PORT OF SEATTLE MEMORANDUM

COMMISSION AGENDA ACTION ITEM

Item No. 6d

Date of Meeting August 14, 2012

DATE: August 3, 2012

TO: Tay Yoshitani, Chief Executive Officer

FROM: Scott Pattison, Seaport Asset Manager

Catherine Chu, Capital Project Manager

SUBJECT: Terminal 5 and Terminal 18 Berth Maintenance Dredging

Amount of This Request: \$1,950,000 **Source of Funds:** General Fund

Est. State and Local Taxes: N/A Est. Jobs Created: N/A

Est. Total Project Cost: \$4,600,000

ACTION REQUESTED:

Request Commission authorization for the Chief Executive Officer to direct staff to develop design documents, conduct sediment testing and environmental review, obtain permits, and prepare construction documents for the Terminal 5 and Terminal 18 Maintenance Dredging Project for an estimated cost of \$950,000, and to advertise for bids and award major construction contracts for the first phase of Terminal 5 and Terminal 18 Maintenance Dredging Project for an estimated cost of \$1,000,000. The total project cost is estimated at \$4,600,000.

SYNOPSIS:

The purpose of this project is to restore the berths at Terminals 5 (T-5) and Terminal 18 (T-18) to their designed depths to ensure that these terminals remain accessible to deep-draft cargo vessels currently in service. The Port is not specifically obligated by the lease to dredge at T-5 but the Port has performed maintenance dredging at T-5 and other terminals in the past. At T-18 the Port has a lease obligation to maintain berth depth at -50'. At T-5 the Port would dredge two berths (berths 2 and 3) to a minimum of -50' and the south berth (Berth 1) to a minimum of -45', all of which are the design depths. The need for dredging at T-5 was triggered by recent changes in vessel rotations and increase in vessel size at T-5. Dredging at T-5 south berth in 2012 is especially urgent, and due to its relatively smaller volume, it's feasible. The remainder of T-5 dredging has to wait till 2013 due to the volume involved and need for additional sediment testing and permitting. The Port will only perform maintenance dredging at T-18 if the current permits allow for this dredging. If new permits and related testing are required at T-18, staff will have to request additional authorization. Dredging volume at T-18 are not significant today. If no new permits are required, performing that limited amount of dredging now will be cost

Tay Yoshitani, Chief Executive Officer August 3, 2012 Page 2 of 6

effective. This request is for authorization to proceed with design and environmental permitting, and to proceed with construction of the first phase of the project at the south berth of T-5 and high spot removals at T-18 in 2012. Staff will return to the Commission to seek additional authorization for construction of the remaining scope of the project in 2013. This project is in the 2012 Seaport Operating Expense budget.

BACKGROUND:

In the past decade, maintenance dredging has been required to meet essential navigational access needs at existing marine cargo facilities. Recent projects include maintenance dredging at T-46 (2004), T-30 (2006), T-91 (2006), T-18 (2008), and T-5 (2010). The need for periodic maintenance dredging is expected to continue due to the greater frequency of deep-draft vessels calling at the Port requiring full design depth. Port continues to study the cause of the sedimentation, including vessel operations and sediment transportation from upstream of the Duwamish River.

The 2008 T-18 Maintenance project restored all four of the container berths to -50' consistent with the Port's lease agreement with the tenant. The 2010 T-5 Maintenance Dredging project dredged Berth 2 to a minimum of -50' while maintaining Berth 3 and part of Berth 1 (south berth) at -45'. The proposed project would continue to maintain all T-18 berths at -50'; and at T-5 maintain Berths 2 and 3 at a minimum of -50' and part of Berth 1 at -45'.

PROJECT JUSTIFICATION:

The proposed project would restore berths at T-5 and T-18 to their designed depths, in addition to fulfilling the Port's lease obligation at T-18.

Project Objectives:

- Maintain required navigation depth for deep draft container vessels;
- Acquire all necessary and required permits from appropriate agencies prior to start of construction;
- Comply with all conditions stipulated by permit authorizations;

PROJECT SCOPE OF WORK AND SCHEDULE:

Scope of Work:

This authorization is for design and permitting for maintenance dredging at T-5 and T-18, which will be performed by Port staff with support from outside consultants under an existing indefinite delivery, indefinite quantity (IDIQ) contract, and for construction of the first phase of the project, which is dredging at the south berth at T-5 and high spot removals at T-18 in 2012, if we can receive permits in time, to meet urgent operations requirements. Construction of the first phase of T-5 and T-18 maintenance dredging in 2012 is subject to fast-track design, permitting, and

Tay Yoshitani, Chief Executive Officer August 3, 2012 Page 3 of 6

contracting, which inherently carries elevated risks and costs. Risks include delayed permits causing project missing critical in-water construction window in the winter of 2012; engineers may determine that dredging is not feasible without costly structural upgrades to the slope under the dock; and much higher incremental construction cost due to smaller volume dredging as a separate contract and possible additional permit conditions due to short permit review time. All of the phase one material will be disposed of at the approved upland disposal sites due to lack of time to test the material further for open-water disposal. The remainder of the project, primarily consisted of dredging T-5 Berth 3 (1000') from -45' (typical) to -50' design depth (plus advance maintenance dredging and over-dredging allowance as allowed by permits) and any additional high spot removals at T-5, is planned for construction in 2013. This phase of the project involves much greater dredging volume and requires additional sediment characterization and environmental reviews. Staff will return to the Commission in 2013 for final project authorization before proceeding with construction of future dredging that's planned for 2013. If any part or all of phase one construction could not be accomplished in winter of 2012 due to the risks mentioned above, staff will return to the Commission for its reauthorization as part of the 2013 project.

