



**COMMISSION  
AGENDA MEMORANDUM**

**Item No.** 10d

**ACTION ITEM**

**Date of Meeting** September 12, 2023

**DATE:** August 25, 2023

**TO:** Stephen P. Metruck, Executive Director

**FROM:** Stephanie Jones Stebbins, Managing Director, Maritime  
Arthur Kim, Capital Project Manager III, Waterfront Project Management

**SUBJECT:** West Waterway Deepening (CIP# 800593)

**Amount of this request:** \$4,000,000

**Total requested project cost:** \$29,500,000

**ACTION REQUESTED**

Request Commission authorization for the Executive Director to (1) Execute a Design Agreement and all other documents associated with the US Army Corps of Engineers for the Preconstruction Engineering and Design phase of the West Waterway Channel Deepening Project, and (2) Authorize the Preconstruction Engineering and Design Phase of the West Waterway Channel Deepening Project, including execution of outside services contracts and service directives, for an estimated Port cost of \$4,000,000. \$1,500,000 was previously authorized for a feasibility study by the Northwest Seaport Alliance (NWSA) and another \$150,000 was previously authorized for Project Notebook development through Executive Authorization, with the total authorized amount for the project to be at \$5,650,000.

**EXECUTIVE SUMMARY**

In 2014, The Managing Members of the NWSA authorized participation in cost sharing with the US Army Corps of Engineers (USACE) for a Feasibility Study to deepen the federal navigation channels in the East and West Waterways for a total of \$1,500,000 in NWSA's share. In 2017, USACE completed the Feasibility Study and in 2018 Congress authorized deepening the navigation channels to -57' mean lower low water (MLLW). In February 2020, USACE received funding for moving forward with the Preconstruction Engineering and Design (PED) phase of the West Waterway Channel Deepening Project. Deepening the navigation channels to -57' MLLW will keep Seattle Harbor competitive by making it fully accessible by deep-draft vessels. In 2017, USACE estimated a total of \$3,340,000 in PED phase costs. This estimates for the PED, Work-In Kind (WIK), and construction will be adjusted once the Design Agreement is signed. The Design Agreement (DA) commits the Port of Seattle to share 50% of the total eligible design costs, or in cash and eligible work-in-kind.

Meeting Date: September 12, 2023

USACE will manage the PED phase of the project, which will include environmental permitting, engineering, and plans and specifications for dredging the West Waterway to the newly authorized -57'. The Port's participation will include cash contributions and some eligible WIK, as well as additional Port costs that are not eligible for WIK credit. USACE's 2017 estimated total design phase costs to the Port was \$1.74 million, but due to inflation and increase in costs for testing the overall cost to the Port is now \$4,000,000. The PED phase is expected to be completed in late 2026, at which time the Port is expected to negotiate a Project Partnership Agreement with USACE for construction, the cost of which is estimated at \$49,000,000 (2017 estimate), of which the total Port share was estimated to be \$28M (2017 estimate).

### **JUSTIFICATION**

Seattle Harbor is a major gateway for regional and national exports and imports. Ships deployed on the U.S. West Coast have been rapidly increasing in size, and these ships need deeper drafts for safe passage. The current Terminal 5 (T-5) Modernization Project by the NWSA already includes deepening the berths at T-5 by 2023. If the West Waterway is not deepened, the ultra-large vessels expected to call at T-5 will have to wait for the tides to access the terminal. The federal channel deepening projects are funded and managed by the home ports.

### ***Diversity in Contracting***

The project staff, in coordination with the Diversity in Contracting Department, have set a 12% woman and minority business enterprise (WMBE) goal for the project specific Service Agreement.

### **DETAILS**

This is the design and permitting phase for deepening the West Waterway to the authorized project depth of -57' MLLW. The authorized West Waterway federal navigation channel is 5,400 feet long, 700 feet wide at the approach reach, and 500 feet wide at the inner reach. See attached PowerPoint for more details. The Seattle Harbor Navigation Improvement Project Final Integrated Feasibility Report and Environmental Assessment was published by USACE in 2017 and is available online on USACE Seattle District's website as well as upon request.

### ***Scope of Work***

The PED phase of the project will include sediment characterization, permitting, engineering, and preparing of plans and specifications for construction. Construction is not included in this authorization. The USACE is the lead agency to perform the work. The Port participates in the project as a local sponsor by contributing cash and WIK per attached Design Agreement.

Port's participation under the DA includes:

1. Cash payments to make up the difference between Port's WIK and Port 50% obligations to the overall project design costs.
2. 2.5 years in WIK that includes:
  - Participate in USACE project delivery team.

Meeting Date: September 12, 2023

- Sediment characterization.
- Geotechnical engineering.
- Limited scope environmental reviews.
- Limited scope engineering reviews.
- Financial administration and reporting as required per Design Agreement.
- Participation in ship simulation workshop by Port staff, Puget Sound pilots and tugboat operators as required by USACE.

