WASHINGTON STATE
Joint Aquatic Resources Permit Application (JARPA) Form[1,2]

USE BLACK OR BLUE INK TO ENTER ANSWERS IN THE WHITE SPACES BELOW.

US Army Corps of Engineers ®
Seattle District

AGENCY USE ONLY

Date received:

Agency reference #: _____

Tax Parcel #(s): _____

_____

_____

Part 1–Project Identification

1. Project Name (A name for your project that you create. Examples: Smith's Dock or Seabrook Lane Development) [help]
Tesoro Savage Vancouver Energy Distribution Terminal – Dock Maintenance and Utility Infrastructure

Part 2–Applicant

The person and/or organization responsible for the project. [help]

2a. Name (Last, First, Middle)			
Flint, Kelly			
2b. Organization (If applicable)			
Tesoro Savage Petroleum Terminal LLC			
2c. Mailing Address (Street or PO Box)			
6340 South 3000 East, Suite 600			
2d. City, State, Zip			
Salt Lake City UT 84121			
2e. Phone (1)	**2f.** Phone (2)	**2g.** Fax	**2h.** E-mail
(801) 944-6600	( )	(801) 944-6554	generalcounsel@savageservices.com

[1]Additional forms may be required for the following permits:

- If your project may qualify for Department of the Army authorization through a Regional General Permit (RGP), contact the U.S. Army Corps of Engineers for application information (206) 764-3495.
- If your project might affect species listed under the Endangered Species Act, you will need to fill out a Specific Project Information Form (SPIF) or prepare a Biological Evaluation. Forms can be found at http://www.nws.usace.army.mil/Missions/CivilWorks/Regulatory/PermitGuidebook/EndangeredSpecies.aspx.
- Not all cities and counties accept the JARPA for their local Shoreline permits. If you need a Shoreline permit, contact the appropriate city or county government to make sure they accept the JARPA.

[2]To access an online JARPA form with [help] screens, go to http://www.epermitting.wa.gov/site/alias__resourcecenter/jarpa_jarpa_form/9984/jarpa_form.aspx.

For other help, contact the Governor's Office of Regulatory Assistance at 1-800-917-0043 or help@ora.wa.gov.

Part 3–Authorized Agent or Contact

Person authorized to represent the applicant about the project. (Note: Authorized agent(s) must sign 11b of this application.) [help]

3a. Name (Last, First, Middle)			
Carrico, Brian P.			
3b. Organization (If applicable)			
BergerABAM			
3c. Mailing Address (Street or PO Box)			
1111 Main Street, Suite 300			
3d. City, State, Zip			
Vancouver WA 98660			
3e. Phone (1)	**3f.** Phone (2)	**3g.** Fax	**3h.** E-mail
360) 823-6112	( )	( )	Brian.Carrico@abam.com

Part 4–Property Owner(s)

Contact information for people or organizations owning the property(ies) where the project will occur. Consider both **upland and aquatic** ownership because the upland owners may not own the adjacent aquatic land. [help]

☐ Same as applicant. (Skip to Part 5.)

☐ Repair or maintenance activities on existing rights-of-way or easements. (Skip to Part 5.)

☐ There are multiple upland property owners. Complete the section below and fill out JARPA Attachment A for each additional property owner.

☐ Your project is on Department of Natural Resources (DNR)-managed aquatic lands. If you don't know, contact the DNR at (360) 902-1100 to determine aquatic land ownership. If yes, complete JARPA Attachment E to apply for the Aquatic Use Authorization.

4a. Name (Last, First, Middle)			
Boyden, Patty			
4b. Organization (If applicable)			
Port of Vancouver, USA			
4c. Mailing Address (Street or PO Box)			
3103 NW Lower River Road			
4d. City, State, Zip			
Vancouver, WA 98660			
4e. Phone (1)	**4f.** Phone (2)	**4g.** Fax	**4h.** E-mail
(360) 693-3611	( )	(360) 735-1565	pboyden@portvanusa.com

Part 5–Project Location(s)

Identifying information about the property or properties where the project will occur. [help]

☐ There are multiple project locations (e.g. linear projects). Complete the section below and use JARPA Attachment B for each additional project location.

5a. Indicate the type of ownership of the property. (Check all that apply.) [help]

☐ Private
☐ Federal
☒ Publicly owned (state, county, city, special districts like schools, ports, etc.)
☐ Tribal
☒ Department of Natural Resources (DNR) – managed aquatic lands (Complete JARPA Attachment E)

5b. Street Address (Cannot be a PO Box. If there is no address, provide other location information in 5p.) [help]

5501 NW Lower River Road

5c. City, State, Zip (If the project is not in a city or town, provide the name of the nearest city or town.) [help]

Vancouver, WA 98660

5d. County [help]

Clark

5e. Provide the section, township, and range for the project location. [help]

¼ Section	Section	Township	Range
NE ¼	19	2N	1E WM
NW ¼	20	2N	1E WM

5f. Provide the latitude and longitude of the project location. [help]

- Example: 47.03922 N lat. / -122.89142 W long. (Use decimal degrees - NAD 83)

45.64248 N. lat / 122.71998 W. long

5g. List the tax parcel number(s) for the project location. [help]

- The local county assessor's office can provide this information.

503030-000

5h. Contact information for all adjoining property owners. (If you need more space, use JARPA Attachment C.) [help]

Name	Mailing Address	Tax Parcel # (if known)
Port of Vancouver USA	3103 NW Lower River Road Vancouver WA 98660	53030-004, 503030-005, 152177-000, 152180-000
Washington State Department of Natural Resources (subject to Port Management Agreement with the Port of Vancouver)	PO Box 47027 Olympia WA 98504-7027	No number

5i. List all wetlands on or adjacent to the project location. [help]

There are no wetlands on the project site near the planned work at the dock.

5j. List all waterbodies (other than wetlands) on or adjacent to the project location. [help]

Columbia River

5k. Is any part of the project area within a 100-year floodplain? [help]

☒ Yes ☐ No ☐ Don't know

5l. Briefly describe the vegetation and habitat conditions on the property. [help]

The Applicant is seeking USACE acknowledgement that the proposed dock work and utility installations on the existing dock structures is authorized under the Nationwide Permit Program. Only vegetation and habitat conditions within the area subject to USACE regulatory jurisdiction and directly adjacent areas are described.

The riparian area consists of a narrow, armored slope between the access road at the top of the bank and the sandy substrate at the water's edge. The riparian area directly upland of the dock area is mostly devoid of vegetation with the exception of scattered trees and vegetation below the top of the bank. Vegetation within the riparian habitat at the site consists primarily of small-diameter black cottonwood (*Populus trichocarpa*) and willows (*Salix* spp.), non-native false indigo bush (*Amorpha fruticosa*), and Himalayan blackberry (*Rubus armeniacus*). The bank is armored with riprap, and above the riprap there is a narrow band of ruderal grass/forb habitat. A guardrail is located at the top of the bank and areas landward of the top of the bank are devoted to paving, parking and storage.

As noted above, the shoreline is primarily riprap, leading to a gently sloping sand and silt substrate, before dropping off to the berth and channel. Aquatic habitat conditions within the area of the Facility are consistent with those associated with an urbanized and industrial reach of the Columbia River. The navigation channel of the river in this area is maintained to a depth of approximately -43 + 2 feet. As a result, the natural fluvial processes of the river have been altered dramatically. The nearshore habitat drops off rapidly and, as a result, there is little shallow water habitat or transition zone. Columbia River water volumes are managed by upstream dams, and there is no functioning floodplain within the site. Sediments in the area of the project are predominantly silts, sands, and clays, with very little gravel or cobble present. There is limited in-stream large woody debris nor any backwater or side channel habitat at the site. The Columbia River, a Type 1 water/Type S shoreline of the state, supports resident and anadromous fish species (see responses 9l and 9m).

Vegetation and habitat conditions on the property are typical of the Port of Vancouver's industrial shorelines in the vicinity, except in areas where habitat improvements were previously conducted. Habitat improvements were conducted in 2009 along the East Landfill shoreline, downstream of berths 13 and 14. This restoration activity included the construction of a riparian planting area, placement of large woody debris, and riparian plantings along the length of the East Landfill revetment. The Port has plans to install large woody debris on the Terminal 4 shoreline east of the project site as part of mitigation efforts for the separate West Vancouver Freight Access (WVFA) project but the project will not affect these areas.

5m. Describe how the property is currently used. [help]

The project will involve work at the Port of Vancouver berths 13 and 14. These dock structures are used to provide berthing/ moorage for up to 2 ocean-going vessels for short and/or long term use, including cargo handling, consistent with the Department of the Army Permit No. 93-25. The structures were completed in 1993-1994 and have been in use since their completion.

