APPENDIX F
Current and Future Uses at the Former Weyerhaeuser Mill A Cleanup

To:	Pete Adolphson, Sandra Caldwell and Barry Rogowski – Washington Department of Ecology
From:	Erik Gerking – Port of Everett
Date:	October 13, 2021
Subject:	Current and Future Uses at the Former Weyerhaeuser Mill A Cleanup

As part of the Remedial Investigation/Feasibility Study (RI/FS) for the former Weyerhaeuser Mill A cleanup, the Washington Department of Ecology (Ecology) has requested that the Port of Everett (Port) supply additional information regarding current and anticipated future uses at the Former Weyerhaeuser Mill A Site (Site) as they relate to seaport terminal and navigation operations. This memorandum and its exhibits provide additional details to describe the current use and designations relevant to seaport operations at the South Terminal portion of the Site Marine Area[1], operational considerations that affect those uses, and expected evolution of Site uses in the reasonably foreseeable future (10-15 years post-remedy). Historical sediment contamination at the Site limits the Port's ability to implement improvements to their marine terminal facilities.

As detailed below, the Site is expected to continue use as a marine terminal in perpetuity. In the relatively near-term, it will require a deeper berth depth of up to -50 feet mean lower-low water (MLLW) at the South Terminal. Terminal improvements are needed to support the class of vessels necessary to maintain the Port's commercial viability and to serve its designation as a disaster recovery facility, a national defense facility, a facility of statewide significance, and its recent US Department of Transportation designation as a Strategic Commercial Seaport (See Exhibit A).

The Port has been actively working to develop the South Terminal as evidenced by completion of the recent Wharf Strengthening Project. However, future improvements rely first on completing the MTCA required cleanup actions. The Port's improvement plans are outlined in its numerous public planning documents. Failing to implement a cleanup that allows the Port to ultimately achieve its current and future use requirements will negatively impact the vitality of the local and regional economy, impact public safety, and prohibit the Port's ability to support a national defense response.

[1] The Site includes the marine and uplands areas of the Port's South Terminal and Pacific Terminal. This memo focuses on the South Terminal marine area because the current remedial alternatives evaluation is limited to the marine areas of the Site, and the Pacific Terminal is already at the anticipated future Site use depth.

The MTCA rules require that the current and potential future site use be considered at several steps in the cleanup process, including in the Feasibility Study (FS). The MTCA rules require that the cleanup action "*…protect human health and the environment for current and potential site and resource uses*." WAC 173-340-702(4). As such, remedial alternatives cannot be evaluated in accordance with MTCA without considering the current and potential future uses of the Site.

I. Remedial Investigation Current and Future Use Statement

A summary of the Port's future uses is included in the current public review draft of the Remedial Investigation, which has been reviewed by Ecology and Weyerhaeuser. The Remedial Investigation includes the following description of current and potential future site use for the marine terminals:

The Site is zoned for heavy manufacturing (M-2) and is currently used for shipping and marine terminal operations break-bulk cargo and other goods. South and Pacific Terminals are deep-water marine terminals on Port Gardner Bay that are an important component in the west coast marine transportation network. Consistent with the Port's Master Plan, the use of the Site will be for maritime commerce. Acknowledging global shipping trends and the continued increase in vessel size, the Port will be required to provide deeper navigational depths and longer berths in order to maintain the viability of their marine terminals.

Consistent with the Master Plan of Terminal Improvements (Port 2008) to facilitate current and future operations, the Port has completed recent improvements to their marine terminal facilities, including:

- *Pacific Terminal – Dredging to expand the navigational approach at Pacific Terminal to accommodate larger vessels.*
- *South Terminal – Strengthening of the wharf, installation of crane rail, the addition of two 100-foot gauge gantry cranes, and the installation of dock side electrical system to support larger, Post-Panamax class ships.*
- *Operational Equipment – Acquisition of a heavy-lift rubber-tired harbor crane designed to efficiently handle both containerized and breakbulk cargoes.*

To keep pace with the changing shipping industry and its current customer requirements, the Port will need to continue to make improvements to the marine terminals to support cargo operations:

- *At the South Terminal, deepening of the berth area is needed to allow Post-Panamax class ships to use the berth and cranes. The anticipated berth to facilitate Post Panamax ships is in excess of 1,200 feet in length and would be deepened to -50 feet MLLW (with up to a 2-foot over-depth allowance) to allow sufficient draft depths over a range of tide conditions.*
- *The berth depths at the Pacific Terminal and Pier 1 will need to be maintained at -42 feet MLLW (with up to a 2-foot over-depth allowance).*

In response to Ecology's request, the following sections provide further details to explain the Port's identified current and planned uses for the Site, specifically related to seaport operations at the South Terminal.

