

PORT OF SEATTLE
MEMORANDUM

COMMISSION AGENDA

Item No. 6c

Date of Meeting July 13, 2010

DATE: June 14, 2010

TO: Tay Yoshitani, Chief Executive Officer

FROM: Michael Burke, Senior Manager, Container Leasing and Operations
Catherine Chu, Capital Construction Project Manager

SUBJECT: Terminal 5 Maintenance Dredging Phase I
Project #103835

Amount of This Request: \$1,300,000

Source of Funds: Primarily General Fund, with \$175,000 from Tax Levy for qualified environmental reserve work

State and Local Taxes Paid: \$80,000 **Est. Workers Employed:** 9

Total Expected T-5 Phase I Dredging Project Cost: \$1,980,000

Total Expected T-5 Phase II Dredging Project Cost: \$6,100,000

Total Expected T-5 Dredging Project Cost (Phase I and II): \$8,080,000

ACTION REQUESTED:

Request authorization for the Chief Executive Officer to execute consultant services contracts amendments and service directives; to provide construction support and permit compliance services; advertise for bids; and award major construction contracts for the Terminal 5 (T-5) Maintenance Dredging Phase I project, for a total of up to \$1,300,000, bringing the total authorization amount for T-5 Maintenance Dredging project to \$1,980,000.

SYNOPSIS:

This request is one of a series of authorizations needed to complete maintenance dredging at T-5 and T-18. Dredging ensures adequate depth for navigation and also results in a cleaner waterway by removing and capping contaminated sediments. T-18 Maintenance Dredging was completed in 2009. The proposed T-5 Maintenance Dredging Phase I will provide one deep draft berth at -50' MLLW and two berths at -45' MLLW by 2011.

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ADDITIONAL BACKGROUND:

On February 26, 2008, Port Commission authorized \$400,000 for staff to conduct environmental and technical assessments, prepare project scope of work and design, conduct environmental review and apply for permit authorizations for navigational access dredging at T-5 and T-18.

On September 9, 2008, Port Commission authorized total of \$2,257,000 for T-18 Maintenance Dredging including construction, and authorized total of \$680,000 for design and permitting funding for T-5 Maintenance Dredging. T-18 construction was completed in February 2009 as planned.

Early in 2009, the Port faced serious budget constraints due to economic conditions. As a result, the Seaport decided to delay T-5 maintenance dredging to 2010-11. The Port Commission was informed of the decision through 2009 1st Quarter project updates. An additional briefing to the Commission was presented on November 30, 2009, regarding a comprehensive and long-term approach to maintenance dredging at T-5, including phasing, strategies, such as advance maintenance dredging to reduce future frequencies of maintenance dredging events, adequate allowable over-dredging to ensure permit compliance, and a long-term programmatic permit which allows a phased approach to maintenance dredging at T-5.

T-5 is located adjacent but not within two Superfund sites. These sites include the Lockheed West and West Waterway Superfund sites.

Funding for Phase I maintenance dredging will come out of the 2010 and 2011 operating budget and the environmental reserve fund.

The planned Phase II project will first study Berth 3 (the northern berth) for the need and feasibility to construct an under-water wall in order to ensure that the -50' depth is sustainable. This study is already in the previous Commission approvals, and is expected to complete by early 2011. If the wall is necessary and feasible, the total cost for Phase II including the wall is estimated at about \$6,100,000, and would be a capital project except for the environmental reserve component. The design and construction of the wall would be subject to further reviews and Commission approval. Approving Phase I does not obligate the Commission to approve Phase II.

PROJECT JUSTIFICATION:

Although the T-5 lease commitment does not obligate the Port to maintain specific berth depth requirements, maintaining adequate depths at the container terminals is critical to ensure navigational access by current and future deep draft container vessels, and therefore contributes to the Port's goal to maintain and grow Seattle's market share for container business. Dredging also results in a cleaner waterway by removing and capping contaminated sediments.