5n. Describe how the adjacent properties are currently used. [help]

The area upland of berths 13 and 14 are devoted to facilities supporting the berth activities including parking, loading and laydown areas. Further landward is an approximately 70-acre parking and storage facility, an auto processing building, and facilities for rail car and truck loading of Subaru automobiles. Northwest of the project site is an approximately 8-acre aggregate yard where various sand and gravels are received by barge and truck, stored on-site and shipped by truck.

There is an existing marine structure used for aggregate unloading and a boat house for the Clark County Sheriff's marine patrol boat downstream of berths 13 and 14. Berth 10 is located upstream and is used for automobiles and other roll-on/roll-off cargo.

5o. Describe the structures (above and below ground) on the property, including their purpose(s) and current condition. [help]

Berths 13 and 14 were constructed in 1993 and 1994 in a T-dock configuration consisting of two trestles with platforms and mooring structures (see Photo 1 on Figure 7). The docks consist of steel pile supported concrete decks with a steel pile fender system. Four steel pile-supported concrete breasting dolphins are connected to the T docks by steel grated walkways. Three steel pile-supported concrete mooring dolphins are located landward of the T docks (see Photo 3 on Figure 7). The structures were developed for short and long term moorage of ocean going governmental and commercial vessels.

5p. Provide driving directions from the closest highway to the project location, and attach a map. [help]

From Interstate 5 north or southbound take the Fourth Plain Exit (Exit 1D). Follow Fourth Plain Boulevard west approximately 1.5 miles to where it merges into NW Lower River Road. Continue west approximately 1.4 miles to the intersection with NW Gateway Avenue. Travel south on Gateway Avenue up and over the railroad grade separation to Terminal 5. Berths 13 and 14 are located approximately 2,000 feet SE and are accessible only with a Port escort.

Part 6–Project Description

6a. Briefly summarize the overall project. You can provide more detail in 6b. [help]

Tesoro Savage Petroleum Terminal LLC (the Applicant) is seeking coverage under the Nationwide Permit Program for activities associated with the rehabilitation of the existing berths 13 and 14 and the placement of pipelines and associated facilities for the transportation of crude oil from upland facilities to marine vessels.

The rehabilitation activities will consist of adding structural capacity to the existing piles supporting the dock and mooring dolphins and will include the necessary removal and replacement of the decking, mooring hardware and fendering system and removing portions of the structure that conflict with mooring lines. This is consistent with NWP 3 (Maintenance), which authorizes the repair, rehabilitation, or replacement of any previously authorized, currently serviceable structure. NWP 3 also authorizes temporary structures, fills, and work necessary to conduct the maintenance activity.

The pipeline work will consist of installing a pipeline, return line, manifolds, hoses, a crane structure and other facilities on the dock surface. This is consistent with NWP 12 (Utility Line Activities), which

authorizes the construction, maintenance, and repair of utility lines and associated facilities in and over waters of the United States, provided the activity does not result in the loss of more than ½-acre of waters of the United States. Utility lines include a pipeline for the transportation of liquid material - including oil - for any purpose. The utility line proposed will not result loss of waters of the United States, and will be used for the transportation of liquid (oil) from upland facilities to vessels.

In addition to the work described above that is within the USACE jurisdiction, there will be a number of activities taking place upland including the installation of tie back anchors, upland mooring points, and movable walkways.

6b. Describe the purpose of the project and why you want or need to perform it. [help]

The purpose of the project is to bring the currently serviceable structure up to current seismic design standards to allow for the continued use of the dock to berth marine vessels (NWP 3) and to install pipelines and associated facilities to allow for the transportation of crude oil from upland unloading and storage facilities to marine vessels (NWP 12).

6c. Indicate the project category. (Check all that apply) [help]

- ☒ Commercial
- ☐ Residential
- ☐ Institutional
- ☐ Transportation
- ☐ Recreational
- ☐ Maintenance
- ☐ Environmental Enhancement

6d. Indicate the major elements of your project. (Check all that apply) [help]

☐ Aquaculture	☐ Culvert	☐ Float	☐ Retaining Wall (upland)
☐ Bank Stabilization	☐ Dam / Weir	☐ Floating Home	☐ Road
☐ Boat House	☐ Dike/Levee/Jetty	☐ Geotechnical Survey	☐ Scientific Measurement Device
☐ Boat Launch	☐ Ditch	☐ Land Clearing	☐ Stairs
☐ Boat Lift	☒ Dock/Pier	☐ Marina / Moorage	☐ Stormwater facility
☐ Bridge	☐ Dredging	☐ Mining	☐ Swimming Pool
☐ Bulkhead	☐ Fence	☐ Outfall Structure	☒ Utility Line
☐ Buoy	☐ Ferry Terminal	☒ Piling/Dolphin	
☐ Channel Modification	☐ Fishway	☐ Raft	

☐ Other:

6e. Describe how you plan to construct each project element checked in 6d. Include specific construction methods and equipment to be used. [help]

- Identify where each element will occur in relation to the nearest waterbody.
- Indicate which activities are within the 100-year floodplain.

Activities proposed under NWP 3

In-water and over-water work:

Tesoro Savage proposes to repair, rehabilitate, and replace a number of features at the Berth 13 and 14 facility to support its continued use for vessel mooring. The work is necessary to strengthen the dock in order to meet current/seismic standards. Proposed in-water work is limited to temporary pile installation and removal (all vibratory), and removal of pile associated with mooring dolphins that will no longer be needed. Installation of cross-pile steel braces will also occur and may extend below the OHWM. The remainder of the work will occur within existing pipe pile (pile strengthening for seismic upgrades), above water, or on land landward of the OHWM. The proposed work will include minor deviations from the existing configuration that are necessary for strengthening and/or safe access, or reflect the removal of structures which would no longer be needed.

A number of existing 18-inch steel pile at Berth 13, two berthing dolphins (MP 6, MP 3), and two mooring dolphins (MP 8, MP 1) will be strengthened by installing ground anchors at the base of the existing piles and a smaller diameter steel pile and concrete will be installed inside the existing piles (see Figure 4). Work below the waterline would be enclosed entirely within the existing pipe piles, except for any steel braces that extend below the OHWM. To accommodate this work the existing concrete deck and pile caps will be removed to expose the tops of the piles. The pile cap and decks will be reconstructed with poured in place concrete and/or structural steel framing, depending on location.

The existing grated walkways and associated support trusses that connect the breasting dolphins east and west of the Berth 13 dock will be replaced with larger steel trusses (see figures 3 and 4). This is necessary to physically connect the structures and provide additional strength. The trusses will be constructed of square or tubular pipe in an open web design that will allow for significant light penetration. This minor deviation in design (wider trusses) is necessary to provide structural/seismicupgrades while still functioning as an open structure. Replacement 5-foot-wide steel grated walkways will be installed on top of the trusses. Overall, upgrades to support trusses would result in ~920 square feet of additional overwater coverage. In-kind replacement of the existing 5-foot wide grated walkways overlying the trusses will not change grated cover in this area.

An existing mooring dolphin and 275 linear feet of existing 5-foot-wide grated walkway at Berth 14 will be removed (see Figure 3 and Photo 2 on Figure 7). The removal efforts overall, will include 11 18-inch diameter steel pipe pile (dolphin support), 4 12-inch diameter steel pipe pile (dolphin fender), ~1,370 square feet of grated overwater cover (walkways between MP 9 and MP 6) and removal of ~400 square feet of solid overwater cover (dolphin pile cap).

Construction Sequencing

Mobilization
The contractor will mobilize labor and equipment to the site. Laydown areas for materials and equipment will be located landward of the OHWM.

Demolition
In-water and overwater demolition will consist of removal of the existing breasting dolphin and associated walkways and removal of the existing deck and pile caps from those areas of the structure requiring structural/seismic upgrades. Demolition will generally proceed by removing existing concrete

caps, and then removing the associated piles for each structure. Piles will be removed by vibratory extraction or by pulling them directly with a crane mounted on a barge. If a pile is unable to be extracted with the above methods it will be cut off consistent with agency-approved BMPs. Any voids left in the river bottom following pile removal are expected to collapse and fill in rapidly due to the sandy/silty nature of the substrates at the site and natural sediment transport activities in the river. The removed piles will be stored temporarily on a barge before being sent to a recycling center. All pile removal activities below the OHWM will be conducted within the in-water work window. Demolition may be conducted using land- and/or barge-based equipment.

Pile Strengthening

Prior to strengthening, the inside of the piles will be inspected for substrate that must be removed, if necessary. The piles were installed with partially closed ends and significant substrate is not anticipated to be present. The end of the pile will be opened with a drill to allow installation of the ground anchor. The ground anchor will likely consist of a steel threaded rod that will be inserted into a hole drilled into the substrate and secured with grout. A new steel pile will then be placed inside the existing pile and concrete grout pumped into the piles to complete the pile work. This may be conducted using land- and/or barge-based equipment and will not be limited to the in-water work window.