II. Factors Influencing the Port's Current and Planned Site Uses

As described in the Agreed Order for the Site, the public review draft Remedial Investigation, and multiple other Site documents, the Site is the location of the Port's South Terminal and Pacific Terminal seaport facilities. Because none of the Port's other terminals can be expanded due to physical constraints, the South Terminal is designated as the Port's primary seaport terminal. It receives ships that carry container and oversized cargo, including components for Boeing aircraft and the Department of Defense. The Port's Comprehensive Scheme of Improvements and other existing long range planning documents designate the South Terminal as the Port's primary deep-water shipping terminal, which requires increasing the berth length and depth.

The South Terminal has been the focus of a recent modernization effort aimed at fulfilling its role as (1) a critical regional disaster response facility, (2) a national defense facility, and (3) to preserve its commercial viability in the face of industry trends toward larger ships. The modernization project to-date has strengthened the existing South Terminal Wharf and installed 100-gauge cranes in anticipation of serving larger ships in the future. Because the Site remedy has not yet been selected, the Port has deferred detailed design efforts for the future configuration of the South Terminal.

a. Disaster Recovery & National Defense Designations Affect the Site

In addition to being the Port's primary terminal for support of Snohomish County economic development and aerospace activities, the South Terminal has also been designated a Disaster Recovery Port (DRP) and a Commercial Strategic Seaport (CSS). The DRP designation means that State and local planning for natural and other disasters rely on the Port of Everett – and particularly the South Terminal – to receive critical disaster relief supplies if the Port of Seattle and/or Port of Tacoma terminal facilities become impaired or are out of commission. The DRP designation implicitly assumes that Port of Everett facilities will be able to accommodate ships that normally call on Seattle or Tacoma. The CSS designation makes the Port of Everett one of only five (5) seaports on the U.S. West Coast with this designation and one of only 18 ports nationwide. With the CSS designation, the Port will support the Department of Defense on mobilization and demobilization efforts with its military sealifts, among other national defense efforts. The Port will also be positioned to deploy assets during national defense emergencies.

As discussed in detail below, merchant ships have been and will continue to get longer and have deeper drafts. The ports of Seattle and Tacoma have deepened most of their deep-water berths to accommodate ships that require navigation depths of up to -50 feet MLLW. As a DRP, if the Port of Everett cannot accept and speedily unload such ships in the wake of a disaster, public safety and other important national interests could be adversely impacted.

b. Industry Trends Require Accommodation of Larger Ships

A known trend of maritime history is that military and commercial ships become larger over time. As depicted in Exhibit B, in the 1950s the first generation of container vessels were less than 500 feet long.[2] By the 1980s ship length had doubled and draft depth had increased up to 50 percent. In recent years, the newest class of ships ("Class E") has continued the trend with overall lengths of up to approximately 1,300 feet. Typically, as ship lengths grow so does the necessary berth depth to support them.

Industry economics dictate that larger the ships have lower unit costs for shipping. Because of that, smaller ships are retired over time, requiring port facilities to lengthen and deepen terminal facilities to serve the evolving fleet. Sediment contamination at the Site, however, has prevented the Port from undertaking projects necessary to serve many of the current classes of vessels commonly calling on Puget Sound ports. Recently, the Port has had to decline or not pursue multiple business opportunities because of their inability to further develop the South Terminal.

Evidence of the Port's shortfall to keeping up with other Puget Sound ports can be seen by comparing the South Terminal facilities to the terminal facilities at the Port of Seattle and Port of Tacoma. As depicted in the Northwest Seaport Alliance (NWSA) chart attached as Exhibit C, 13 of the NWSA's 15 terminals are dredged to a depth of at least -50 feet MLLW[3] and 11 of the 13 are 1,200 feet or longer. The NWSA's terminal configurations – as with any port district's improvements – were in direct response to shipping company requests for accommodation of the larger vessels they were building and operating.[4] But for the sediment contamination that limits the Port's ability to deepen and lengthen the South Terminal berth, many of those ships could call on the Port of Everett.

