", Draft 5'-8", Air Draft 64'-4" (Overnight Passenger Vessel, USCG Subchapter T-L, O.N. 1033572)
Future Vessel--LOA 284'-0", Beam 60'-0", Draft 8'-6", Air Draft 65'-0" (Overnight Passenger Vessel, USCG Subchapter K)

Thank you,
Paul

From: Petereit, Ralph [mailto:Petereit@pbworld.com]
Sent: Friday, March 09, 2012 11:28 AM
To: Paul Taiclet
Subject: FW: Columbia River User Data Request - Queen of the West

Paul,

Attached is the information we are trying to obtain on the Queen of the West and any other vessel that you are proposing to use on the Columbia River in the future. Thanks

Ralph

From: Petereit, Ralph
Sent: Friday, February 24, 2012 1:27 PM
To: 'taiclet@americancruiselines.com'
Subject: Columbia River User Data Request - Queen of the West

Dear Mr. Taiclet,

Thank you for speaking with me about providing vessel user data for American Cruise Lines' Queen of the West, a vessel that may transit under the I-5 Bridge on the Columbia River. As you may know, the States of Washington and Oregon are currently designing for the replacement of the bridge. This project is called the Columbia River Crossing (CRC) Project. As part of the process for determining the replacement bridge navigation clearance criteria, current vessel owners are being

contacted to determine their vessel usage through this area so that informed decisions can be made. The information you provide will become part of the record that will be included in a Coast Guard Bridge Permit Application. You may have seen a recent notices in Portland area newspapers and the Coast Guard's Local Notice to Mariners Announcement. I have attached a copy of the announcement for your information (see #4856 in the announcement).

We are reaching out to you because your company may have vessels that require special navigation needs. Our firm, Parsons Brinckerhoff, has been contracted to assist the Washington State Department of Transportation in collecting user information in a very short period of time. Our interest is in collecting vessel information on those vessels that have in the past, or will in the future need to pass under the bridge, including going into Oregon Slough just upriver from the bridge. While the focus is primarily on air draft, vessel draft and width, other information is also being requested. A vessel data user sheet is attached which includes the requested information. We would like to obtain information on the Queen of the West and any other vessels you have that may transit up the Columbia River, including any plans you may have for future larger vessels. If you can complete this information and return it to me I would appreciate it. You may

Thank you in advance for your time.

Ralph Petereit, P.E.
Vice President/Director - Ports & Marine West
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American Safari Cruises/InnerSea Discoveries Vessels

From http://www.innerseadiscoveries.com/

Safari Spirit

American Waterways, Inc. (Portland Spirit) Vessels

From http://www.portlandspirit.com

Portland Spirit

Crystal Dolphin

Grays Harbor Historical Seaport Vessels

From www.historicalseaport.blogspot.com

Lady Washington

Hawaiian Chieftain

Linblad Expeditions Vessels

From http://www.expeditions.com/

National Geographic Sea Bird

National Geographic Sea Lion

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Appendix G – Port Interviews

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River Port Information

Introduction

Many Ports along the Columbia and Snake Rivers rely on navigation access as part of their business. This includes tug and barge traffic carrying bulk commodities such as grain, fuel, wood chips, and sand and gravel, containerized and project cargo, passenger vessels and pleasure craft. As part of the data gathering effort, 21 ports along the Columbia and Snake River system were contacted regarding their existing and future activities and plans that may require navigation. Ports located upriver of the Interstate-5 Bridge were asked about their recent and future plans for dredging and marine construction in order to identify marine traffic that might need to pass under the Interstate-5 Bridge.

The information obtained from each port is summarized below and detailed in later sections. The status and/or availability of the latest business plan was also requested. Most of the Ports have the plan available on the internet and in those cases the internet link is provided. A few ports provided their plans electronically as they were not available over the internet. Some of the ports either do not have a plan or it was not publicly available.

Summary

This summary is provided as a general discussion of the overall information obtained with respect to existing and potential future navigation related impacts associated with transit under the Interstate-5 Bridge. Some of the information related to overall cargo types was obtained from the latest statistics available online from the U.S. Army Corps of Engineers and this was consistent with an earlier synopsis of cargo movements presented by Parsons Brinckerhoff in the "Navigation Baseline Report" for the SR 35 Bridge Feasibility Study prepared for the Southwest Washington Regional Transportation Council in 2003.

Existing Conditions

A summary of the existing operations, dredging and marine construction is presented in this section. The summary under dredging and marine construction is limited to ports upriver of the Interstate-5 Bridge since these projects had the potential to generate vessel traffic by contractors underneath the Interstate-5 Bridge.

Operations

Barges are used to move cargo on the upper Columbia and Snake River system due to geometric constraints at the navigation locks. Traffic is limited to a draft of 14 feet, width of 86 feet and lengths between 650 feet and 675 feet according to information obtained from the U.S. Army Corps of Engineers. This information can be found at the following site: http://www.nwp.usace.army.mil/navigation/home.asp.

Of the 8.2 million short tons of cargo navigating between Vancouver and The Dalles on the Columbia River in 2009, wheat was by far the most common commodity at 52

percent, followed by petroleum and petroleum products at 22 percent, forest products (primarily wood chips) at 9 percent, sand and gravel at 8 percent, waste and scrap at 3 percent and chemicals (fertilizer and ethanol) at 2 percent (U.S. Army Corps of Engineers (2009) "Water Borne Commerce of the United States, Part 4 – Waterways and Harbors Pacific Coast, Alaska and Hawaii," IWR-WCUS-09-4, Institute for Water Resources, U.S. Army Corps of Engineers, Alexandria Virginia). While the most common bulk commodities are grain, fuels, wood products and aggregate, other project cargo and equipment include dredges, cranes, fabricated structural components such as dam and lock components for the U.S. Army Corps of Engineers, wind turbine components including blades, nacelles and steel tube, U.S. Navy shipments of decommissioned reactor cores to the Hanford Nuclear Reservation, and modular cargo recently delivered by barge to the Ports of Pasco and Lewiston for oil shale processing sites in Canada.

Container traffic in 2010 reported by the U.S. Army Corps of Engineers (http://www.ndc.iwr.usace.army.mil//wcsc/by_state10.html) included 26,500 TEU's overall with about four out of five inbound loaded while only one of four outbound were loaded. This traffic is primarily handled by the Ports of Morrow, Umatilla, Pasco, Whitman Co. (Wilma) and Lewiston.