Overwater Construction

New concrete pile caps will be formed using water-tight forms. The superstructure will be constructed with steel framing with a steel grid deck and a poured in place concrete topping slab. Walkways and trusses are expected to be manufactured off site and brought to the site for installation. Temporary piles (up to 40) may be used for the concrete formwork. Temporary piles will be 18- to 24-inch-diameter open-ended steel pipe or H-piles and will be installed with a vibratory hammer. It is likely that a smaller number of temporary piles will be in place at any one time during the construction.

Other overwater portions of the project will include installation of associated on deck infrastructure such as the hanging fendering system, bollards, handrails, etc.

Overwater construction may be conducted using land- and/or barge-based equipment.

Overwater activities would be conducted according to the BMPs established for the project, which will minimize any potential for impacts to water quality such as inadvertent releases or release of construction debris into the waters at the site. Overwater construction would not be limited to the in-water work window.

Additional work occurring above the OHWM outside Corps jurisdiction:

Upland Mooring Points and Walkway

To provide an optimal safe mooring configuration, two shore based mooring points will be installed above the OHWM. Quick release mooring hooks will be installed on a concrete pile cap to handle mooring lines. In addition, steel tie back wires will extend from the two shore based mooring points and two new tie-back anchors to the existing mooring dolphins. These wires will serve to withstand forces imposed on the mooring dolphins from the vessels at berth. New quick release mooring hooks will be installed on all mooring points. The mooring system will incorporate a load monitoring system for the physical tensioning of the mooring lines so that they operate within optimum design limits while a vessel is berthed.

Upland mooring points will be supported on steel pipe piles with concrete pile caps. The locations of these elements will be cleared of any vegetation and the rip rap removed to facilitate pile installation. A diesel impact hammer will be utilized to install the piles to tip elevation. The piles will be cut to the necessary length and form work, hardware and rebar installed for the pile cap. Concrete will be poured

and allowed to cure before removing the formwork and installing the hardware and equipment. Upland mooring points will each be supported by 10 24- or 36-inch steel pipe pile.

Two retractable 5-foot-wide grated walkways would be installed to allow safe access to MP 8 and MP 1 during vessel mooring (see Figure 3). The retractable walkways will each be supported on 4 24- or 36-inch steel pipe piles positioned on the shoreline above the OHWM: they will require no new in-water structures. The walkways will remain retracted except when vessels are moored, during which time they together would constitute ~750 square feet of grated overwater cover.

Upland Access Trestle Improvements
The project will install ground improvements at the upland end of the access trestle and along the shoreline. A series of drilled shafts may be installed at the Berth 13 Trestle abutment if required for structural support. Ground improvements will consist of vibro-compaction, stone columns or other similar method that results in the establishment of an area of denser soils through compaction and the placement of additional materials. 6 24-inch steel pipe piles will also support the access trestle. Pipe pile installation will require use on an impact pile driver. This work would not be limited to the in-water work window.

Activities consistent with NWP 12 (Utility Line Activities):

Pipelines and Associated Facilities

Pipelines, jib cranes, a moveable gangway, an observation and control platform, dock safety unit, pipe trays, and lighting will be installed on the existing Berth 13 trestle and dock to support the transportation of crude oil to marine vessels (see Figures 3, 4 and 5). The 36-inch pipeline and the 6 to 12-inch return line will be located on the trestle where they will connect with a manifold on the dock. Hoses will be connected to the manifold and used to transfer the crude oil from the piping system to the marine vessel being loaded. The hoses will be supported by a pulley or crane system and connected to the grounding grid to protect from the buildup of static electricity. The loading system will incorporate automatic shutoff valves with a maximum 30-second shutoff time. A jib crane for storage of a skiff and boom reels will be installed on Berth 14.

Pipelines will be constructed of ASTM A53 or A106 steel pipe. The pipeline will be standard walled, to ensure ease of inspection and maintenance, and in accordance with the applicable requirements of Washington Administrative Code (WAC) 173-180-340, and 49 CFR 195.246 through 49 CFR 195.254. Cathodic protection will be provided to prevent corrosion. The pipelines will be supported so that the bottom of the piping is approximately 2 feet off the ground on vertical supports located every 20 to 25 feet.

6f. What are the anticipated start and end dates for project construction? (Month/Year) [help]

- If the project will be constructed in phases or stages, use JARPA Attachment D to list the start and end dates of each phase or stage.

Start date: October 2014 End date: January 2016 ☐ See JARPA Attachment D

6g. Fair market value of the project, including materials, labor, machine rentals, etc. [help]

6h. Will any portion of the project receive federal funding? [help]

- **If yes**, list each agency providing funds.

☐ Yes ☒ No ☐ Don't know

Part 7–Wetlands: Impacts and Mitigation

☒ Check here if there are wetlands or wetland buffers on or adjacent to the project area.
(If there are none, skip to Part 8.) [help]

7a. Describe how the project has been designed to avoid and minimize adverse impacts to wetlands. [help]

☒ Not applicable

As noted in Section 5i, the project site contains no wetlands.

7b. Will the project impact wetlands? [help]

☐ Yes ☒ No ☐ Don't know

7c. Will the project impact wetland buffers? [help]

☐ Yes ☒ No ☐ Don't know

7d. Has a wetland delineation report been prepared? [help]

- **If Yes**, submit the report, including data sheets, with the JARPA package.

☐ Yes ☒ No

7e. Have the wetlands been rated using the Western Washington or Eastern Washington Wetland Rating System? [help]

- **If Yes**, submit the wetland rating forms and figures with the JARPA package.

☐ Yes ☐ No ☐ Don't know

7f. Have you prepared a mitigation plan to compensate for any adverse impacts to wetlands? [help]

- **If Yes**, submit the plan with the JARPA package and answer 7g.
- **If No, or Not applicable**, explain below why a mitigation plan should not be required.

☐ Yes ☐ No ☒ Not applicable

No impacts will occur.

7g. Summarize what the mitigation plan is meant to accomplish, and describe how a watershed approach was used to design the plan. [help]

7h. Use the table below to list the type and rating of each wetland impacted, the extent and duration of the impact, and the type and amount of mitigation proposed. Or if you are submitting a mitigation plan with a similar table, you can state (below) where we can find this information in the plan. [help]

Activity (fill, drain, excavate, flood, etc.)	Wetland Name[1]	Wetland type and rating category[2]	Impact area (sq. ft. or Acres)	Duration of impact[3]	Proposed mitigation type[4]	Wetland mitigation area (sq. ft. or acres)

[1] If no official name for the wetland exists, create a unique name (such as "Wetland 1"). The name should be consistent with other project documents, such

as a wetland delineation report.
[2] Ecology wetland category based on current Western Washington or Eastern Washington Wetland Rating System. Provide the wetland rating forms with the JARPA package.
[3] Indicate the days, months or years the wetland will be measurably impacted by the activity. Enter "permanent" if applicable.
[4] Creation (C), Re-establishment/Rehabilitation (R), Enhancement (E), Preservation (P), Mitigation Bank/In-lieu fee (B)

Page number(s) for similar information in the mitigation plan, if available: _____

7i. For all filling activities identified in 7h, describe the source and nature of the fill material, the amount in cubic yards that will be used, and how and where it will be placed into the wetland. [help]

7j. For all excavating activities identified in 7h, describe the excavation method, type and amount of material in cubic yards you will remove, and where the material will be disposed. [help]

Part 8–Waterbodies (other than wetlands): Impacts and Mitigation

In Part 8, "waterbodies" refers to non-wetland waterbodies. (See Part 7 for information related to wetlands.) [help]

☒ Check here if there are waterbodies on or adjacent to the project area. (If there are none, skip to Part 9.)

8a. Describe how the project is designed to avoid and minimize adverse impacts to the aquatic environment. [help]

☐ Not applicable

Facility elements located within the aquatic environment are necessary to transport crude oil to vessels and have been designed to reduce disturbance and impacts. The project includes minimization measures and best management practices (BMPs) to minimize the extent of potential effects to the aquatic environment. The minimization measures and BMPs listed below will be implemented throughout the project. These measures will minimize potential adverse impacts including temporary water quality impairment and permanent habitat effects associated with overwater shading.