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PROJECT STATEMENT AND OBJECTIVES:

Project Statement:

Perform T-5 Phase I maintenance dredging and comply with permit conditions, to provide one deep draft berth at -50' MLLW, and maintaining the two remaining berths at -45' MLLW.

Project Objectives:

The objective of the proposed project is to maintain navigational access for deep draft cargo vessels serving T-5, and comply with all permit conditions.

PROJECT SCOPE OF WORK AND SCHEDULE:

Scope of Work:

Execute consultant services contracts and amendments, advertise for bid, award major construction contracts, perform T-5 Phase I maintenance dredging and comply with permit conditions, to provide one deep draft berth at -50' MLLW, and maintain the two remaining berths at -45' MLLW. Phase I dredging area includes area between Station 4+00 to 9+00 (Berth 1, 500') to -45' MLLW, area between Station 9+00 to 19+00 (Berth 2, 1000') to -50' MLLW, and area between Station 19+00 to 29+00 (Berth 3, 1000') to -45' MLLW. Also included is any permit allowed and/or required advance maintenance dredging (up to 1'), allowable over-dredging (up to 4'), and backfill with clean sand (for both slope stability and environmental protection). Costs include outside services and in house staff time, construction contract payments, contingency, sales tax, permit fees, and other administrative and overhead costs.

Schedule:

Phase I maintenance dredging is expected to be completed by February 2011. The Port is expecting the Army Corps of Engineers approval of the Joint Aquatic Resources Permit before scheduled contract award in September. Delays in permitting, while not anticipated, could pose a risk to project completion within the permit required construction window between December 1, 2010 and February 15, 2011.

FINANCIAL IMPLICATIONS:

Budget/Authorization Summary

Previous Authorizations	\$680,000
Current request for authorization	\$1,300,000
Total Authorizations, including this request	\$1,980,000
Remaining budget to be authorized (<i>pending phase II capital project request</i>)	\$6,100,000
Total Estimated Project Cost	\$8,080,000

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Project Cost Breakdown

Construction	\$800,000
State & Local Taxes	\$80,000
Construction Management	\$156,000
Design	\$595,000
Project Management	\$136,000
Permitting	\$213,000
Total Authorization:	\$1,980,000

Source of Funds

The 2010 operating budget included \$450,000 for Terminal 5 maintenance dredging. Actual spending in 2010 is expected to be approximately \$600,000, and accordingly will create an unfavorable operating expense variance of \$150,000 in 2010. Seaport Division will seek ways to offset this increase in operating expenses with savings in other areas. The remaining \$1,000,000 of the project authorization will be included in the 2011 Operating Expense Budget.

With the exception of the environmental reserve work described below, the cost of this project will be funded from the general fund.

It is expected that approximately \$175,000 of the Phase I project construction costs (including upland disposal of contaminated sediment and some of the surface cover for exposed sediment) will be GASB 49 environmental work. The GASB 49 portion of this project will be paid out of operating Environmental Reserves. The source of funds for the GASB 49 environmental portion of the project will be the tax levy.

Financial Analysis Summary

CIP Category	NA
Project Type	Expense – Renewal/Replacement
Risk adjusted Discount rate	NA
Key risk factors	<ul style="list-style-type: none">• 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 requires narrow construction window from 1/1/2010 to 2/15/2011, which could result in a lack of bids and/or higher bids• Permit delays could result in delaying the project by an entire year due to narrow construction window• Agencies could impose additional permit conditions beyond current project scope