Excursion and passenger vessel traffic includes several operators and one or more vessels per operator. Some vessels transit the entire system terminating the extent of their upstream trip at or near the Port of Clarkston. These vessels as well as those that do not transit the entire distance may stop at one or more docks including the Ports of Skamania County, Cascade Locks, Hood River, City of The Dalles, Klickitat County, Arlington (operator granted permission in the past but never stopped), Umatilla, Walla Walla, Garfield (operator granted permission in the past but never stopped) and Clarkston.

Dredging

Ongoing maintenance dredging needs include channel and/or berth maintenance at several of the ports upriver of the Interstate-5 Bridge including the Ports of Cascade Locks, Benton County, Walla Walla, Clarkston and Lewiston. In many cases the ports try to contract with the U.S. Army Corps of Engineers dredging contractor when they are in the area (i.e. private contractors). However, the Port of Cascade Locks contracted with SDS Lumber to conduct their dredging with its equipment (clamshell bucket). Others such as the Port of Benton have their facility maintained by the U.S. Navy who brings in divers to remove sediment at their low dock.

Marine Construction

Most of the marine construction at the upriver ports is conducted by land based equipment to the extent possible. Recent examples include the Port of Cascade Locks (recent boarding float replacement), Hood River (groin and riprap slope protection repair), Arlington (piling and boat ramp), Pasco (seawall upgrade) and Whitman County (repaired sheet pile dock and removed rock from a berth). Recent and ongoing work that involved water based equipment includes City of The Dalles commercial dock project which is currently under construction using barge mounted cranes. Pile driving and dolphin construction at Willow Creek for the Port of Arlington was completed several

years ago before the project was indefinitely postponed due to regulatory issues. The Port of Morrow had two projects funded under Connect Oregon I and III involving in water work on docks and barges slips using barge mounted equipment by West Coast Contractors and Bergerson Construction, respectively.

Future Conditions

A summary of potential future operations, dredging and marine construction is presented in this section. As noted previously the summary of dredging and marine construction is limited to upriver ports as these projects have the potential to generate marine traffic by contractors past the Interstate-5 Bridge.

Operations

There is a possibility of modular cargo for oil sand processing and/or hydraulic fracturing operations for natural gas production depending on regulatory and market trends. The coal industry has been in the market for west coast export terminal facilities. Recent and ongoing examples include the Port of Longview and the Port of St. Helens. One of the proposals for the Port of St. Helens involves barging coal from the Port of Morrow to the Port of St. Helens in specialty barges. The U.S. Navy may ship a larger class of decommissioned reactor compartments in the future from Ohio Class Submarines to the Port of Benton by barge but that is likely several years in the future. Other than those possible cargo modifications, the port interviews and plans indicate continuance of ongoing operations. Some of this existing cargo such as bulk commodities may increase modestly (typically a few percent per year, on average, based on trends illustrated in most of the ports business plans). Container cargo is more volatile and is subject to the factors such as international container service at Port of Portland's Terminal 6.

Cruise industry related business was down significantly during the recent economic recession with some operators going out of business. However, service appears to be rebounding somewhat though not yet to the levels seen several years ago.

Dredging and Marine Construction

Ongoing maintenance dredging will include those ports and facilities noted under existing conditions. New projects that are either planned or still under consideration are discussed below. These projects will require dredging, marine construction or some combination thereof. Future projects were mentioned by several ports including the Ports of Cascade Locks (beach expansion project including jetty extension work, two new groins and two mobile floating docks; new marina at Government Rock and a new cruise boat dock), Hood River (currently securing permits to re-sculpt the delta materials, i.e. dredging/ excavation); Arlington (development of partially completed facility to allow barge based export of aggregate from Willow Creek quarry and riprap repair at grain terminal which will likely require a barge mounted crane to reach the areas to be repaired), Morrow (possible barge slip dredging but this is several years out at the earliest), Umatilla (400 foot dock extension at the container terminal and a new G dock in the marina), Whitman County (enlargement of a sheet pile dock at the TGM facility at Wilma that will require water based construction equipment, currently in permitting

process) and Lewiston (150 foot dock extension at the container terminal but this would likely be constructed with land based equipment).

Port Interviews
All of the 21 ports were contacted by telephone, except for the Port of Portland which was interviewed at the Port office in person.

Port of Astoria
Interviewee: Herb Florer, Deputy Director
Date: March 5, 2012

Existing operations

1. The Port does not currently receive any waterborne cargo originating upriver of the Interstate-5 Bridge.
2. However historic photos indicate previous transload activity at the port from barge to oceangoing ships.
3. Pier 1 and to some extent Pier 2 could serve as barge to ship transload facilities.
4. The Port owns the former Tongue Point U.S. Naval Station but at this time there is no navigation related activity at the site.
5. The Port handles large cruise ship calls but these vessels are too large for the federal channel upstream of the Interstate-5 Bridge so Portland is the upstream extent of their navigation.
6. Other smaller excursion vessels call and these do travel upstream on the Columbia and Snake Rivers.

The Port has a strategic business plan dated 2010 available at the following links on the Port's web site:
http://www.portofastoria.com/media/PDFFiles/StrategicPlan2010/0925_TemplateRptACOMPfinalcover.pdf
http://www.portofastoria.com/media/PDFFiles/StrategicPlan2010/0925_TemplateRptBCOMP.pdf

Future plans

1. The Port is looking at a concept for a dock that could be constructed perpendicular to the ends of the finger piers at Tongue Point giving a long contiguous berth in deep water with a short access channel to the main shipping channel in the Columbia River.
2. This terminal concept at Tongue Point could support multiple types of transload activities including barge to ship that may involve barge traffic at the Interstate-5 Bridge.
3. During recent meetings with the Columbia River Pilots to discuss potential future cargo volumes, companies involved with bulk commodities noted the Bradwood site as a potential candidate for future marine terminal operations.
4. Ships are getting larger with deeper drafts and wider beams. Thus, this trend in relation to the constraints of the existing (yet recently deepened) federal channel

could spur future opportunities at the Port of Astoria associated with these constraints.

Port of St. Helens
Interviewee: Paula Miranda, Deputy Director
Date: February 14, 2012 and April 2, 2012

Existing operations

1. There are no current operations that generate navigation traffic at the Interstate -5 Bridge.

Although the Port does not have a current strategic plan, a new one is underway and should be completed later this year.

Future plans

1. The Columbia Pacific Bio-refinery is positioned to start production of ethanol when economic conditions become favorable. Although this may generate exports of ethanol by barge this is expected to be limited to the Portland market and would not generate navigation at the Interstate-5 Bridge. The imported corn for the plant will arrive by rail.
2. The Port is evaluating two coal export proposals from two companies. One of these proposals would export coal by barge from the Port of Morrow to the Port of St. Helens dock at Port Westward for transload to ocean going ships. This may generate as many as four barges per day which would fill about 150 ships per year.