Installation of the upland mooring points (MP 2 and MP 7) and retractable grated walkways(see Figure 3) will require use of an impact hammer to install 24- or 36-inch steel pile in upland areas immediately adjacent to the shoreline. Each mooring point consists of 10 piles and each retractable walks consist of 4 piles. As described in the project Biological Assessment, this activity could result in temporarily elevated underwater sound. Based on the analysis in the BA, potentially injurious cumulative sound could extend from the mooring points into aquatic areas (see 8e – 5), which includes the shallow shoreline areas as well as deeper mainstem areas waterward of each mooring point. Because it would occur in site uplands, this action would not be limited to the in-water work period. Fish present during the impact pile driving could experience sound-related injury. This could include individual juvenile and/or adult fish from any of 16 listed populations (see response 9l) that are seasonally present in the lower Columbia River. In a number of recent consultations, NOAA Fisheries has determined that

individual juvenile fish (yearling and subyearling) from a number of salmon and steelhead populations may be present year round in the lower Columbia River (for example, see NOAA Fisheries Biological Opinion tracking number 2012/03763: Port of Longview Berth 4 - Demolition and Lay Berth Construction), and therefore while timing considerations (not currently proposed) may minimize the risk of sound-related injury for listed salmonids, it cannot be entirely avoided.

Minimization Measures

- Grating will be used on all walkway surfaces between the docks and the dolphins to allow light penetration.
- Anti-perch pile caps will be added to the tops of any exposed piles to prevent perching of piscivorous birds.
- Timing restrictions will be used to avoid in-water work when listed species are most likely to be present. The current WDFW and U.S. Army Corps of Engineers (USACE) recommended work window for this area is November 1 through February 28 annually.
- Project construction will be completed in compliance with Washington State Water Quality Standards (WAC] 173-201A) including:
    - No petroleum products, fresh cement, lime, concrete, chemicals, or other toxic or deleterious materials will be allowed to enter surface waters.
    - There will be no discharge of oil, fuels, or chemicals to surface waters, or onto land where there is a potential for reentry into surface waters.
    - Fuel hoses, oil drums, oil or fuel transfer valves, fittings, etc. will be checked regularly for leaks, and materials will be maintained and stored properly to prevent inadvertent releases.
    - A construction spill prevention, control, and countermeasures (SPCC) plan will be prepared for use during construction and operation of the project. A copy of the plan with any updates will be maintained at the work site.
- The project will follow a construction SPCC plan which will outline BMPs, responsive actions in the event of a release, and notification and reporting procedures. The SPCC plan also will outline management elements such as personnel responsibilities, project site security, site inspections, and training.
- The construction SPCC plan will outline measures to be taken to prevent the release or spread of hazardous materials, either found on site and encountered during construction but not identified in contract documents, or any hazardous material that is stored, used, or generated on the construction site during construction activities. These items include, but are not limited to, gasoline, oils, and chemicals.
- Applicable spill response equipment and material designated in the construction SPCC plan will be maintained at the job site.

General Construction BMPs

Typical BMPs for construction in, over, and near water will be applied, including:

- Checking construction vessels and equipment for leaks and/or other problems that could result in discharge of petroleum-based products or other material into the Columbia River.
- Corrective actions, including those listed below, will be taken in the event of any release of oil, fuel, or chemicals from construction vessels, equipment, or materials into the water.
    - In the event of inadvertent release of fuels, lubricants, or other materials during construction, containment and cleanup efforts will begin immediately and be completed in an expeditious manner, in accordance with all local, state, and federal regulations, and taking precedence over normal work. Cleanup will include proper

disposal of any inadvertently released material and used cleanup material.

  - The cause of the inadvertent release will be assessed and appropriate action will be taken to prevent further incidents or environmental damage.
  - Inadvertent releases will be reported to Ecology's Southwest Regional Spill Response Office at 360-407-6300.

- Work barges will not be allowed to ground out on the river bottom during construction.
- Excess or waste materials generated during construction will not be disposed of or abandoned waterward of the OHWM or allowed to enter waters of the state. Waste materials will be disposed of in an appropriate landfill.
- Demolition and construction materials will not be stored where wave action or upland runoff can cause materials to enter surface waters.
- Oil-absorbent materials will be present on site to be used in the event of an inadvertent release or if any fuels, lubricants, or other oil-based product is observed in the water during construction.

Pile Removal BMPs

- The piles will be dislodged with a vibratory hammer, when possible.
- The piles will be removed in a single, slow, and continuous motion to minimize sediment disturbance and turbidity in the water column.
- If a pile is unable to be removed with the vibratory hammer, it will be cut or pushed in the sediment consistent with agency approved BMPs.
- Removed piles and associated sediments (if any) will be contained on a barge. If piles are placed directly on the barge and not in a container, the storage area will consist of a row of hay or straw bales, filter fabric, or similar material placed around the perimeter of the storage area.

Pile Installation BMPs

- In-water pile driving is limited to temporary steel pile. The vibratory hammer method will be used to drive temporary steel piles to minimize noise levels.

Overwater Concrete BMPs

- Wet concrete will not come into contact with surface waters.
- Forms for any concrete structure will be constructed to prevent leaching of wet concrete.
- Concrete process water will not enter waters of the US. Any process water/contact water will be routed to a contained area for treatment and disposal.

8b. Will your project impact a waterbody or the area around a waterbody? [help]

☒ Yes ☐ No

8c. Have you prepared a mitigation plan to compensate for the project's adverse impacts to non-wetland waterbodies? [help]

- **If Yes**, submit the plan with the JARPA package and answer 8d.
- **If No, or Not applicable,** explain below why a mitigation plan should not be required.

☐ Yes ☒ No ☐ Not applicable

The project design minimizes impacts to the aquatic environment and would remove existing structural elements that serve to offset minor deviations in the proposed structure's configuration.

The work associated with the existing structures would require the replacement of two existing steel trusses and the placement of retractable steel grated walkways. The replacement steel trusses are wider and would cover a larger area (see 8e - 1), but are open design tubular steel which allows for significant light penetration. The retractable walkways represent new grated overwater cover, but this would be in place *only during periods when vessels are moored* (see 8e – 2). Truss replacement would occur over deep water (deeper than -20 ft CRD); the retractable walkways would be in place over shallow water (less than -10 ft CRD) when vessels are moored.

The project would remove a number of structures in deeper waters (deeper than -20 ft CRD), including pile, solid cover, and grated cover (see 8e - 4).

Overall, this project would result in a net reduction in overwater cover (truss spans, grated walkways, and solid cover). The net increase in area of truss spans would not adversely affect aquatic areas due to its open design, ability to transmit light, and placement in deeper water areas, as well as the overall net decrease in cover. There would be a net decrease in grated walkways and solid cover as well as pile number and footprint.

Potential adverse impacts to individual fish are addressed in 8a.

8d. Summarize what the mitigation plan is meant to accomplish. Describe how a watershed approach was used to design the plan.

- If you already completed 7g you do not need to restate your answer here. [help]

A mitigation plan has not been prepared for the project.

8e. Summarize impact(s) to each waterbody in the table below. [help]

Activity (clear, dredge, fill, pile drive, etc.)	Waterbody name[1]	Impact location[2]	Duration of impact[3]	Amount of material (cubic yards) to be placed in or removed from waterbody	Area (sq ft or lf) of waterbody directly affected
1 - Overwater Structure – Truss	Columbia River	In-water (deeper than 20 feet below OHWM)	Permanent	N/A	920 sq. ft. (open truss); existing truss walkways to be replaced in-kind with **no change** in grated cover
2 - Overwater Structure – Retractable Walkways	Columbia River	In-water (to 20 feet below OHWM)	Permanent (movable)	N/A	750 sq. ft. (grated)
3 - Temporary Pile Installation	Columbia River	In-Water	Temporary (4 months)	Approximately Forty 18- to 24-in steel pipe or H steel piles	126 sq ft benthic area
4 - Overwater	Columbia	In-Water	Permanent	11, 18-in steel piles	-23 sq ft benthic

Structure Removal	River			4, 12-3/4-in steel piles	area -400 sq. ft (solid decking) -1,370 sq. ft. (grated walkways)
5 - In-water sound that is potentially injurious to fish during upland impact pile driving adjacent to the water.	Columbia River	In-Water	Temporary	N/A	See Biological Assessment.

[1] If no official name for the waterbody exists, create a unique name (such as "Stream 1") The name should be consistent with other documents provided.
[2] Indicate whether the impact will occur in or adjacent to the waterbody. If adjacent, provide the distance between the impact and the waterbody and indicate whether the impact will occur within the 100-year flood plain.
[3] Indicate the days, months or years the waterbody will be measurably impacted by the work. Enter "permanent" if applicable.

8f. For all activities identified in 8e, describe the source and nature of the fill material, amount (in cubic yards) you will use, and how and where it will be placed into the waterbody. [help]

No fill will be placed below OHWM or in the 100-year floodplain

8g. For all excavating or dredging activities identified in 8e, describe the method for excavating or dredging, type and amount of material you will remove, and where the material will be disposed. [help]

No new dredging is planned or proposed with the facility. The Port has existing permits for the dredging of Berths 13 and 14 (USACE Permit No. NWP-2007-916, Water Quality Certification Order #5984).