Schedule:

Design and permitting efforts will begin immediately following Commission authorization. Construction of phase one of the project would begin in December 2012 and be completed by February 2013. It is anticipated that design and permitting for the remainder of the project will be completed by spring of 2013, at which time staff will return to the Commission to request additional project authorization for construction. Additional construction is planned to occur from December 2013 to February 2014.

FINANCIAL IMPLICATIONS:

Budget/Authorization Summary:

Previous Authorizations	\$0
Current request for authorization	\$1,950,000
Total Authorizations, including this request	\$1,950,000
Remaining budget to be authorized (pending design & permitting results)	\$2,650,000
Total Estimated Project Cost	\$4,600,000

Project Cost Breakdown:	This Request	Total Project
Construction (includes environmental remediation work)	\$950,000	\$3,300,000
Construction Management	\$50,000	\$110,000
Design and Environmental Studies	\$690,000	\$690,000
Project Management	\$120,000	\$120,000
Permitting	\$140,000	\$140,000
State & Local Taxes (estimated)	\$0	\$240,000
Total	\$1,950,000	\$4,600,000

Tay Yoshitani, Chief Executive Officer August 3, 2012 Page 4 of 6

Budget Status and Source of Funds:

The 2012 Operating budget included \$500,000 for design and permitting costs related to the Terminal 5 phase II maintenance dredging. Actual spending in 2012 from this authorization is expected to be \$500,000, which is the amount budgeted for 2012. The balance of spending from this authorization is scheduled for 2013, and will be included in the 2013 Operating Expense Budget.

It is expected that approximately \$811,000 of the project construction costs (including disposal of contaminated sediment) will be operating environmental remediation liability work.

The total cost of this project will be funded from the general fund.

Financial Analysis and Summary:

CIP Category	Expense Project		
Project Type	Renewal and Replacement		
Risk adjusted discount rate	N/A		
Risk adjusted discount rate	N/A		
Key risk factors	 Key risk factors include potential cost overruns due to project time constraints or expansion of project scope due to higher than anticipated levels of sediment contamination. Permit requirements assume a narrow construction window between December and February, which impacts bid pricing. Permit delays could result in project scheduling delay until a subsequent "fish window" for construction. Agencies could impose additional permit conditions beyond current project scope. Engineers may determine that dredging is not feasible without costly structural upgrades to the slope under the dock. 		
Project cost for analysis	\$4,600,000		
Business Unit (BU)	Container Operations		
Effect on business	The estimated total project costs will have the following effect on		
performance	NOI in future years. Depreciation expense will not be impacted		
	by this project, as this dredging project is an operating expense.		
	NOI (in \$000's) 2012 2013 2014 TOTAL Incremental Revenue Incremental OpExp (500) (1,250) (2,850) (4,600) NOI (\$500) (\$1,250) (\$2,850) (\$4,600) Depreciation \$0		
IRR/NPV	N/A		

Tay Yoshitani, Chief Executive Officer August 3, 2012 Page 5 of 6

Lifecycle Cost and Savings:

Maintenance dredging may occur every 3 to 5 years to maintain the berths at T-5 and T-18 at the current design depths.

STRATEGIC OBJECTIVES:

This project supports the asset preservation objective.

ENVIRONMENTAL SUSTAINABILITY:

Design and project implementation will include practices to avoid and minimize potential negative environmental effects during dredging. Dredged materials will be disposed of at approved locations based on consultations with and decisions of the regulatory agencies comprising the Dredge Materials Management Program.

BUSINESS PLAN OBJECTIVES:

Maintain existing customer service and allow the container business to grow. Maintaining design depth is a lease obligation at Terminal 18. Though not a specific obligation of the lease at Terminal 5, the Port has performed maintenance dredging at T-5 and other port terminals in the past.

TRIPLE BOTTOM LINE SUMMARY:

- The proposed project is subject to rigorous environmental reviews. Permitting and construction will follow best management practices to ensure minimal negative environmental impact.
- Maintaining container terminals at adequate depths for navigation maintains existing customer service and allows the container business to grow.
- The permit process requires notification of neighboring communities, agencies of interest and appropriate environmental groups. Waters near Harbor Island are Treaty-protected "usual and accustomed" fishing areas. The Muckleshoot and Suquamish Tribes will be consulted during the permitting process, with the objective of avoiding potential disruption of Treaty fishing access.

ALTERNATIVES CONSIDERED AND THEIR IMPLICATIONS:

Alternative 1: Proceed with design and permitting for maintenance dredging at T-5 and T-18. **This is the recommended alternative.**

Alternative 2: Do nothing and restrict access to T-5 and T-18 during low tide. This would delay vessel operations, compromise customer service, and may result in possible loss of existing and future customers to other ports. This is not the recommended alternative. The Port would also

Tay Yoshitani, Chief Executive Officer August 3, 2012 Page 6 of 6

not be meeting its lease obligations at Terminal 18 if maintenance dredging is not done at some point.

OTHER DOCUMENTS ASSOCIATED WITH THIS REQUEST:

None

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS:

None