Port of Longview
Interviewee: Rocky Fisher, Senior Superintendent of Operations
Date: March 8, 2012

Existing operations

1. The only operation that currently generates marine traffic at the Interstate-5 Bridge are grain exports by barge to the new Export Grain Terminal (EGT) facility for transload to ocean going ships.
2. Weyerhaeuser does have log barges call at their facility which likely transit the Interstate-5 Bridge. Log barges do not call at the Port of Longview.
3. Wind turbine tower components are imported by ship but at this point all of that cargo leaves by truck.
4. In the past some project related cargo had come in by ship and was transferred to barge but this was quite a while ago and the details are not readily available if at all.

The Port has a Master Plan and Comprehensive Scheme of Harbor Improvements both dated 2011 and they can be downloaded from the following links on the Ports website:

http://www.portoflongview.com/Portals/0/Documents/Document-Library/Miscellaneous/Port%20of%20Longview%20Mater%20Plan%20Final%20Report%2006-14-11.pdf

http://www.portoflongview.com/Portals/0/Documents/Document-Library/Miscellaneous/Final%20Comp%20Scheme.pdf

Future plans

1. There has been some discussion of barging wind turbine components upstream but nothing concrete in the way of plans at this time.
2. No other plans at this time that would affect barge or other marine traffic at the Interstate-5 Bridge.

Port of Kalama
Interviewee: Mark Wilson, Deputy Director | Development Director
Date: March 12, 2012

Existing operations

1. The only operations that generate marine traffic at the Interstate-5 Bridge are grain exports by barge to the Kalama Export Company and Cenex/ United Harvest facilities for transload to ocean going vessels.

The Port has a Comprehensive Plan and Scheme of Harbor Improvements dated 2010 which can be downloaded from the following links on the Ports website:
http://www.portofkalama.com/File.ashx?cid=143

Future plans

1. Marine terminal upgrades are underway at the Cenex/ United Harvest facility and barge traffic will resume upon completion.
2. There are no other plans at this time affecting river navigation traffic types or volumes at the Interstate-5 Bridge.

Port of Vancouver
Interviewee: Katy Brooks, Community Planning and Outreach Manager
Date: March 13, 2012

Existing operations

1. The Port consistently imports grain by barge from upriver ports to the facility at Berth 1 in Terminal 2.
2. Recent or ongoing project cargo includes the large modules produced for the oil sands processing industry in Canada and occasional shipments of wind turbine components up river by barge although the majority of wind turbine components are shipped upriver by truck or rail.

3. In the past there is occasional miscellaneous project cargo but this is difficult to predict. None of this cargo has been tall enough to affect planning for the height of the new proposed bridge adjacent to the Interstate-5 Bridge.

The Port has a strategic plan (2012-2021) rev. Feb. 2012 posted at the following link: http://www.portvanusa.com/sites/default/files/tinymce/files/2021%20STRATEGIC%20PLAN.pdf

Future plans

1. There is the potential for future project cargo including the shale sand modules but these may be shipped as smaller modules in the future based on the recent suspension of overland transport in some jurisdictions. Future miscellaneous project cargo will likely continue but the timing, type and sizes are unknown.
2. There are no expansion plans at this time which would generate different or additional cargo shipments either up or down river.
3. The Port's two relatively large water front industrial parcels of land (Terminal 5 and Gateway) will likely serve rail to ship cargo movements as opposed to barge traffic.

Port of Skamania County
Interviewee: Julie Mayfield, Executive Assistant
Date: February 16, 2012

Existing operations

1. The Port has one excursion vessel dock that has had calls by the Queen of the West (American Cruise Lines), Lady Washington and Hawaiian Chieftan over the past few years. For 2012 the Queen of the West is scheduled for 30 calls to the excursion vessel dock beginning mid April and extending through the first week of November with an average of 4 to 5 calls per month.
2. The excursion vessel dock does not need dredging although recent landslides in the Rock Creek watershed are depositing sediment along the north shore of the Columbia River immediately downstream. Although sediment has not yet reached the excursion vessel berth it is getting close and could impact the berth in the future.
3. There has not been any marine facility repair or new construction lately.

The Port has a resource development plan (2001-2003) posted at the following link: http://www.portofskamania.org/images/plan.pdf

Future plans

1. Based on existing experience there is no foreseeable dredging needs in the future unless the Rock Creek sediments continue to migrate eastward toward the cruise boat dock.
2. There are no plans for new construction or improvements to the marine facilities at this time but shore based work to repair eroding banks may occur in the near

future. This erosion control work would be constructed using shore based equipment.

Port of Cascade Locks
Interviewee: Chuck Daughtry, General Manager
Date: February 13, 2012
Interviewees: Chuck Daughtry and Kristi Bengtson, Administrative Assistant, Marina Manager
Date: March 14, 2012

Existing operations

1. The Port has one excursion vessel dock that has had calls by the Queen of the West (American Cruise Lines), Portland Spirit and National Geographic boats such as the Sea Lion (Lindblad Expeditions).
2. The Sternwheeler Columbia Gorge is owned by the Port of Cascade Locks and is operated as a concession by Portland Spirit. The Sternwheeler Columbia Gorge is moored at the cruise boat dock at the Port. Thus, when the Lindblad Expedition boats arrive they normally moor in the old locks.
3. There are tug and barge operations out of SDS Lumber across the river in Stevenson.
4. The Port owns and operates a marina and beach with significant sailboat activity including international meets, however these are limited to small boats.
5. The Port needs to dredge the marina entrance approximately once every five years with average volumes of about 2,000 cubic yards. On occasion, dredging was also performed at the cruise boat dock. This dredging has recently been performed by SDS Lumber using its own equipment, but at this time that equipment is no longer available. The dredging was conducted by clamshell bucket with in-water disposal. The Port is in the permitting process and, due to delays associated with the permitting, was not able to take advantage of the U.S. Army Corps of Engineers dredging contractor from Vancouver, Washington that was recently working near Bonneville Dam.
6. Some of the boarding floats in the marina were recently replaced but this was completed by a local firm from Cascade Locks so did not involve any navigation underneath the Interstate-5 Bridge.

The Port is underway in preparing a strategic plan but it is not yet available. Two sets of Strategic Planning Meeting minutes were provided by the Port. These meetings occurred on May 26, 2011 and December 1, 2011.

Future plans

1. The Port needs more dock space for excursion and passenger vessels. This would be a new dock in addition to the existing dock where the Sternwheeler Columbia Gorge is typically moored. As part of this new dock project the Port would also like additional smaller docks for transient vessels.