Part 9–Additional Information

Any additional information you can provide helps the reviewer(s) understand your project. Complete as much of this section as you can. It is ok if you cannot answer a question.

9a. If you have already worked with any government agencies on this project, list them below. [help]

Agency Name	Contact Name	Phone	Most Recent Date of Contact
USACE	Steve Manlow, Michelle Walker	(206) 316-3047	January 17, 2014
Washington Department of Fish & Wildlife	Anne Friesz	(360) 906-6764	June 27, 2013
National Marine	Jeff Fisher, Steve Landino	(360) 534-9342	August 15, 2013

Fisheries Service			
Ecology	Hedia Adelsman	(360) 407-6222	August 7, 2013
City of Vancouver	Jon Wagner	(360) 487-7885	On going
Energy Facility Site Evaluation Council	Stephen Posner	(360) 664-1903	On going

The applicant has coordinated extensively with regulatory agencies. The contacts listed above are intended to reflect those with regulatory interest in the in-water elements.

9b. Are any of the wetlands or waterbodies identified in Part 7 or Part 8 of this JARPA on the Washington Department of Ecology's 303(d) List? [help]

- **If Yes,** list the parameter(s) below.
- If you don't know, use Washington Department of Ecology's Water Quality Assessment tools at: http://www.ecy.wa.gov/programs/wq/303d/.

☒ Yes ☐ No

Columbia River within WRIA #28 is listed on Ecology's 303(d) list for temperature, sediment bioassay, fecal coliform, dissolved oxygen, and PCBs. There is no listed 303(d) parameter at the project site. Downstream of the project site the Columbia is on the 303(d)-list for polychlorinated biphenyls (PCBs) in nearshore sediments.

9c. What U.S. Geological Survey Hydrological Unit Code (HUC) is the project in? [help]

- Go to http://cfpub.epa.gov/surf/locate/index.cfm to help identify the HUC.

Lower Columbia – Sandy (17080001)

9d. What Water Resource Inventory Area Number (WRIA #) is the project in? [help]

- Go to http://www.ecy.wa.gov/services/gis/maps/wria/wria.htm to find the WRIA #.

WRIA #28, Salmon - Washougal

9e. Will the in-water construction work comply with the State of Washington water quality standards for turbidity? [help]

- Go to http://www.ecy.wa.gov/programs/wq/swqs/criteria.html for the standards.

☒ Yes ☐ No ☐ Not applicable

9f. If the project is within the jurisdiction of the Shoreline Management Act, what is the local shoreline environment designation? [help]

- If you don't know, contact the local planning department.
- For more information, go to: http://www.ecy.wa.gov/programs/sea/sma/laws_rules/173-26/211_designations.html.

☐ Rural ☒ Urban ☐ Natural ☐ Aquatic ☐ Conservancy ☐ Other _____

9g. What is the Washington Department of Natural Resources Water Type? [help]

- Go to http://www.dnr.wa.gov/BusinessPermits/Topics/ForestPracticesApplications/Pages/fp_watertyping.aspx for the Forest Practices Water Typing System.

☒ Shoreline ☐ Fish ☐ Non-Fish Perennial ☐ Non-Fish Seasonal

9h. Will this project be designed to meet the Washington Department of Ecology's most current stormwater manual? [help]

- **If No**, provide the name of the manual your project is designed to meet.

☒ Yes ☐ No

Name of manual: 2012 Stormwater Management Manual for Western Washington

9i. Does the project site have known contaminated sediment? [help]

- **If Yes**, please describe below.

☒ Yes ☐ No

There is no dredging proposed for this project. The Port conducted sediment characterization at berths 13 and 14 in 2013 as part of their ongoing berth dredging activities. Chemicals of concern were not detected in samples collected from Berth 13 at concentrations greater than the Sediment Evaluation Framework (SEF) toxicity screening levels (SL). Chromium and nickel were detected in a sample collected from Berth 14 at concentrations greater than SEF SLs; however chromium and nickel concentrations were less than SEF SLs in subsequent reanalyses of the sample. No other chemicals of concern were detected at concentrations greater than SEF SLs in the sample from Berth 14. Material dredged from Berths 13 and 14 would be considered suitable for upland disposal. (PSET Memorandum, NWP-2007-916, April 19, 2013) Approvals for dredging within these areas were received in 2013 and include appropriate handling details for dredged materials (USACE Permit No. NWP-2007-916, Water Quality Certification Order #5984).

9j. If you know what the property was used for in the past, describe below. [help]

The Berth 13 and 14 area was created with dredged material in the early 90's and has been in active industrial use since that time.

9k. Has a cultural resource (archaeological) survey been performed on the project area? [help]

- **If Yes**, attach it to your JARPA package.

☒ Yes ☐ No

9l. Name each species listed under the federal Endangered Species Act that occurs in the vicinity of the project area or might be affected by the proposed work. [help]

The table below indicates those species potentially occurring in the vicinity of the project area. A Biological Assessment will be prepared for this project which addresses listed species as well as critical habitats. The Biological Assessment also will address upland species, including mammals and birds. Overall, based on the developed nature of the site, effects on upland species are anticipated to be negligible or not to occur.

Species Name			ESA Listing Status	Critical Habitat
Common Name	**Scientific Name**	**ESU or DPS***		
Chinook Salmon	*Oncorhynchus tshawytscha*	Lower Columbia River ESU	Threatened	Designated
		Upper Willamette River ESU	Threatened	Designated
		Upper Columbia River spring-run ESU	Endangered	Designated
		Snake River spring/ summer-run ESU	Threatened	Designated
		Snake River fall-run ESU	Threatened	Designated
Chum Salmon	*O. keta*	Columbia River ESU	Threatened	Designated
Coho Salmon	*O. kisutch*	Lower Columbia River ESU	Threatened	Proposed
Sockeye Salmon	*O. nerka*	Snake River ESU	Endangered	Designated
Steelhead	*O. mykiss*	Lower Columbia River DPS	Threatened	Designated
		Upper Willamette River DPS	Threatened	Designated
		Middle Columbia River DPS	Threatened	Designated
		Upper Columbia River DPS	Endangered	Designated
		Snake River Basin DPS	Threatened	Designated
Bull Trout	*Salvelinus confluentus*	Columbia River DPS	Threatened	Designated
Pacific Eulachon (Smelt)	*Thaleichthys pacificus*	Southern DPS	Threatened	Designated
North American Green Sturgeon	*Acipenser medirostris*	Southern DPS	Threatened	Designated

*ESU =Evolutionarily Significant Unit and DPS=Distinct Population Segment

.

9m. Name each species or habitat on the Washington Department of Fish and Wildlife's Priority Habitats and Species List that might be affected by the proposed work. [help]

The Columbia River, a Type 1 water/Type S shoreline of the state, supports resident and anadromous fish species. Within the project vicinity, WDFW has designated riparian priority habitat under its Priority Habitat and Species program, but does not map it. The designated area includes the Columbia River and land adjacent to the river. At this location, the riparian area is largely devoid of vegetation (see Photo 4 on Figure 7) and contributes little to aquatic habitat function (see response 5l)

WDFW recognizes priority habitats as having unique or significant value to many species requiring protective measures and/or management guidelines to ensure their perpetuation (Knutson and Naef 1997). Federal listed, proposed for listed, and/or WDFW priority fish that occur in the Columbia River include Chinook, chum, coho, sockeye salmon, eulachon/smelt, bull trout, steelhead trout, resident/sea-run cutthroat trout (*O. clarki clarki*), white (*Acipenser transmontanus*) and green sturgeon, and Pacific (*Lampetra tridentata*) and river lamprey (*L. ayresi*). Priority mammals that occur in the river include Steller sea lions (*Eumatopius jubatus*), California sea lions (*Zalophus californianus*), and harbor seals (*Phoca vitulina*). No other non-fish priority species are mapped within the area of the project by WDFW, but the Columbia River at this location within the known distribution area for leopard dace (*Rhinichthys falcutus*) and mountain sucker (*Catostomus platyrhuchus*) both of which are priority fish species.

Part 10–SEPA Compliance and Permits

Use the resources and checklist below to identify the permits you are applying for.

- Online Project Questionnaire at http://apps.ecy.wa.gov/opas/.
- Governor's Office of Regulatory Assistance at (800) 917-0043 or help@ora.wa.gov.
- For a list of addresses to send your JARPA to, click on agency addresses for completed JARPA.

10a. Compliance with the State Environmental Policy Act (SEPA). (Check all that apply.) [help]

- For more information about SEPA, go to www.ecy.wa.gov/programs/sea/sepa/e-review.html.