[2] Note that the alphabetical classifications in Exhibit B are used for convenience and simplicity and are not official ship classifications recognized by maritime or government bodies.

[3] In practice a -50 MLLW berth in Puget Sound can only reliably accommodate ships with drafts several feet less than that dimension because the process of unloading cargo spans multiple low tide cycles (including minus tides if those occur while the ship is at the berth). For instance, using the classifications in Exhibit A, the smaller "Class B" ships (6,000 TEUs/ 4,000 containers) calling at the South Terminal in its current configuration take approximately 5 to 7 days to unload. Unloading larger "Class C" and "Class D" ships in the future with crane access spanning the entire length of the ship and using two cranes would take approximately 10 days. With low tides in Puget Sound up to -4 to -5 feet and allowing for a modest under-keel clearance, a -50-foot berth can only be reliably counted on to accommodate a Class C ship.

[4] Many west coast ports have begun planning to accommodate Class E ships. The Port of Seattle has already contracted for dredging to deepen the berth at Terminal 5 to -57 feet in 2022 or 2023.

III. SUMMARY

The strategic nature of the Site will have it operating as a marine terminal in perpetuity. Because of the presence of sediment contamination, the Port's ability to utilize the South Terminal to its full potential by deepening and lengthening its berths has been restricted. Over the last decade, the class of ships serviced at the South Terminal has been limited and has fallen behind industry trends. The South Terminal must accommodate deeper draft ships (at the least the newer and larger Class C vessels) in the near future to preserve the South Terminal's economic viability and fulfill its role as a DRP and CSS port. As stated in the RI, future uses at the Site will require a berth at South Terminal measuring more than 1,200 feet long with an operational depth of -50 feet MLLW.

EXHIBIT A
Port of Everett Strategic Seaport Designation – U.S. Department of Transportation Maritime Administration

U.S. Department
Of Transportation
Maritime
Administration

1200 New Jersey Avenue, SE
Washington, DC 20590

September 20, 2021

Ms. Lisa Lefeber
CEO and Executive Director
Port of Everett
1205 Craftsman Way, #200
Everett, WA 98201

Dear Ms. Lefeber:

I am writing to notify you that the Commander, Military Surface Deployment and Distribution Command (SDDC) has formally designated the Port of Everett as a Strategic Commercial Seaport. The National Port Readiness Network (NPRN) Memorandum of Understanding defines a Strategic Seaport as "a U.S. commercial or military seaport formally designated by the Commanding General, SDDC, to support the deployment of U.S. Armed Forces assets in the event of war, contingency, or other national emergency or disaster."

This SDDC decision was supported by their analysis of port capabilities versus requirements which identified a shortfall in required strategic port capability on the West Coast and validated that the designation of Everett would mitigate this shortfall. The SDDC decision was also based on your letters, dated June 13, 2018, and May 24, 2021, to the Maritime Administration (MARAD) confirming that the port "has reviewed and completely understands the requirements of being a designated Commercial Strategic Seaport. The Port is willing to assume these responsibilities and is fully committed to fulfilling them if designated." As previously discussed between my staff and you, I must again emphasize that this strategic port designation does not provide any federal or military funding or financial incentives to the Port of Everett.

Thank you for your organization's readiness to serve our Nation in this very critical capacity. MARAD looks forward to developing an excellent relationship with the Port of Everett to ensure support of all military needs while minimizing disruption to commerce. My staff will be working with you and your team to implement the various actions required by this strategic seaport designation. The MARAD points of contact for this effort are Mr. Matt Butram, Program Analyst, who may be reached at 202-36-1976 or Matthew.Butram@dot.gov; and Mr. Nuns Jain, the Strategic Ports Program Manager (acting), who may be reached at 757-322-5801 or Nuns.Jain@dot.gov.