2. The port would like to attract a Cascade Locks to Astoria high speed touring vessel such as the Outrageous operated by Portland Spirit. Currently the Outrageous operates between Portland and Cascade Locks and Portland to Astoria.
3. Dredging needs are not anticipated to change from those currently unless a new dock is constructed. Thus, the Port will be looking to dredge about once every five years into the foreseeable future.
4. The Port is in the permitting process for its beach expansion project. This will include expansion of an existing jetty, two new groins and two small mobile docks.
5. The Port would like to see a marina in the future at Government Rock.

Port of Hood River
Interviewee: Laurie Borton, Operations Manager
Dates: February 14, 2012 and March 14, 2012

Existing operations

1. The Port has one excursion vessel dock that is utilized in the spring through fall. During the fall in 2011 the three cruise vessels called including the Sternwheeler Columbia overnight once in September, eight two-and-a-half hour calls by the Sea Bird (Lindblad Expeditions) September through November and ten overnight calls by the Safari Spirit (American Safari Cruises) from the end of September through the first of December.
2. About once a quarter the U.S. Coast Guard Buoy Tender Bluebell will call overnight. The first occurrence this year already occurred.
3. The Port owns and operates a marina which also hosts a yacht club.
4. The Port facilities are located upstream and downstream of the mouth of Hood River which discharges significant volumes of sediment. The sediment is accumulating in proximity to Port facilities including an excursion vessel dock that is not accessible due to this sedimentation. Thus, the cruise vessels and U.S. Coast Guard buoy tender moor within the marina (located upstream of the accumulated sediment) where a suitable dock with sufficient depth is available.
5. The Port does not have a problem with sedimentation in the marina or its mouth and has not dredged in the past 11 years. In 2006 a discharge event deposited a large amount of sediment at the mouth of Hood River which prevents access to the cruise dock at the north end of Nichols Basin. However, the Port does not have plans to dredge and reopen this facility to cruise vessels and will instead rely on its cruise boat dock in the marina.
6. Recent construction included groin repair at the event site in 2011 and riprap repair at the marina entrance and at the hook last month (February 2012). All of this work was conducted using land based equipment.

The Port provided its existing strategic plan dated 2006. The plan is scheduled for revision by 2013.

Future plans

1. The Port is looking to secure permits and approvals to re-sculpt the sand in the Hood River delta but not to re-open the former cruise dock.
2. There are no current plans for future marine construction.

Port of The Dalles

Interviewee: Andrea Klaas, Executive Director
Date: February 13, 2012 and March 19, 2012

Existing operations

1. The Port sold all of its developable land except one 85 acre tract adjacent to the Columbia River with barge access. The Port would like to see water dependent development on this parcel but there are basalt outcroppings which will make certain types of development challenging.
2. There is a grain export terminal operated by Mid Columbia Producers that generates barge traffic.
3. An excursion vessel dock is located on land under indefinite lease to the city and currently has calls from the Sea Lion (Lindblad Expeditions).
4. The Port owns and operates a marina.
5. The marina was dredged in the 1980's or 1990's due to sedimentation associated with the jetty on the upstream side of the marina. Dredging has not taken place recently. None of the other facilities need dredging due to the deep depths associated with the basalt formations at the river bank.
6. Marine construction is underway for the City of The Dalles on a new floating dock for recreational vessels and a fixed dock for commercial vessels (e.g. cruise vessels) with a 5 ton jib crane to handle light cargo. Bergerson Construction is the contractor. The work is scheduled to be completed by June 2012.

The Port's strategic business plan, dated 2009, is posted at the following link: http://www.portofthedalles.com/documents/2009%20Strategic%20Plan%20-%20Small%20File.pdf

Future plans

1. Dredging in the future is not anticipated other than maintenance of the marina which is infrequent.
2. Other than ongoing construction of the new docks there are no plans for future construction at this time. However, local governments are discussing the possibility of a second bridge over the Columbia River in the event the population in the Dallesport area north of the river reaches a level of 40,000 to 50,000. This is many years in the future, if at all. Future development in the Dallesport area reflects difficulties with limited land for development on the Oregon side of the river in The Dalles. Current population in the Dallesport area is only about 3,000.

Port of Klickitat County

Interviewees: Margie Ziegler, Administrative Assistant and Port Auditor and
Marc Thornsbury, Executive Director
Date: February 16, 2012

Existing operations

1. The Port has one facility for log exports immediately upstream of The Dalles Dam. This facility is operated by The Dallesport Log Yard. This facility was also used in the past by excursion boat which would tie up the floating barge for moorage while passengers visited the Mary Hill Museum. However, this excursion boat activity has not occurred lately.
2. There has not been any recent marine construction or dredging needs at the Port facilities.

The Port does not have a strategic plan.

Future plans

1. There is no dredging or near term marine construction in the planning stage at this time. However, there is always a possibility of the need for a future marine facility over the next 10 to 20 years.

<u>Port of Arlington</u>
Interviewee: Denise Ball, Administrative Assistant
Date: February 13, 2012
Interviewee: Peter Mitchell, Economic Development Officer
Date: March 14, 2012

Existing operations

1. The Port owns and operates a recreational marina.
2. There is no excursion vessel activity although facilities exist to accommodate calls from these vessels. In the recent past Lindblad Expeditions scheduled a stop for a wind farm tour but did not stop for unknown reasons.
3. A grain elevator and dock is owned and operated by Mid Columbia Producers which generates barge traffic but the Port does not have any involvement in this facility or operation.
4. The Port began construction of a barge terminal at Willow Creek but completion of the project is delayed due to regulatory and legal issues. There is a chance the facility may not be completed although most of the piling and dolphins for the facility were already installed.
5. Due to deep water at the grain terminal and inside the marina there is no need for dredging.
6. Recent construction included piling and a boat ramp but that was accomplished using land based equipment.

The Port does not have a strategic plan that can be provided at this time. However, the Port recently completed a draft plan that will be released pending internal review.

Future plans

1. The Port owns a quarry at Willow Creek with about 5 million cubic yards of aggregate. There is a possibility some of this material could be shipped by barge in the future.
2. Future dredging is not anticipated at any of the facilities due to deep water.
3. Some erosion repair is needed in the riprap at the grain terminal. Some of the riprap moved down the slope in the past and is impacting barge operations. This repair will likely require a barge mounted crane in order to reach all the areas to be repaired.
4. Depending on the outcome of the regulatory and legal issues with the Willow Creek facility there may be future work on some of the partially completed elements of the project. If this work proceeds it may require barge mounted equipment.

