

PORT OF SEATTLE
MEMORANDUM

COMMISSION AGENDA

Item No. 5a

ACTION ITEM

Date of Meeting November 6, 2012

DATE: October 29, 2012

TO: Tay Yoshitani, Chief Executive Officer

FROM: Scott Pattison, Seaport Asset Manager
Curtis Stahlecker, Capital Project Manager

SUBJECT: Terminal 46 Dock Rehabilitation Project

Amount of This Request: \$1,797,000

Source of Funds: General Fund

Est. Total Project Cost: \$24,064,000

Est. State and Local Taxes: \$1,780,000

ACTION REQUESTED:

Request Commission authorization for the Chief Executive Officer to direct staff to develop design documents, apply for permits, and prepare construction documents as part of the Terminal 46 (T-46) Dock Rehabilitation project for an estimated cost of \$1,797,000, bringing the total authorized cost of this project to \$1,854,000. The total project cost is estimated at \$24,064,000.

SYNOPSIS:

This memo requests Commission approval for permitting, design, and project management funding in the amount of \$1,797,000 for the proposed T-46 Dock Rehabilitation project. Improvements are limited to the two main container berths (approximately 2,440 lineal feet) at T-46. The project would rehabilitate container berth pile caps and deck panels that have deteriorated with the passage of time by removing corrosive concrete, repairing rebar and recasting with new cement "grout." Completion of this project is expected to preserve the existing use and capacity of the two containership berths at the T-46 dock, which is a lease obligation under the current operating agreement with Total Terminals International. Work will be coordinated with the tenant and performed in stages to minimize disruption to terminal operations. This project at T-46 was not included in the 2012 capital budget, however generally replaces similar work budgeted at T-18 that is being deferred. The funding is included in the proposed 2013 draft Plan of Finance.

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BACKGROUND:

In 2011, the Seaport expanded and formalized its Asset Stewardship Program to include detailed condition surveys of key Seaport assets, including its docks. The 2011 condition survey of the T-46 dock confirmed and expanded on prior survey findings regarding deterioration of key elements of the dock, including the berth pile caps and deck panels. Pile caps are beams that are on top of the piling that tie the piling together into a linear structure; deck panels are placed on top of the pile caps and create the level deck area of the dock. Included in the Dock System Condition Assessment Report is information describing the causes of this deterioration and recommendations for rehabilitation, including when the rehabilitation might best be performed and its estimated cost. The report also proposes a schedule for ongoing inspections of the dock. Combined, these steps are designed to ensure the dock remains fully in service over time.

This project would rehabilitate the dock's deck panels and pile caps at the two main containership berths at T-46 (approximately 2,440 lineal feet of dock). The project would not rehabilitate other deteriorated portions of the dock at the northern and southern ends of T-46.

Rehabilitation of a container terminal Dock System's pile caps and deck panels is an emerging need – at the Port of Seattle and other ports. In order to better understand the extent of work, the time it takes to perform the work, and costs, the Port is undertaking a Pilot Pile Cap project (pilot project) on a sample of four pile caps at T-18 at this time that is expected to be completed by the end of 2012. The pilot project is expected to expand the Port's understanding of the means to evaluate the condition and methods to rehabilitate similar pile caps and deck panels in its portfolio. Experience gained from the pilot project will be used to guide decisions on the design of the T-46 Dock Rehabilitation project. This will also help guide recommendations for future inspections and rehabilitation of other Port terminals.

T-46 is fully leased and is actively used for movement of both import and export cargoes between ships, trucks, and rail. Accordingly, the project will need to be performed in stages to enable terminal operations to continue with minimum disruption. Coordination with the tenant will be important to management of the project.

The project was not anticipated in the 2012 capital budget, but is proposed in the 2013 Draft Plan of Finance.

PROJECT JUSTIFICATION:

The project will rehabilitate approximately 2,440 lineal feet of the T-46 dock by restoring its structural integrity, extending its remaining life, and thereby preserving existing assets and revenues.

Project Objectives:

The following objectives will be used to measure project success and benefits gained.

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- Minimize costs
- Minimize time to complete construction
- Minimize disruptions to tenant operations
- Maximize coordination with related projects
- Maximize extension of design life

PROJECT SCOPE OF WORK AND SCHEDULE:

Scope of Work:

Scope of work for this authorization is to complete design and permitting tasks and prepare construction documentation necessary to complete the rehabilitation. Design and permits will be completed by Port staff. Below is a synopsis of the types of work anticipated at the T-46 dock by this project:

- Remove deteriorating and corrosive concrete from pile caps and deck panels
- Clean and recoat or replace corroded rebar
- Recast with grout to preserve and extend the life of these assets

Following design, staff will return to Commission to seek authorization to complete the project, which may include major construction contracts, work performed by Port crews, and the purchase of equipment and materials. Port legal staff has determined this work is a Port lease obligation for all proposed scope elements in the project.

Schedule:

Construction is targeted to commence in the fourth quarter of 2013 and be completed by early 2016. Schedule milestones are represented below, subject to change depending on permits, scope changes, and unforeseen schedule delays.

