

**PORT OF SEATTLE**  
**MEMORANDUM**

**COMMISSION AGENDA**  
**ACTION ITEM**

<b>Item No.</b>	
<b>Date of Meeting</b>	May 8, 2012

**DATE:** May 7, 2012

**TO:** Tay Yoshitani, Chief Executive Officer

**FROM:** Ralph Graves, Managing Director, CDD  
Dwight Rives, Director, PCS  
Rod Jackson, Capital Project Manager, Seaport

**SUBJECT:** Terminal 91 Waterline Replacement  
CIP #800298

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

**Source of Funds:** General Operating Funds

**Total Project Cost:** \$4,875,000

**ACTION REQUESTED:**

Authorization for additional funding to complete construction of the project at an additional cost of \$300,000 for a total project cost of \$4,875,000

**SYNOPSIS:**

Portions of the underground waterlines at Terminal 91 (T-91) in the vicinity of the Magnolia Bridge and upland area were installed over 60 years ago (1945 Navy era). These old, deteriorated systems are unreliable and have exceeded their useful design/service life.

These pipelines distribute the domestic water throughout the terminal and supply water to the fire protection systems—critical to terminal/tenant operations and safety. Replacement of these aged pipelines was to prevent continued failures which create costly repairs and interruption of operations for both the Port and our customers. Multiple water main failures during the past few years have resulted in repair costs of over \$150,000 plus the additional costs including negative impacts absorbed by our tenants when waterlines fail.

Commission approved the construction funds for this project on October 12, 2010 and construction commenced November 2010.

During the first weeks of construction, the Project Team discovered the need to replace a 1200 foot long segment of pipe and valves which were not in the original work scope. At the time of

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discovery, the team felt that the project would have adequate contingency to absorb the costs of additional pipeline installation and the decision was made to proceed with the additional work scope and to closely monitor expenditures as construction continued. However, as construction progressed, the project's contingency was depleted and in January 2012, the Team went before Commission to request an additional \$320,000. At that time, the Team analyzed remaining work and felt confident that the work could be completed within the revised authorized budget.

Subsequently, due to varying site conditions and in finding more extensive deterioration of the existing piping system than originally expected, the remaining work required a greater level of effort than what was reported in January 2012. Based on current projections, the project will need an additional \$300,000 to complete the construction work.

### **PROJECT STATEMENT AND OBJECTIVES:**

#### ***Project Statement:***

This project replaces deteriorated waterlines, valves, and hydrants, separates domestic and fire system lines, installs back-flow preventers, dry pipe valves, and above-ground hot boxes at several existing T-91 facilities including buildings M-19, M-28, W-39, W-40, W-50, W-390 and W-391

### **PROJECT SCOPE OF WORK AND SCHEDULE:**

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

- The project was designed in-house, the construction portion utilized Port Construction Services and Marine Maintenance crews to demolish and replace deteriorated waterlines, valves, and hydrants; prepare base materials; provide new future utility stub connections for additional future Upland capacity; separate domestic and fire system water service at several of the existing facilities while installing back flow preventers per City of Seattle and National Fire Protection Codes; and restore surface pavement as required.

#### ***Schedule:***

	<b><u>Start</u></b>	<b><u>Finish</u></b>
Pre -Design	January 2010	March 2010 <b>(COMPLETED)</b>
Design	March 2010	September 2010 <b>(COMPLETED)</b>
Permits	September 2010	October 2010 <b>(COMPLETED)</b>
Construction	November 2010	June 2012 <b>(IN PROGRESS)</b>
Close Out	July 2012	November 2012

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### **FINANCIAL IMPLICATIONS**

#### **Budget/Authorization Summary**

Original Budget	\$0
Previous Authorizations	\$4,575,000
Current request for authorization	\$300,000
Total Authorizations, including this request	\$4,875,000
Remaining budget to be authorized	\$0
Total Project Cost	\$4,875,000

#### **Project Cost Breakdown**

Construction	\$4,092,000
Sales Tax	\$ 150,000
Soft Costs	\$ 547,000
REMEDIATION Environmental Remediation Liability	\$ 86,000
Total Project Costs	\$4,875,000

#### **Source of Funds**

This project was included in the 2011 and 2012 Plan of Finance under Committed CIP# C800298, T-91 Water Main Replacement N. of Bridge, in the amount of \$4,255,000. The additional \$620,000 required to fund the balance is available due to deferred projects such as the Terminal 25 South Redevelopment Phase 2 project.