Port of Morrow

Interviewee: Lisa Mittelsdorf, Director Economic Development
Date: February 14, 2012 and March 16, 2012

Existing operations

1. Tidewater manages several facilities at the Port that generate barge traffic including the container terminal, a chip reload facility, a petroleum dock and a bio-fuels facility.
2. CLD Pacific Grain owns and operates a grain storage and export dock that generates barge traffic. However, at this time very little throughput occurs.
3. Boardman Chip operates a wood chip facility that exports by barge on property leased from the port.
4. Aggregates (Cemex Materials, LLC) and ethanol (Pacific Ethanol, LLC) are shipped by barge. Pacific Ethanols products are exported at the Tidewater bio-fuels facility.
5. There has not been any specialty cargo imported or exported by barge. Although there has been some wind turbine components, these were handled by rail and truck.
6. There has not been any cruise vessel activity at the Port.
7. There has not been any dredging lately.
8. Recent projects include Connect Oregon III container barge slip lengthening and wall lengthening constructed by Bergerson Construction and a Connect Oregon I project involving dock work by West Coast Contractors both of which involved use of barge mounted equipment.

The Port provided the executive summary from its Strategic Plan.

Future plans

1. The CLD Pacific Grain terminal may be acquired in the future by a local co-op which would likely yield increased activity and barge traffic.

2. Potato exports are expected to rise and this product is shipped using containers.
3. There is a barge slip that is not currently used and would need to be dredged prior to future use. Permitting for this dredging has not been initiated and this may or may not occur over the next ten years.
4. There is no future marine construction planned at this time.

Port of Umatilla
Interviewee: Kim Puzey, General Manager
Date: February 14, 2012 and March 16, 2012

Existing operations

1. The Port owns and operates a container terminal and dock with about 1600 containers handled annually on average. The container on barge navigation operations are handled by Bernert Barge Lines.
2. Pendleton Grain Growers own and operate a grain terminal resulting in barge traffic handled by Shaver Transportation.
3. The Port leases land to Boise Cascade for its wood chip facility.
4. Tidewater owns fuel storage facilities and imports fuel by barge for distribution from Spokane to Boise as well as providing diesel to Union Pacific Railroad's Hinkle switchyard by pipeline.
5. Tidewater also imports liquid fertilizer by barge.
6. The Port owns and operates a marina on land leased from the U.S. Army Corps of Engineers.
7. Cruise boats have tied up to the container dock in the past but operator names are unknown.
8. There are no dredging needs at the Port due to deep depths in the area.
9. Dock repair and improvements were constructed using water based equipment in the past.

The Port provided its Strategic Business Plan dated 2011.

Future plans

1. Marine Construction in the Strategic Business Plan includes a 400 foot dock extension at the container terminal, new G dock in the marina, improvements to the grain terminal access road and a new scale, refurbish rail line serving the liquid fertilizer import operations and procurement of short sea shipping barges. Of these projects all are expected to be accomplished by land based equipment except the container terminal extension which would likely be constructed using barge mounted equipment.
2. Dredging is not anticipated in the future due to naturally occurring depths.

Port of Pasco
Interviewee: Jim Toomey, Executive Director
Date: February 16, 2012

Existing operations

1. Port would like to see re-establishment of container cargo service to Japan through Port of Portland.
2. One 28 acre property was the former site of an export grain terminal as well as a Tidewater Barge Lines operation that included imports of fertilizer and hydrocarbon products. These hydrocarbon and fertilizer import and distribution operations have been transferred to the Tidewater's Snake River Terminal in Pasco.
3. Specialized cargoes received at the port include large modules produced in Korea for the oil sands processing industry in Canada but this is coming to a close.
4. A small percentage (5 to 10 percent) of the structural components for regional wind power development arrive by barge for transfer to truck. However, most of the cargo is shipped by rail or truck from Ports farther down the river such as Vancouver and Longview. Components imported by rail are re-handled at the BNSF yard.
5. Lampson Industries, LLC exports cranes by ocean going barges to international markets including China a couple of years ago and one currently under construction that will be bound for Japan.
6. The port has not dredged in the last 20 years as it is located in a section of the river with sufficient velocity to prevent siltation at the berths.
7. There was a recent upgrade to a port seawall and associated infrastructure using land based equipment.

The Port does not have a strategic business plan.

Future plans

1. Due to natural gas production using the hydraulic fracturing process, there may be future modular cargo similar to those previously shipped for the oil sand processing operation.
2. There are no plans for facilities in the future that would require dredging.
3. There are no future marine construction plans at this time.

Port of Benton Co.
Interviewee: John Haakenson, Director of Airports and Operations
Date: February 17, 2012
Interviewee: Marvin Kinney, Director of Special Projects
Date: March 7, 2012

Existing operations

1. The Port has a high dock that has been used for shipments of project related equipment. Most recently a ringer crane was used on the dock to unload

equipment from barges for construction of the vitrification plant on the Hanford Site.
2. The other marine facility is the low dock that has been used and maintained by the U.S. Navy for imports of decommissioned nuclear reactor compartments. The reactor compartments are decommissioned and prepared for transport at the Puget Sound Naval Shipyard in Bremerton, Washington and shipped by barge to the low dock at the Port. Mr. Kinney estimated the compartments to be about 30 ft in diameter. These shipments include one compartment per barge and on average about one to two are shipped each year in the fall although in some years there may be on the order of a half dozen shipments.
3. Rail access is approximately one mile away from the two docks.
4. River flows maintain navigable depths in the berth at the high dock which has not been dredged in the past 11 or 12 years and does not need dredging at this time. The Navy utilizes its own divers to operate hand held suction dredging equipment to maintain depths at the low dock.
5. There has not been any recent construction or repair of marine facilities.

The Ports Comprehensive Plan dated 2011 is available on the Port's web site:
http://www.portofbenton.com/wordpress/wp-content/uploads/pdfs/11CompPlan.pdf

Future plans

1. Although there will be a need for sand imports once the vitrification plant becomes operational, it will most likely be imported by rail as opposed to barges.
2. The Navy will begin decommissioning larger reactor compartments from Ohio Class submarines in the future. These compartments will be larger than the existing shipments and the road accessing the low dock has undergone some improvement and widening in anticipation of these future shipments. The road apparently needs additional improvement before the larger compartments arrive. These shipments may begin within a few years.
3. There are no plans for new construction or improvements to the marine facilities at this time.