☒ A copy of the SEPA determination or letter of exemption is included with this application.

☐ A SEPA determination is pending with ____ (lead agency). The expected decision date is: _____

☐ I am applying for a Fish Habitat Enhancement Exemption. (Check the box below in 10b.) [help]

☐ This project is exempt (choose type of exemption below).

☐ Categorical Exemption. Under what section of the SEPA administrative code (WAC) is it exempt?

_____

☐ Other: _____

☐ SEPA is pre-empted by federal law.

10b. Indicate the permits you are applying for. (Check all that apply.) [help]

LOCAL GOVERNMENT

Local Government Shoreline permits:

☐ Substantial Development ☐ Conditional Use ☐ Variance

☐ Shoreline Exemption Type (explain): _____

Other city/county permits:

☐ Floodplain Development Permit ☐ Critical Areas Ordinance

STATE GOVERNMENT

Washington Department of Fish and Wildlife:

☐ Hydraulic Project Approval (HPA) ☐ Fish Habitat Enhancement Exemption – Attach Exemption Form

Effective July 10, 2012, you must submit a check for $150 to Washington Department of Fish and Wildlife, unless your project qualifies for an exemption or alternative payment method below. **Do not send cash.**

Check the appropriate boxes:

☐ $150 check enclosed. (Check #_____)
Attach check made payable to Washington Department of Fish and Wildlife.

☐ Charge to billing account under agreement with WDFW. (Agreement #_____)

☐ My project is exempt from the application fee. (Check appropriate exemption)
- ☐ HPA processing is conducted by applicant-funded WDFW staff. (Agreement #_____)
- ☐ Mineral prospecting and mining.
- ☐ Project occurs on farm and agricultural land. (Attach a copy of current land use classification recorded with the county auditor, or other proof of current land use.)
- ☐ Project is a modification of an existing HPA originally applied for, prior to July 10, 2012. (HPA #_____)

Washington Department of Natural Resources:

☐ Aquatic Use Authorization

Complete JARPA Attachment E and submit a check for $25 payable to the Washington Department of Natural Resources. **Do not send cash.**

Washington Department of Ecology:

☐ Section 401 Water Quality Certification

FEDERAL GOVERNMENT

United States Department of the Army permits (U.S. Army Corps of Engineers):

☐ Section 404 (discharges into waters of the U.S.) ☒ Section 10 (work in navigable waters)

United States Coast Guard permits:

☐ Private Aids to Navigation (for non-bridge projects)

Part 11–Authorizing Signatures

Signatures are required before submitting the JARPA package. The JARPA package includes the JARPA form, project plans, photos, etc. [help]

11a. Applicant Signature (required) [help]

I certify that to the best of my knowledge and belief, the information provided in this application is true, complete, and accurate. I also certify that I have the authority to carry out the proposed activities, and I agree to start work only after I have received all necessary permits.

I hereby authorize the agent named in Part 3 of this application to act on my behalf in matters related to this application. _____ (initial)

By initialing here, I state that I have the authority to grant access to the property. I also give my consent to the permitting agencies entering the property where the project is located to inspect the project site or any work related to the project. _____ (initial)

Applicant Printed Name	Applicant Signature	Date

11b. Authorized Agent Signature [help]

I certify that to the best of my knowledge and belief, the information provided in this application is true, complete, and accurate. I also certify that I have the authority to carry out the proposed activities and I agree to start work only after all necessary permits have been issued.

Authorized Agent Printed Name	Authorized Agent Signature	Date

11c. Property Owner Signature (if not applicant). [help]
Not required if project is on existing rights-of-way or easements.

I consent to the permitting agencies entering the property where the project is located to inspect the project site or any work. These inspections shall occur at reasonable times and, if practical, with prior notice to the landowner.

Property Owner Printed Name	Property Owner Signature	Date

18 U.S.C §1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly falsifies, conceals, or covers up by any trick, scheme, or device a material fact or makes any false, fictitious, or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious, or fraudulent statement or entry, shall be fined not more than $10,000 or imprisoned not more than 5 years or both.

If you require this document in another format, contact the Governor's Office of Regulatory Assistance (ORA) at (800) 917-0043.
People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call (877) 833-6341.
ORA publication number: ENV-019-09 rev. 06-12

PURPOSE: Bring the currently serviceable structure up to current seismic design standards for the continued use of the dock to berth marine vessels (NWP 3) and to install pipelines and associated facilities to allow for the transportation of crude oil from upland unloading and storage facilities to marine vessels (NWP 12).

APPLICANT: Tesoro-Savage

ADJACENT PROPERTY OWNERS:
Port of Vancouver, Washington Department of Natural Resources (WDNR),

FIGURE 1
VICINITY MAP

TESORO SAVAGE VANCOUVER
ENERGY DISTRIBUTION TERMINAL

LAT/LONG: N 45.642/ W 122.719
NEAR/AT: VANCOUVER
COUNTY OF: CLARK
STATE OF: WA
APPLICATION BY:
TESORO SAVAGE PETROLEUM TERMINAL LLC

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January 2014

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PURPOSE: Bring the currently serviceable structure up to current seismic design standards for the continued use of the dock to berth marine vessels (NWP 3) and to install pipelines and associated facilities to allow for the transportation of crude oil from upland unloading and storage facilities to marine vessels (NWP 12).

APPLICANT: Tesoro-Savage

ADJACENT PROPERTY OWNERS:
Port of Vancouver, Washington Department of Natural Resources (WDNR),

FIGURE 2
EXISTING CONDITIONS/
TAX LOTS

TESORO SAVAGE VANCOUVER
ENERGY DISTRIBUTION TERMINAL

LAT/LONG: N 45.642/ W 122.719
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TESORO SAVAGE PETROLEUM TERMINAL LLC

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January 2014

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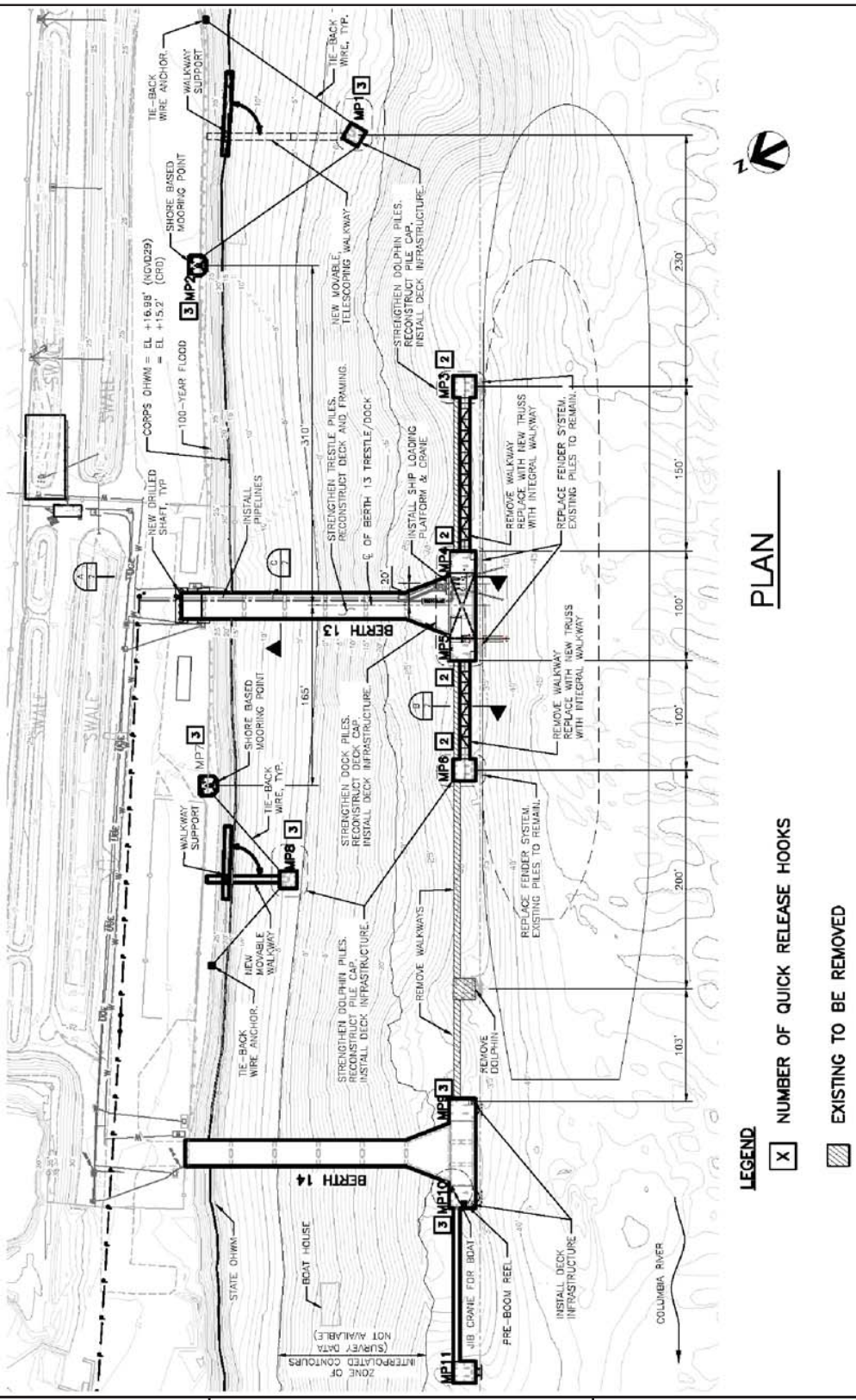

PURPOSE: Bring the currently serviceable structure up to current seismic design standards for the continued use of the dock to berth marine vessels (NWP 3) and to install pipelines and associated facilities to allow for the transportation of crude oil from upland unloading and storage facilities to marine vessels (NWP 12).