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Project cost for analysis	\$1,980,000																																				
Business Unit (BU)	Container Operations																																				
Effect on business performance	<p>Project costs incurred to date have had the following effect on NOI for years 2008/2009. The estimated total project costs will have the following effect on NOI in future years. Depreciation expense will not be impacted by this project, as this dredging project is an operating expense.</p> <table border="1"><thead><tr><th>NOI (in \$000's)</th><th>2008</th><th>2009</th><th>2010</th><th>2011</th><th>TOTAL</th></tr></thead><tbody><tr><td>Incremental Revenue</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td>Incremental OpExp</td><td>(209)</td><td>(170)</td><td>(601)</td><td>(1,000)</td><td>(1,980)</td></tr><tr><td>NOI</td><td>(\$209)</td><td>(\$170)</td><td>(\$601)</td><td>(\$1,000)</td><td>(\$1,980)</td></tr><tr><td>Depreciation</td><td>\$0</td><td>\$0</td><td>\$0</td><td>\$0</td><td>\$0</td></tr><tr><td>NOI After Depreciation</td><td>(\$209)</td><td>(\$170)</td><td>(\$601)</td><td>(\$1,000)</td><td>(\$1,980)</td></tr></tbody></table>	NOI (in \$000's)	2008	2009	2010	2011	TOTAL	Incremental Revenue	-	-	-	-	-	Incremental OpExp	(209)	(170)	(601)	(1,000)	(1,980)	NOI	(\$209)	(\$170)	(\$601)	(\$1,000)	(\$1,980)	Depreciation	\$0	\$0	\$0	\$0	\$0	NOI After Depreciation	(\$209)	(\$170)	(\$601)	(\$1,000)	(\$1,980)
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IRR/NPV	NA																																				

ECONOMIC IMPACTS AND BUSINESS PLAN OBJECTIVES:

The impacts of not doing this work are severe. Container vessel operations will be disrupted and possibly diverted to other ports if water depths are not sufficient to accommodate deep draft vessels.

STRATEGIC OBJECTIVES:

This project supports the Port's strategies to "Ensure Airport and Seaport Vitality" and "Exhibit Environmental Stewardship through our Actions", by:

- Maintaining required navigation depth for deep draft container vessels;
- Improving water quality by removing and capping contaminated sediments from the marine environment;
- The project will acquire all necessary and required permits from appropriate agencies prior to start of construction; and
- will comply with all conditions stipulated by permit authorizations;
- The permit process requires notification of neighboring communities, agencies of interest, tribes and appropriate environmental groups. Comments are expected and welcome;
- The waters near Harbor Island are treaty-reserved "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.

ENVIRONMENTAL SUSTAINABILITY AND COMMUNITY BENEFITS:

The design of the T-5 maintenance dredging program reflects lessons learned from recent projects at T-30, T-91, and T-18, as well as changes necessary to be consistent with new

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technical guidance developed by the Army Corps of Engineers. The approach is different in four primary ways:

- An additional one-foot (1') of "advance maintenance dredging" is included beyond the project depth. Advance maintenance dredging is permitted in critical and fast-shoaling areas as a means to extend the interval between dredging events. This reduces mobilization/demobilization costs and results in lower air emissions over time. The geometry of the dredge prism is characterized in a manner that more accurately portrays the amount of over-depth excavation that is anticipated based on past experience. Over-depth dredging occurs due to the inherent margin of error that results from equipment tolerances, survey inaccuracies, wave and wind conditions, water depth and human factors. Characterization of the dredge prism in the most rigorous way possible allows regulatory and contracting compliance to be more predictable.
- The permit strategy will allow dredging to be phased over a ten year period to defer costs across multiple budget year and to allow differentiation between dredging that will use open-water disposal from upland disposal. This type of "programmatic permit" also allows differentiation between near-term and long-term dredging. Programmatic approaches allow costs and environmental impacts to be better managed and anticipated.
- Best management practices will be employed to avoid and limit environmental impacts of dredging. At least 6" of clean sand will be placed across the dredge area for either structural or anti-degradation purposes.

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS:

- On February 26, 2008, the Port Commission authorized \$400,000 for staff to conduct environmental and technical assessments, prepare project scope of work and design, conduct environmental review and apply for permit authorizations for navigational access dredging at T-5 and T-18.
- On September 9, 2008, the Port Commission authorized total of \$2,257,000 for T-18 Maintenance Dredging including construction, and authorized a total of \$680,000 for design and permitting funding for T-5 Maintenance Dredging.
- On November 30, 2009, staff briefed the Commission regarding status of T-5 Maintenance Dredging project and permit strategies for a comprehensive and long-term approach to maintenance dredging at T-5.