	Start	Finish
Preliminary Design	August 2012	October 2012
Design	November 2012	May 2013
Permits	June 2013	October 2013
Construction	November 2013	March 2016

FINANCIAL IMPLICATIONS:

Budget/Authorization Summary:

	Total Project
Previous Authorizations (<i>Seaport Division authorization</i>)	\$57,000
Current request for authorization	\$1,797,000

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Total Authorizations, including this request	\$1,854,000
Remaining budget to be authorized (<i>pending design efforts and recommendations from pilot project currently underway</i>)	\$22,210,000
Total Estimated Project Cost	\$24,064,000

Project Cost Breakdown:

	Total Authorizations	Total Project
Construction*		\$15,612,000
Construction Contingency		\$3,122,000
Construction Management	\$178,000	\$1,874,000
Design	\$749,000	\$749,000
Project Management	\$796,000	\$796,000
Permitting	\$131,000	\$131,000
State & Local Taxes (estimated)		\$1,780,000
Total	\$1,854,000	\$24,064,000

*Construction budget is preliminary and will be adjusted during design based on findings from the Pilot Project.

Budget Status and Source of Funds:

2012 Draft Plan of Finance:

Funds for this project were not specifically included in the 2012 draft Plan of Finance*. However, funds are available due to amounts included in CIP C800002 Contingency Renewal & Replace. The cost of this project will be funded from the general fund. Funds are included in the proposed 2013 draft Plan of Finance.

Note*: The 2012 operating budget included \$500,000 for the Terminal 18 pile cap project design & permitting costs, which has been deferred in lieu of this Terminal 46 project.

2013 -2017 Proposed Capital Budget:

Due to the timing of the completion of the current estimate, only \$19,800,000 of the total project cost of \$24,064,000 has been included in the 2013-2017 proposed capital budget. The additional \$4,264,000 estimated to complete this project is available in CIP C800002 Contingency Renewal & Replace. The cost of this project will be funded from the general fund.

Financial Analysis and Summary:

CIP Category	Renewal/Enhancement
Project Type	Renewal & Replacement
Risk adjusted discount rate	N/A

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Key risk factors	<ul style="list-style-type: none">• Potential cost overruns due to project complexity or expansion of project scope due to more extensive damage or deterioration than current condition assessments indicate.• Project may not be completed by the stated schedule due to permitting delays or project phasing constraints in order to accommodate continued tenant operations during construction.																								
Project cost for analysis	\$24,064,000																								
Business Unit (BU)	Container Ops																								
Effect on business performance	<p>This project will not generate any incremental revenue.</p> <p>Incremental depreciation expense from this project is estimated to be \$1,203,200/year, based on an expected twenty-year asset life. The allocation of project costs to specific assets will be finalized near the end of the project, which is estimated to be in March 2016. Net Operating Income after Depreciation at Terminal 46 will decrease by the incremental depreciation from this project.</p> <table border="1"><thead><tr><th><u>NOI (in \$000's)</u></th><th><u>2016</u></th><th><u>2017</u></th><th><u>2018</u></th><th><u>2019</u></th><th><u>2020</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>(\$902)</td><td>(\$1,203)</td><td>(\$1,203)</td><td>(\$1,203)</td><td>(\$1,203)</td></tr><tr><td>NOI After Depreciation</td><td>(\$902)</td><td>(\$1,203)</td><td>(\$1,203)</td><td>(\$1,203)</td><td>(\$1,203)</td></tr></tbody></table>	<u>NOI (in \$000's)</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	NOI	\$0	\$0	\$0	\$0	\$0	Depreciation	(\$902)	(\$1,203)	(\$1,203)	(\$1,203)	(\$1,203)	NOI After Depreciation	(\$902)	(\$1,203)	(\$1,203)	(\$1,203)	(\$1,203)
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IRR/NPV	N/A																								

Lifecycle Cost and Savings:

Extending the useful service life of our existing assets defers eventual replacement costs, supporting the economic vitality of our operations.

STRATEGIC OBJECTIVES:

The project is consistent with Century Agenda goals for job and container volume growth at the Seaport, and supports Seaport economic vitality by preserving existing jobs and revenues. The project addresses Port responsibilities under the current terminal lease agreement that is in effect.

ENVIRONMENTAL SUSTAINABILITY AND COMMUNITY BENEFITS:

- Design and project implementation will include practices to avoid and minimize potential negative environmental effects. The project will utilize methods, materials, and practices for effective work while avoiding release of deleterious materials and reducing the potential for adverse effects to the aquatic environment.
- Timely rehabilitation will preserve the service life of existing infrastructure, and is an alternative to more environmentally disruptive and resource/materials consumptive large scale structure removal and replacement.

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BUSINESS PLAN OBJECTIVES:

- Rehabilitate deteriorating assets to preserve and extend existing uses and revenue streams.
- Preserve remaining life of existing assets.
- Comply with Port responsibilities under the existing terminal lease agreement.

TRIPLE BOTTOM LINE:

Extending the useful service life of this existing asset defers eventual replacement for a longer period of time than would otherwise be possible, especially if run to failure. This action avoids the major environmental impacts associated with replacement; preserves the port's ability to generate revenues during construction; and provides security for all of the related jobs necessary for continued operation.

ALTERNATIVES CONSIDERED AND THEIR IMPLICATIONS:

1. Rehabilitate only the most severely distressed areas of the container dock at T-46. This alternative would leave moderate areas of deterioration unaddressed, allowing it to proliferate, thereby increasing the total cost of ownership to the Port. This is not the recommended alternative.
2. Defer rehabilitation for up to 10 years. This alternative would result in an expanded scope of work and increased costs due to estimated acceleration of deterioration. In addition, as dock conditions worsened, there would be an increased risk of dock loading capacity reduction and reduced service life. This is not the recommended alternative.
3. Rehabilitate moderate and severely distressed areas within 2,440 lineal feet of container dock at T-46. **This is the recommended alternative.**

OTHER DOCUMENTS ASSOCIATED WITH THIS REQUEST:

- PowerPoint

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS:

- None