APPLICANT: Tesoro-Savage

ADJACENT PROPERTY OWNERS:
Port of Vancouver, Washington Department of Natural Resources (WDNR),

FIGURE 3
PLAN VIEW

TESORO SAVAGE VANCOUVER
ENERGY DISTRIBUTION TERMINAL

LAT/LONG: N 45.642/ W 122.719
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COUNTY OF: CLARK
STATE OF: WA
APPLICATION BY:
TESORO SAVAGE PETROLEUM TERMINAL LLC

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January 2014

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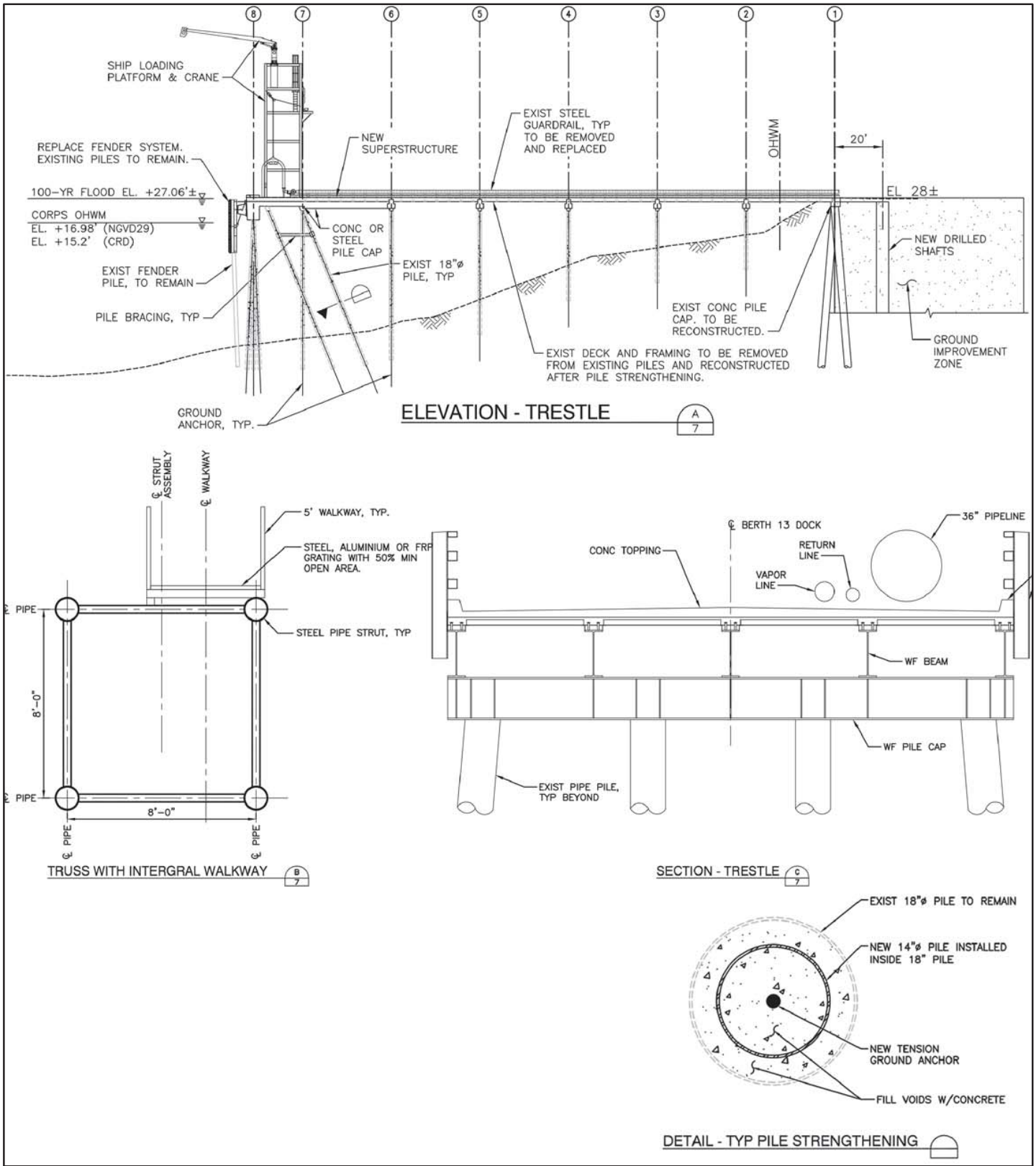

PURPOSE: Bring the currently serviceable structure up to current seismic design standards for the continued use of the dock to berth marine vessels (NWP 3) and to install pipelines and associated facilities to allow for the transportation of crude oil from upland unloading and storage facilities to marine vessels (NWP 12).

APPLICANT: Tesoro-Savage

ADJACENT PROPERTY OWNERS:
Port of Vancouver, Washington Department of Natural Resources (WDNR),

FIGURE 4
CROSS SECTION DETAILS

TESORO SAVAGE VANCOUVER
ENERGY DISTRIBUTION TERMINAL

LAT/LONG: N 45.642/ W 122.719
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STATE OF: WA
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TESORO SAVAGE PETROLEUM TERMINAL LLC

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January 2014

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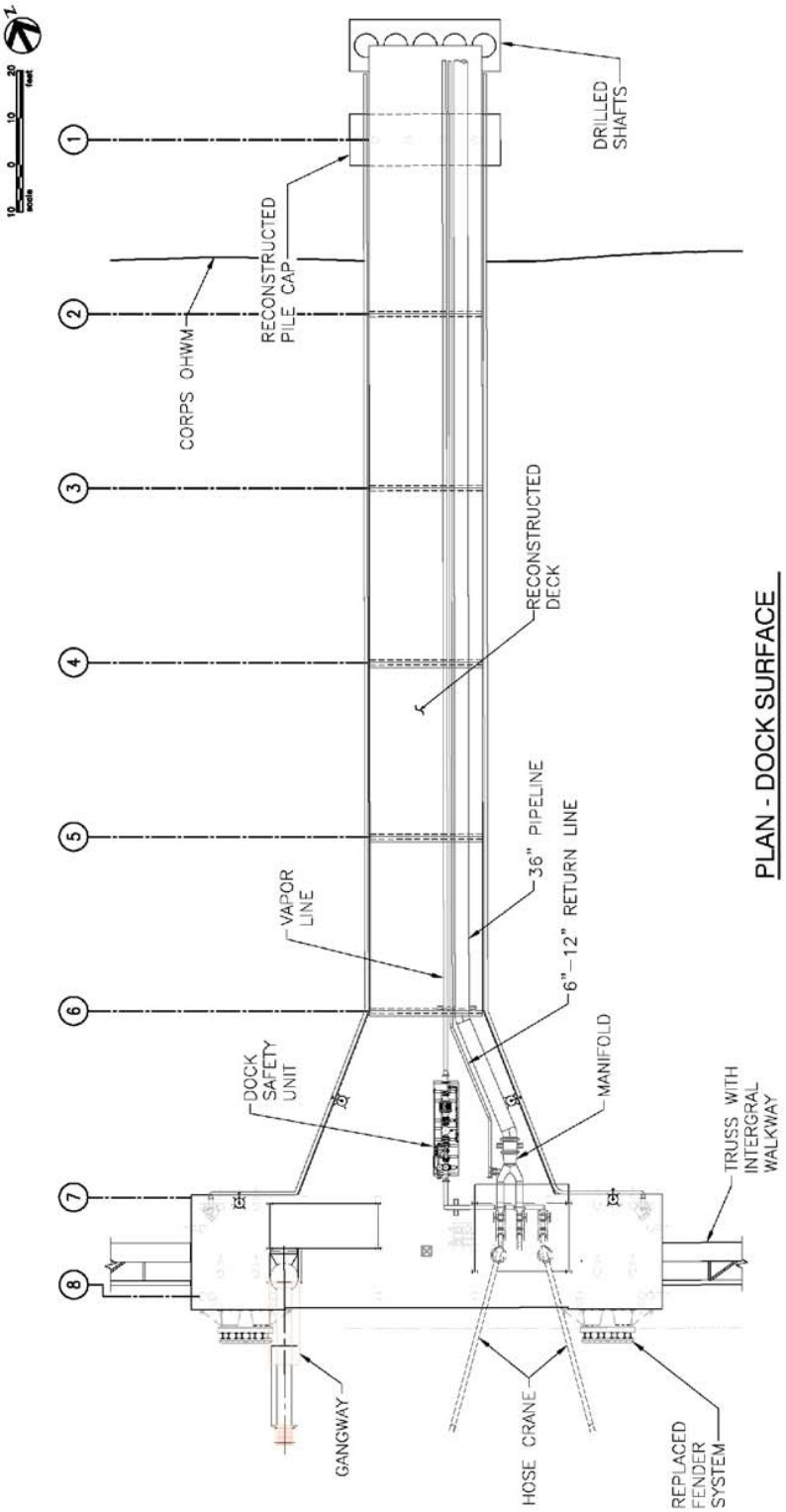