Additional scope of work outside the DA but within this authorization includes:

- Any work in the area that overlaps with the T-5 berths.
- Additional staff time beyond minimum requirements by USACE.
- Technical support by outside consultants on an as needed basis.
- Overhead and contingency.

USACE estimated approximately 700K cubic yards of dredged material. During design, the interagency Dredged Material Management Program will decide whether the material is suitable for open-water disposal based on results of sediment characterization. The Port is still in negotiations with USACE and exploring options regarding beneficial use of clean (suitable) dredged material for nearshore habitat restoration at T-5 North. The scope of work includes design work evaluating sediment disposal strategies but does not currently include beneficial use of dredged sediments for nearshore habitat restoration or other purposes.

***Schedule***

USACE estimated schedule milestones:

Commission Design authorization	2023 Quarter 3
Design Agreement Execution	2023 Quarter 3
Design Kickoff	2023 Quarter 4
Procure WIK Consultant	2024 Quarter 2
Design Completion	2026 Quarter 3

***Cost Breakdown***

	This Request	Total Project
Planning (Feasibility Study)	\$0	\$1,500,000
Design	\$4,000,000	\$4,150,000
Construction	\$0	\$23,850,000
Total	\$4,000,000	\$29,500,000

**ALTERNATIVES AND IMPLICATIONS CONSIDERED**

**Alternative 1 – Do Nothing:** As part of the Feasibility Study, USACE evaluated a “do nothing” alternative. It was found to have detrimental economic impact, as deep-draft vessels would

Meeting Date: September 12, 2023

experience operational delays while waiting on the tides. Seattle will likely lose its market share to ports that could handle these vessels most efficiently and cost effectively.

Cost Implications: No additional capital spending for design and construction.

Pros:

- (1) No capital investments.

Cons:

- (1) Lose federal funding.
- (2) Lose cargo market share.

This is not the recommended alternative.

**Alternative 2** – Continue Port’s participation in the design phase to deepen the West Waterway Channel to -57’ MLLW.

Cost Implications: \$4,000,000

Pros:

- (1) Leverage federal funding of \$1,670,000.
- (2) Ensure Seattle Harbor remains competitive.

Cons:

- (1) Commits Port cost share in cash and in-kind services during design.
- (2) Future construction costs to the Port, estimated to be \$23,850,000 starting as early as 2026, is not included in this authorization.

***This is the recommended alternative.***

**FINANCIAL IMPLICATIONS**

USACE Feasibility study level estimate for Port of Seattle (POS) share from 2017; subject to change after design.

<b><i>Cost Estimate/Authorization Summary</i></b>	POS	NWSA	Total
<b>COST ESTIMATE</b>			
Original estimate (USACE)	\$28,000,000	\$1,500,000	\$0
<b>AUTHORIZATION</b>			
Previous authorizations	\$150,000	\$1,500,000	\$1,650,000
Current request for authorization	\$4,000,000	\$0	\$4,000,000
Total authorizations, including this request	\$4,150,000	\$1,500,000	\$5,650,000
Remaining amount to be authorized	\$23,850,000	\$0	\$23,850,000

Meeting Date: September 12, 2023

***Annual Budget Status and Source of Funds***

This project was included in the 2023 Draft Plan of Finance under C800593 with a total estimated cost of \$28,000,000 (POS share).

This project will be funded by the Tax Levy.

***Financial Analysis and Summary***

Project cost for analysis	\$29,500,000 (\$28M POS share)
Business Unit (BU)	POS Joint Venture
Effect on business performance (NOI after depreciation)	This project will support cargo operations for properties licensed to the NWSA, including the redevelopment of Terminal 5.
IRR/NPV (if relevant)	NA
CPE Impact	N/A

***Future Revenues and Expenses (Total cost of ownership)***

The feasibility study estimates maintenance dredging will be needed approximately every 10 years at a cost of approximately \$1.4M to the Port (assumes 50% cost share with USACE).

**ATTACHMENTS TO THIS REQUEST**

- (1) Design Agreement with USACE
- (2) Presentation

**PREVIOUS COMMISSION ACTIONS OR BRIEFINGS**

- December 3, 2019 – The Managing Members of NWSA were briefed on Seattle Harbor Deepening project.
- December 5, 2017 – The Managing Members of NWSA were briefed on Seattle Harbor Deepening project.
- December 5, 2017 – The Managing Members of NWSA authorized the Executive Director of the Port of Seattle to sign Letters of Agreement with the Muckleshoot Indian Tribe and Suquamish Tribe for impacts to treaty reserved fishing access related to the US Army Corps of Engineers Seattle Harbor Navigation Improvement Project.
- August 19, 2014 – The Managing Members of NWSA authorized the Chief Executive Officer to sign a Feasibility Cost Sharing Agreement with U.S. Army Corps of Engineers committing to \$1.5M in cost share.