The Environmental Remediation Liability portion will be charged to expense in accordance with Port Policy AC-9. The cash funded by Environmental Remediation Liability, which pays for the environmental cleanup project, is funded by the Port's Tax Levy.

The remainder of the project will be funded from the General Fund.

#### **Financial Analysis Summary:**

<b>CIP Category</b>	Renewal/Enhancement
<b>Project Type</b>	Renewal & Replacement
<b>Risk adjusted Discount rate</b>	NA
<b>Key risk factors</b>	<ul style="list-style-type: none"><li>• Project schedule and costs could increase if there are continued unforeseen complexities such as underground obstructions. These risks are mitigated as the project continues through the construction phase.</li><li>• The environmental component of the project may be more extensive as site specific information becomes available. This risk is also mitigated as the project continues through the construction phase.</li></ul>

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<b>Project cost for analysis</b>	\$4,875,000																								
<b>Business Unit (BU)</b>	Seaport Industrial Properties																								
<b>Effect on business performance</b>	<p>This project will not generate any incremental revenue.</p> <p>Total depreciation expense from this project is estimated to be \$97,500 per year based on a fifty year life. The allocation of actual project costs to specific assets will be finalized near the end of the project, estimated to be the end of the second quarter 2012. Net Operating Income after Depreciation for this facility will decrease by the associated depreciation expense of this project.</p> <table border="1"><thead><tr><th><u>NOI (in \$000's)</u></th><th><u>2012</u></th><th><u>2013</u></th><th><u>2014</u></th><th><u>2015</u></th><th><u>2016</u></th></tr></thead><tbody><tr><td>NOI</td><td>\$0</td><td>\$0</td><td>\$0</td><td>\$0</td><td>\$0</td></tr><tr><td>Depreciation</td><td>(\$49)</td><td>(\$98)</td><td>(\$98)</td><td>(\$98)</td><td>(\$98)</td></tr><tr><td>NOI After Depreciation</td><td>(\$49)</td><td>(\$98)</td><td>(\$98)</td><td>(\$98)</td><td>(\$98)</td></tr></tbody></table>	<u>NOI (in \$000's)</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	NOI	\$0	\$0	\$0	\$0	\$0	Depreciation	(\$49)	(\$98)	(\$98)	(\$98)	(\$98)	NOI After Depreciation	(\$49)	(\$98)	(\$98)	(\$98)	(\$98)
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### ALTERNATIVES CONSIDERED AND THEIR IMPLICATIONS:

- Alternative 1: Shut down the project without completing the work. Alternative 1 is not recommended.
- Alternative 2: Complete replacement of the failing underground water distribution systems serving the existing facilities and tenants at T-91 to maintain water service throughout the facility and provide required fire protection systems. This alternative will restore the waterlines to full beneficial use and will minimize the possibility of future failures. This upgrade will also provide needed capacity and additional connection points for future development of the terminal. **This is the recommended alternative.**
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### PREVIOUS COMMISSION ACTIONS OR BRIEFINGS:

On January 24, 2012, Commission authorized an additional \$320,000 to complete construction phase of the T-91 Waterline Replacement project.

On October 12, 2010, Commission authorized \$3,555,000 to proceed with the Construction phase of the T-91 Waterline replacement project.

On March 9, 2010, Commission authorized \$700,000 to proceed with the Design and the Permitting phase of the project including construction document preparation.