<u>Port of Walla Walla</u>
Interviewee: Jim Kuntz, Executive Director
Date: March 7, 2012

Existing operations

1. The Port has a high dock and two barge slips within its Burbank Business Park. One of the barge slips serves the Cargill grain export facility and the other is not currently used.
2. Schnitzer Steel Industries exports scrap metal at a second high dock which is under its ownership.
3. Each of these existing operations generate about one barge call per week and these are handled by Tidewater, Shaver Transportation Company and Bernert

Barge Lines which have been active with these port tenants and others presently and in the past..
4. Project cargo has been imported in the past such as transformers for regional power companies.
5. Excursion vessels (e.g. Cruise West) have berthed at the high dock in the past.
6. The barge slip used by Cargill needs to be dredged about once every ten years. Previous maintenance dredging was most likely conducted by private contractors.
7. There has not been any recent repair or construction of marine facilities.

The Port does not have a business plan. However, the Ports Economic Development Plan dated 2012 is available on the Port's web site:
http://www.portwallawalla.com/images/pdf/econ_development/2012_ECONPLAN.pdf

Future plans
1. Future dredging will be needed at the Cargill barge slip based on past experience however, there does not appear to be other dredging needs unless the barge slip that is not currently used comes back into operation with another tenant.
2. There are no plans for new construction or improvements to the marine facilities at this time.
3. Future dredging and marine facilities construction at the privately held high dock will need to be verified by Schnitzer Steel Industries.

Port of Garfield
Interviewee: Diana Ruchert, Assistant Manager
Date: February 16, 2012

Existing operations
1. The Port has a lease with Pomeroy Grain Growers which exports grain by barge at its private facility. A Shaver Transportation Company barge is located at the facility in the latest aerial photo on Google.
2. Wind turbine components were recently imported over the Pomeroy Grain Growers terminal.
3. The port owns a public dock and has had inquiries in the past by excursion boat companies for permission to stop at its dock but no stops have occurred in the past several years. The dock is used primarily by small recreational power boats for water sports including fishing.
4. There are no dredging needs at either facility to the Ports knowledge.
5. There has not been any recent repair or construction of marine facilities.

The Port has a comprehensive plan dated 2008 available on the Port's web site:
http://www.portofgarfield.com/About%20the%20Port/ComPlan%202008%20PDF.pdf

Future plans
1. Based on existing experience there is no foreseeable need for dredging in the future.

2. There are no plans for new construction or improvements to the marine facilities at this time.

Port of Whitman County.
Interviewee: Debbie Snell, Properties and Development Manager
Date: February 16, 2012

Existing operations

1. The Port does not handle any marine related cargo but leases land to companies conducting those operations. The Port has property at the Wilma, Almota and Central Ferry sites.
2. Tenants at the Wilma site that export or import cargo shipped on the river include two general cargo firms, a lumber milling and manufacturing company, two chip companies (incl. Grainger Company), a break bulk shipper (TGM) and a grain export and storage company (Columbia Grain International).
3. Tidewater closed a petroleum import and storage facility at the Wilma site.
4. TGM has worked with Exxon in the past and handled smaller project related cargo loads out of the Wilma site.
5. The Almota site is small at about 11 acres, has two grain storage and export companies and a public dock constructed of sheet pile.
6. The Central Ferry site is 132 acres and has four grain storage and/or export companies and three fertilizer companies.
7. River currents maintain depths at the berths within the Wilma site and there aren't any current or historic sedimentation issues at either the Almota or Central Ferry sites.
8. Several years ago a diver removed some rock at the Almota site. Last year a crane started leaning after failure of a sheet pile dock. The Port used land based equipment to perform an emergency repair and the dock is now stable.

The Port has a comprehensive plan dated 2011 available on the Port's web site: http://portwhitman.com/Comp%20Plan%202010-2015.pdf

Future plans

1. There is a possibility wind farm related equipment could be shipped through Wilma 10 to 15 years in the future..
2. There are no plans for new construction or improvements to the marine facilities at this time other than enlargement of a sheet pile dock at the TGM facility in Wilma which will involve in-water work with barge mounted equipment when permitting is completed.
3. There are no future plans for dredging at any of the port properties.

Port of Clarkston
Interviewee: Jennifer Bly, Port Auditor
Date: February 16, 2012

Existing operations

1. Marine activity at the port currently consists of excursion vessel calls. These include several companies such as Queen of the West, Linbald Expeditions (Sea Lion and Sea Bird), Fantasy Cruises (Island Spirit) and American Safari (Safari Spirit). Through the recent economic recession excursion vessel activity decreased.
2. An elevator and dock for grain exports by barge currently leased to Lewis-Clark Grain.
3. The Port also owns a 140 ton crane that was used in the past to handle chips and boats. However, due to limited utilization it is not currently maintained and has not been used since 2007.
4. The port has a need for regular maintenance dredging due to its location on the inside of a river bend. The Port normally dredges at the same time the U.S. Army Corps of Engineers is conducting their maintenance dredging activities. About 3 years ago the Port contracted with the U.S. Army Corps of Engineers contractor (Manson) for the service. Timing of the available work window for dredging is not favorable since the spring freshet normally occurs shortly after the in-water work window causing sedimentation within the recently maintained access channels and berths. Over the years this sedimentation issue led to damage to a couple of cruise boats and grounding of a couple of barges.
5. There has not been any recent repair or construction of marine facilities.

The Ports Draft Comprehensive Plan and Riverfront Master Plan both dated 2010 are available on the Port's web site:
http://portofclarkston.com/economic-development/Planning/

Future plans

1. Continue to maintain berth depths and access with dredging.
2. The Port has no current plans at this time for construction or major rehabilitation of marine facilities.

Port of Lewiston
Interviewee: David Doeringsfeld, Port Manager
Date: February 14, 2012

Existing operations

1. Two grain docks handle the majority of the ports marine cargo. Grain is stored and shipped from the Lewis and Clark and CLD Pacific Grain terminals. Tidewater and Shaver Transportation handle the grain barges.
2. The Port handles containers and specialty cargo at the container terminal dock and yard. Specialty cargo recently included large modules produced in Korea for the

oil sands processing industry in Canada but this is coming to a close. After several modules had been shipped to the Port of Lewiston use of the highway route through Montana was suspended pending additional environmental and legal review. This suspension led to the routing of subsequent modules through the Port of Pasco. Foss transported the modules which are about 28 feet high.

3. Dredging is needed on average about once every six years. The last time dredging was conducted (about six years ago) the Corps contractor Manson conducted the Ports dredging using a clamshell bucket.
4. There has not been any recent repair or construction of marine facilities.