Sincerely,

Kevin M. Tokarski
Associate Administrator for Strategic Sealift

EXHIBIT B
Evolution of Container Ships

Evolution of Container Ships

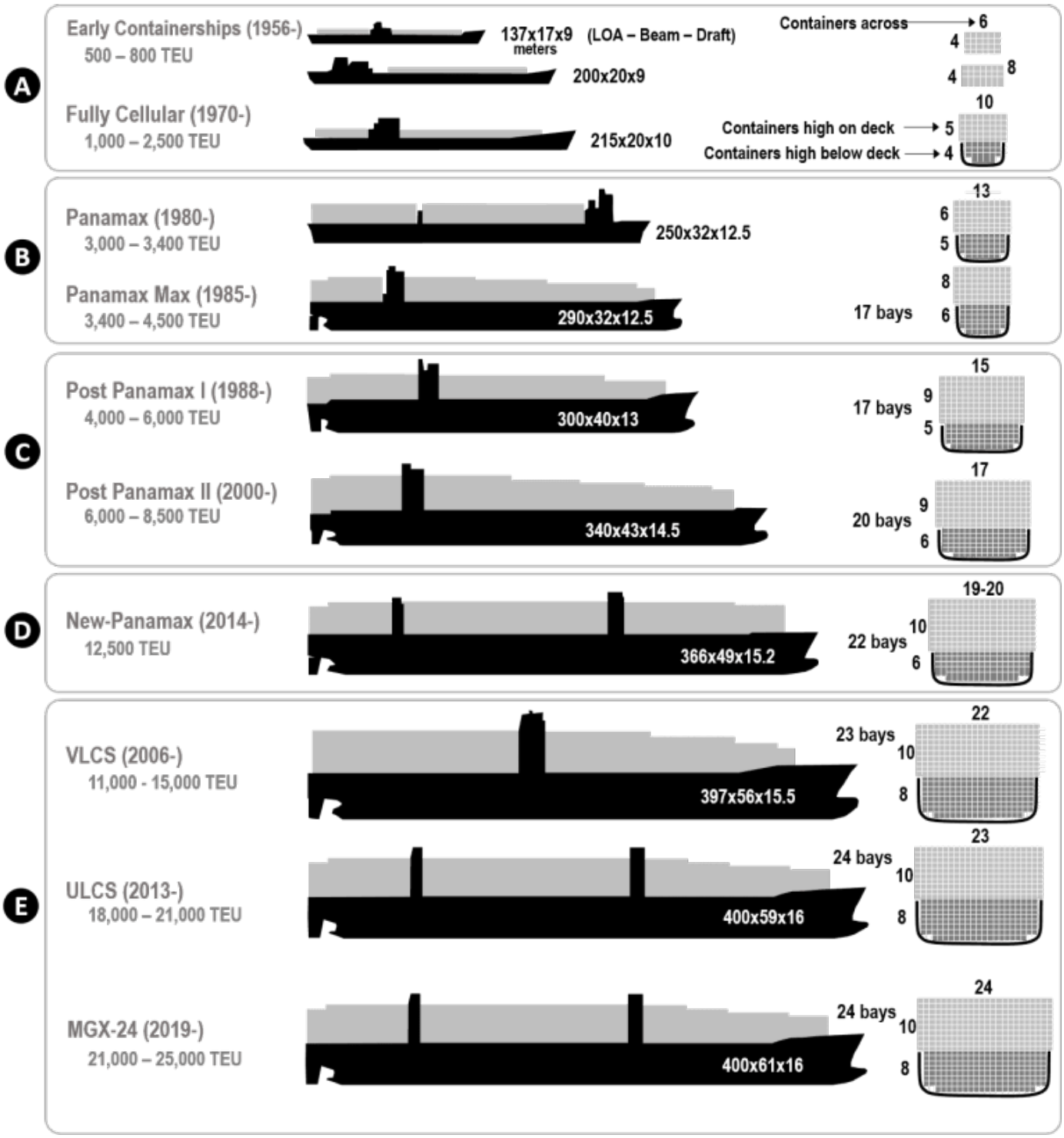
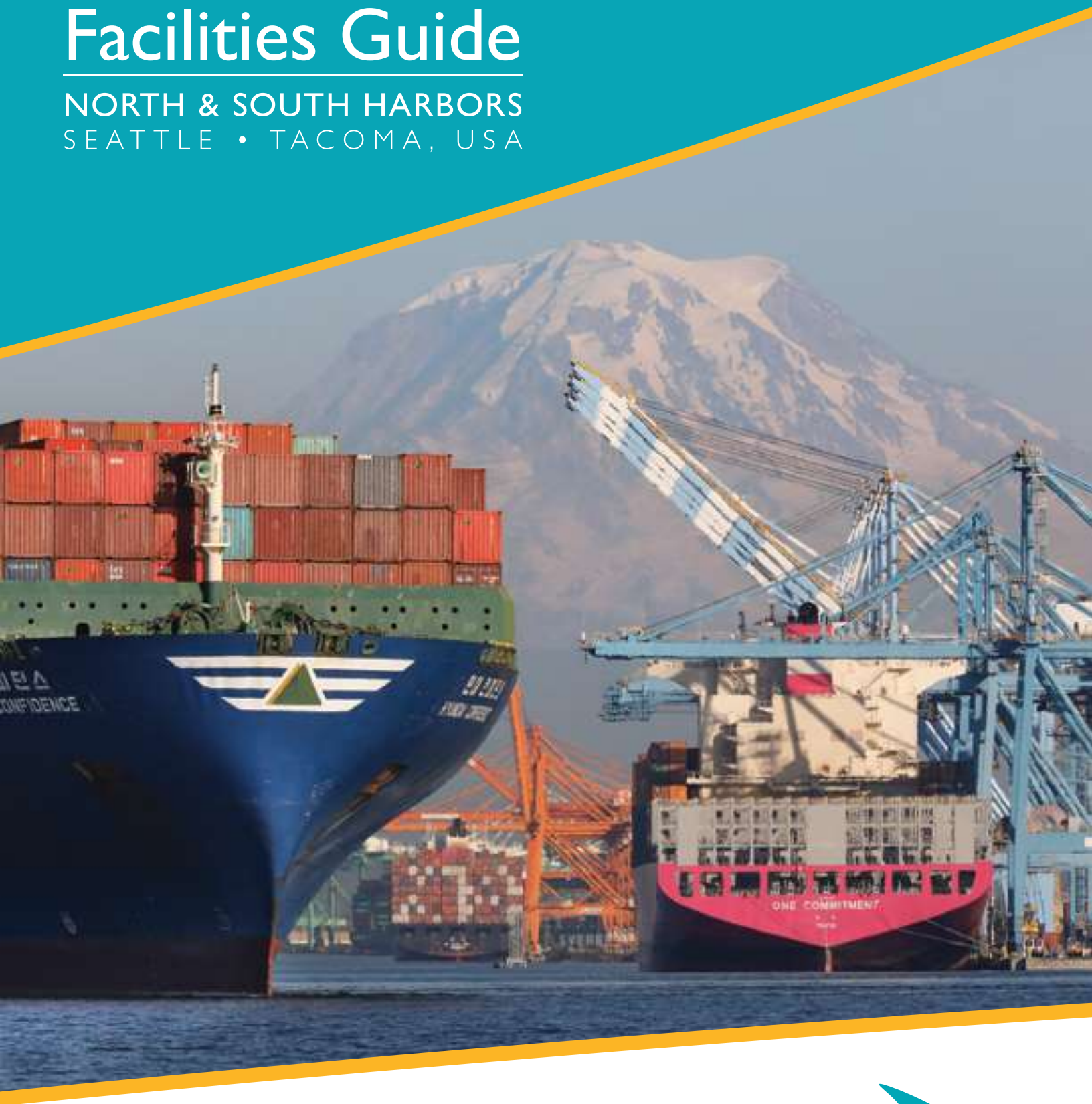