PURPOSE: Bring the currently serviceable structure up to current seismic design standards for the continued use of the dock to berth marine vessels (NWP 3) and to install pipelines and associated facilities to allow for the transportation of crude oil from upland unloading and storage facilities to marine vessels (NWP 12).

APPLICANT: Tesoro-Savage

ADJACENT PROPERTY OWNERS:
Port of Vancouver, Washington Department of Natural Resources (WDNR),

FIGURE 5
DOCK SURFACE PLAN

TESORO SAVAGE VANCOUVER
ENERGY DISTRIBUTION TERMINAL

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STATE OF: WA
APPLICATION BY:
TESORO SAVAGE PETROLEUM TERMINAL LLC

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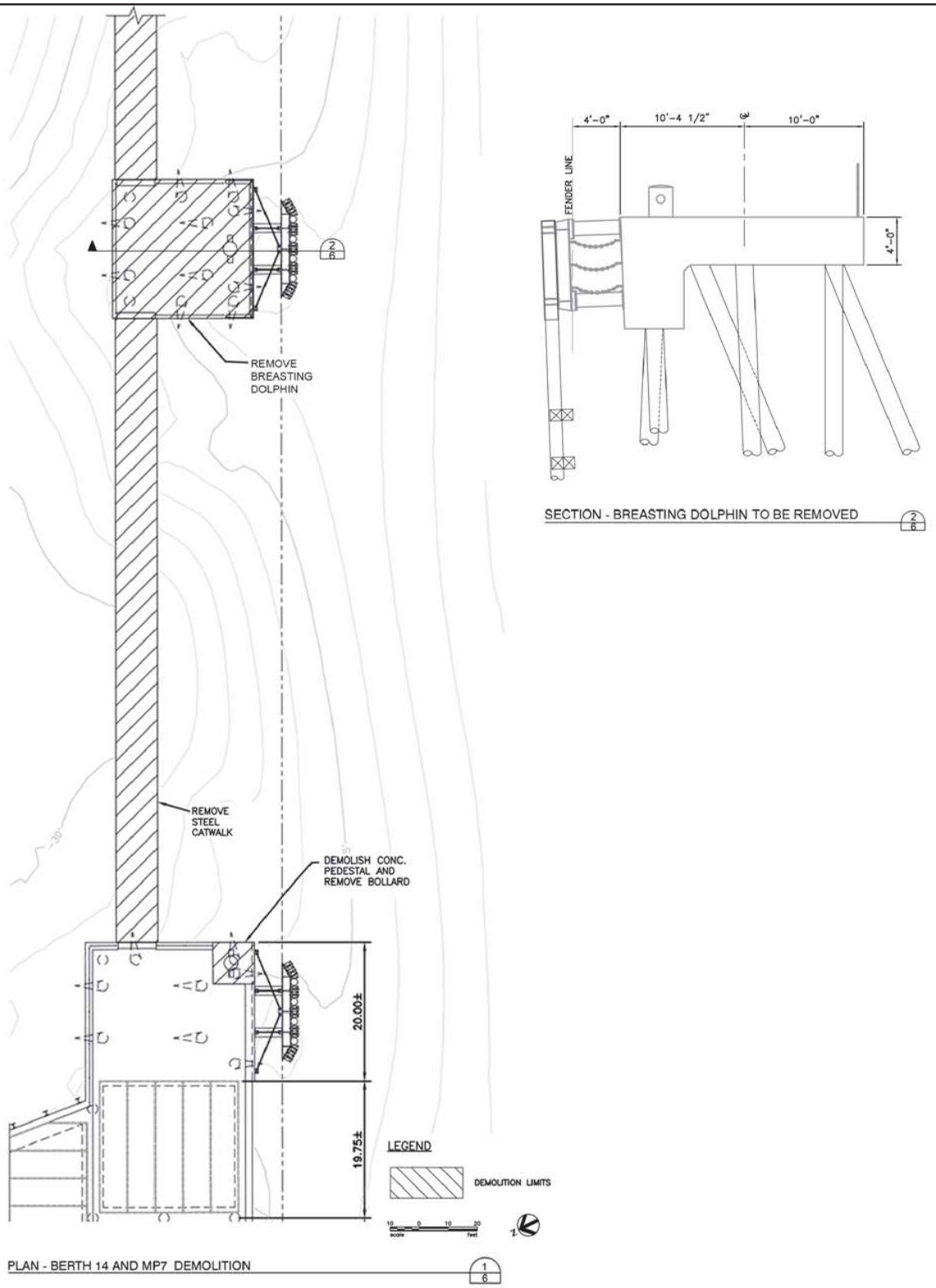

PURPOSE: Bring the currently serviceable structure up to current seismic design standards for the continued use of the dock to berth marine vessels (NWP 3) and to install pipelines and associated facilities to allow for the transportation of crude oil from upland unloading and storage facilities to marine vessels (NWP 12).

APPLICANT: Tesoro-Savage

ADJACENT PROPERTY OWNERS:
Port of Vancouver, Washington Department of Natural Resources (WDNR),

FIGURE 6
DEMOLITION PLAN

TESORO SAVAGE VANCOUVER
ENERGY DISTRIBUTION TERMINAL

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STATE OF: WA
APPLICATION BY:
TESORO SAVAGE PETROLEUM TERMINAL LLC

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January 2014

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Photo 1: Existing Berth 13 Trestle and Dock

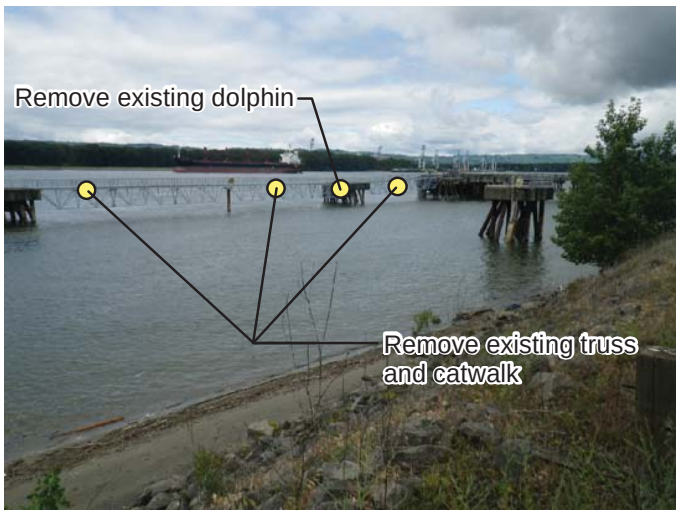

Photo 2: Existing Dolphin and Catwalk to be removed

Photo 3: Existing Mooring Dolphin

Photo 4: Existing Bank Conditions

PURPOSE: Bring the currently serviceable structure up to current seismic design standards for the continued use of the dock to berth marine vessels (NWP 3) and to install pipelines and associated facilities to allow for the transportation of crude oil from upland unloading and storage facilities to marine vessels (NWP 12).

APPLICANT: Tesoro-Savage

ADJACENT PROPERTY OWNERS:
Port of Vancouver, Washington Department of Natural Resources (WDNR),

FIGURE 7
Photo Sheet

TESORO SAVAGE VANCOUVER
ENERGY DISTRIBUTION TERMINAL

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January 2014

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