The Port has a strategic plan available at the following link:
http://www.portoflewiston.com/Content/Strategic-Plan05.pdf

Future plans

1. There are no anticipated alterations in future dredging. Thus, about once every six years or so the Port will likely contract with the U. S. Army Corps of Engineers contractor when they are in the area to maintain the Federal Navigation Channel.
2. Over the next 10 to 20 years there are plans for a 150 foot expansion of the dock at the container terminal to provide an additional barge slip. However, this would likely be constructed by land based equipment.

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Appendix H – River Levels

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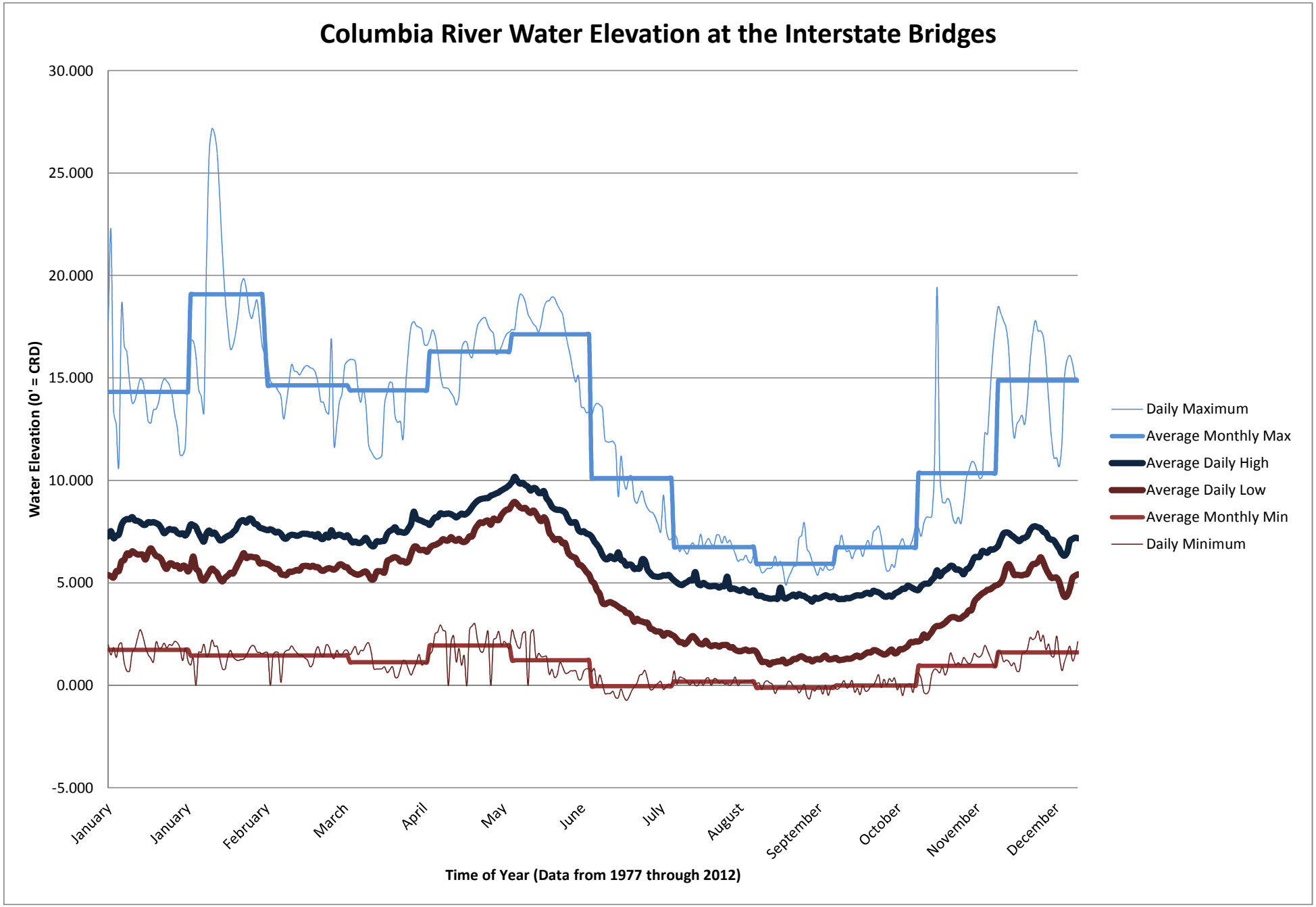
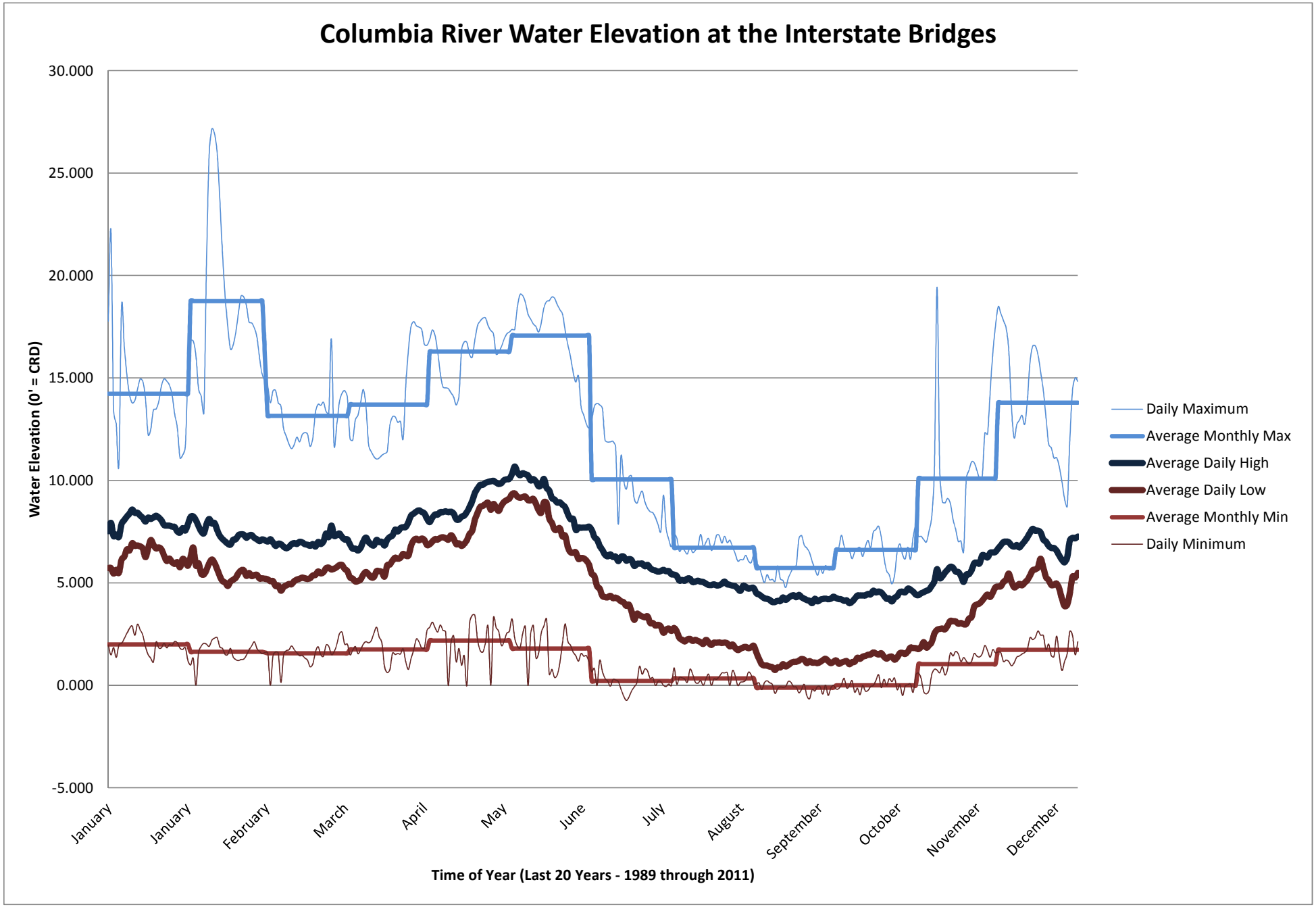
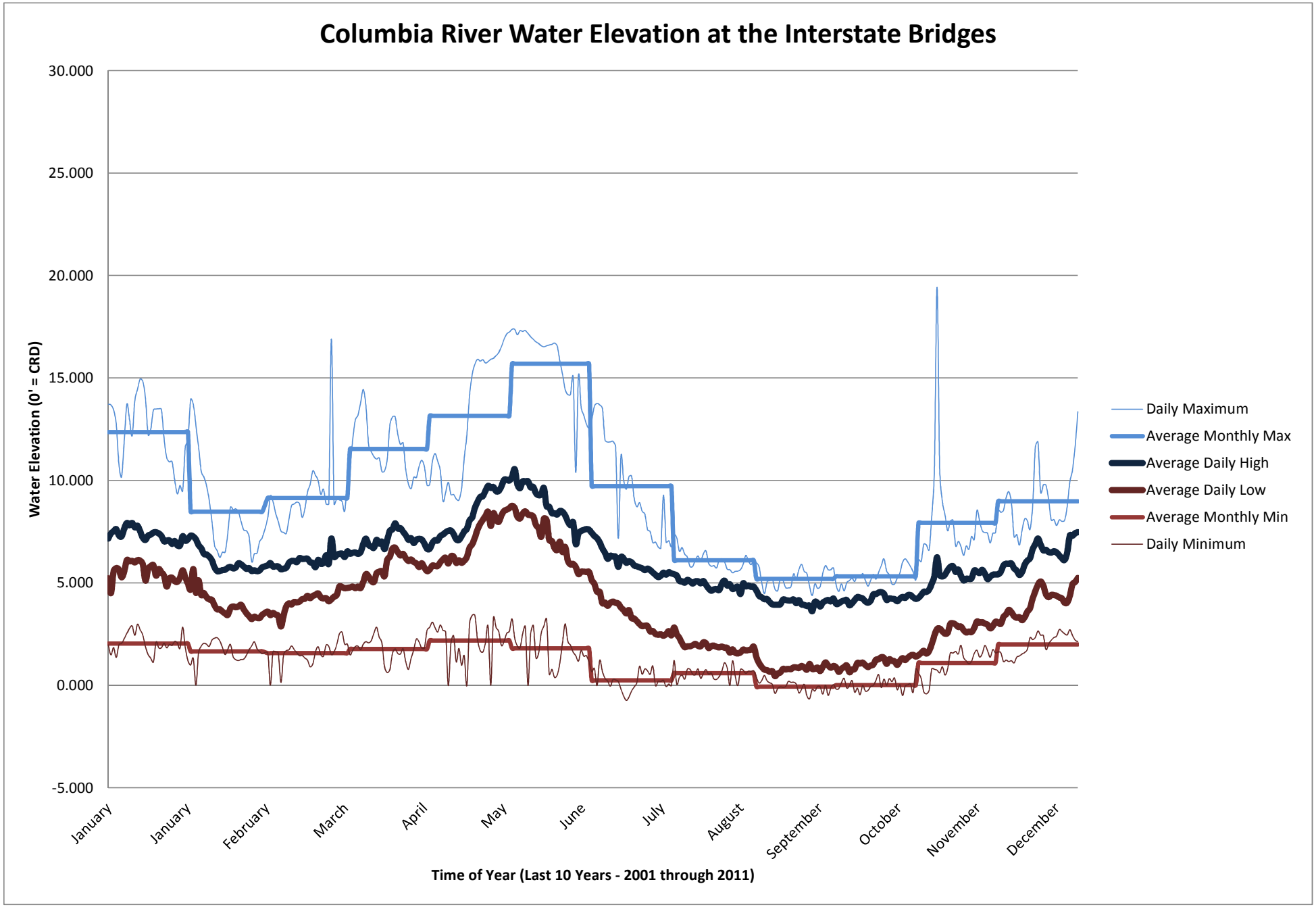

Columbia River Water Elevation at the Interstate Bridges
30.000
25.000
20.000
15.000
10.000
5.000
0.000
-5.000
Water Elevation (0' = CRD)
January
January
February
March
April
May
June
July
August
September
October
November
December
Time of Year (Data from 1977 through 2012)
Daily Maximum
Average Monthly Max
Average Daily High
Average Daily Low
Average Monthly Min
Daily Minimum


Columbia River Water Elevation at the Interstate Bridges
30.000
25.000
20.000
15.000
10.000
5.000
0.000
-5.000
Water Elevation (0' = CRD)
January
January
February
March
April
May
June
July
August
September
October
November
December
Time of Year (Last 20 Years - 1989 through 2011)
Daily Maximum
Average Monthly Max
Average Daily High
Average Daily Low
Average Monthly Min
Daily Minimum


Columbia River Water Elevation at the Interstate Bridges
30.000
25.000
20.000
15.000
10.000
5.000
0.000
-5.000
Water Elevation (0' = CRD)
January
January
February
March
April
May
June
July
August
September
October
November
December
Time of Year (Last 10 Years - 2001 through 2011)
Daily Maximum
Average Monthly Max
Average Daily High
Average Daily Low
Average Monthly Min
Daily Minimum

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