EXHIBIT C
The Northwest Seaport Alliance Facilities Guide

Facilities Guide

NORTH & SOUTH HARBORS

SEATTLE • TACOMA, USA



THE NORTHWEST
SEAPORT ALLIANCE

SEATTLE + TACOMA

CONTAINER TERMINALS

	Area	Berthing	Berth Depth	Cranes	Truck Lanes	Scales	Reefer Plugs	Rail Service
NORTH HARBOR • SEATTLE								
T-5	185 acres 75 ha	2,900 ft 884 m	50 ft 15.2 m	4 4x16 wide	6/2 inbound/ outbound	8	640	On-dock
T-18	196 acres 79 ha	4,440 ft 1,353 m	50 ft 15.2 m	10 7x24 wide 3x20 wide	20/9 inbound/ outbound	22 12 @ Gate 1 8 @ Gate 4 2 @ Gate 3	1,227	On-dock
T-30	82 acres 33 ha	2,685 ft 818 m	50 ft 15.2 m	6 3x23 wide 3x13 wide	13	11	443	Near-dock
T-115	96 acres 39 ha	1,600 ft 488 m	30 ft 9.2 m	Barge	8/6/4 inbound/ outbound	5	780	On-dock
SOUTH HARBOR • TACOMA								
West Sitcum	108 acres 43.7 ha	2,200 ft 671 m	51 ft 15.5 m	5 4x18 wide 1x14 wide	8/6 inbound/ outbound	6	875	Near-dock
Husky	118 acres 48 ha	2,960 ft 902 m	51 ft 15.5 m	8 8x24 wide	7/4 inbound/ outbound	7	600	On-dock
East Sitcum	36 acres 15 ha	900 ft 274 m	51 ft 15.5 m	4 3x15 wide 1x14 wide	5/2 inbound/ outbound	2	300	On-dock
PCT	189 acres 76 ha	2,087 ft 636 m	51 ft 15.5 m	7 7x23 wide	10/6 inbound/ outbound	6	654	On-dock
WUT	142 acres 57 ha	2,600 ft 792 m	51 ft 15.5 m	6 4x18 wide 2x24 wide	9/4 inbound/ outbound	7	884	On-dock
TOTE	48 acres 19 ha	3 RO/RO ramps	51 ft 15.5 m	N/A	5/4 inbound/ outbound	4	140	Off-dock

**Includes on-dock intermodal yard acreage, except for 6CP properties.*

NON-CONTAINER TERMINALS

	Area	Berthing	Berth Depth	Wharf Height	Cargo	Rail Service
NORTH HARBOR • SEATTLE						
T-46*	87 acres 35 ha	2,930 ft 893 m	50 ft 15.2 m	18.5 ft 5.7 m	Alternative Maritime Use	Near-dock
SOUTH HARBOR • TACOMA						
T-7	22 acres 10 ha	1,800 ft 549 m	51 ft 15.5 m	18 ft 5.5 m	Breakbulk Autos	On-dock
East Blair One	19 acres 8 ha	1,200 ft 366 m	51 ft 15.5 m	21.5 ft 6.5 m	Breakbulk Autos	On-dock
Blair	15 acres 6 ha	600 ft 183 m	51 ft 15.5 m	22 ft 6.7 m	Autos	Near-dock
West Hylebos	24 acres 10 ha	800 ft 244 m	35 ft 11 m	21 ft 6.4 m	Bulk	Off-dock

**Note: T-46 is being redeveloped for alternative maritime use.*

LAND & FACILITIES

Intermodal rail facilities

On-dock intermodal yards (IY), working track

- Hyundai IY (WUT), S. Harbor • 16,864 ft (5,140 m)
- North IY (East Sitcum/Husky), S. Harbor • 22,793 ft (6,947 m)
- PCT IY (PCT), S. Harbor • 23,544 ft (7,176 m)
- Terminal 5 IY (T-5), N. Harbor • 18,000 ft (5,486 m)
- Terminal 18 IY (T-18), N. Harbor • 7,600 ft (2,317 m)

Near-dock intermodal yards (IY), working track

- South Intermodal Yard, S. Harbor • 8,645 ft (2,635 m)
- BNSF Seattle Intermodal Gateway, N. Harbor • 19,600 ft (5,974 m)
- Union Pacific ARGO Yard, N. Harbor • 16,600 ft (5,060 m)

Off-dock intermodal yards (IY), working track

- BNSF South Seattle Intermodal Facility • 10,400 ft (3,170 m)

Land ownership

1,758 acres (711 ha) in King and Pierce counties, Washington state

Container terminals

10 terminals; 1,200 acres (486 ha); 50 cranes

Non-container terminals

5 terminals; 130 acres (53 ha)

Waterway depth

-50 ft MLLW (-15.5 m MLLW) or greater