THE NORTHWEST SEAPORT ALLIANCE
MEMORANDUM

MANAGING MEMBERS
ACTION ITEM

Item No. 4C

Date of Meeting July 17, 2018

DATE: July 6, 2018

TO: Managing Members

FROM: John Wolfe, CEO

Sponsor: Andre Elmaleh, Senior Manager, Business Development

Project Manager: Norman Gilbert, Engineering Project Manager II

SUBJECT: Pier 7 Berths A-D Fender Enhancements and Rehabilitation

A. ACTION REQUESTED

As referenced in NWSA Resolution No. 2016-04, Exhibit A, Delegation of Authority Master Policy, Paragraph 8.c.iii., states project costs exceeding $300,000 require approval from Managing Members.

Request project authorization in the amount of $2,000,000 for a total authorized amount of $4,300,000, for work associated with the Pier 7 Berths A-D Fender Enhancements and Rehabilitation project, Master Identification No. 201048.01.

B. SYNOPSIS

Because of increased cargo volume, larger vessel size, and ongoing deterioration, the Pier 7 fender system has not performed well over the last decade.

The main drivers for this recommended upgrade are the existing lease and business obligations. Berth D and a portion of Berth C are under lease and Berths A, B, and C generate revenue directly to the Port from Auto Ships, Military Shipments, and Barge Dockings.

C. BACKGROUND

Berths A through D were built sequentially beginning in 1960 and finishing in 1974. The 100% timber fendering systems for Berths A through C remain in service today as they were originally constructed. The vessel size that these systems were intended to accommodate are no longer calling in significant numbers, while large auto vessels and Panamax Container vessels dominate.

The existing fender system for the three subject berths remains constructed entirely from timber and has been in use since the first wharf was commissioned. The fender system as designed has reached the end of its anticipated useful life.

Tacoma is one of 21 ports identified nationwide as a “Strategic Port” by the U.S. Military and has annually been the port of choice for the Japanese Defense Force to load-in and load out their mechanized units (including tanks and helicopters) during their U.S. based training regimen in Eastern Washington for more than 30 years.

D. PROJECT DESCRIPTION AND DETAILS

Work includes demolition of the existing fender systems of Berths A through C including piling, fender system and hardware. The performance of the steel waler system installed at Berth D in 2015 has proven itself and is the proto-type for continuation at Berths A through C. Work includes installation of timber piling, steel waler/chock replacement, and UHMW rubstrips for waler and piles. Additionally, minor maintenance work will be performed on Berth D and the steel waler/chock system will be extended to the end of the berth.

Project Objectives

Provide a more robust and reliable interface to better withstand the forces imposed by a more diverse group of vessels including larger vessels not anticipated with the original design.

Scope of Work

- Removal of approximately 1,900 feet of timber wales and chocks with associated hardware for berths A through C and a small section at berth D.
- Installation of a combination of approximately 94 timber pile replacements and 26 fresh-heading.
- Installation of approximately 1,900 feet (98 pieces) of steel waler with associated hardware.
- Replacement of twenty fabric wrapped timber piles at Berth D (upgraded to similar system in 2015). and extending the steel wale/chock system to the end of the berth.
- Project and construction management.

Schedule

Advertise for Bid	August 2018
Bid Opening	September 2018
Substantial Completion	January 2019

E. FINANCIAL IMPLICATIONS

Project Cost Details

	This Request	Total Project Cost	Cost to Date	Remaining Cost
Procurement	$ -	$ 2,100,000	$ -	$ 2,100,000
Design	$ -	$ 160,000	$ 47,000.00	$ 113,000
Construction	$ 2,000,000	$ 2,040,000	$ -	$ 2,040,000
Total	**$ 2,000,000**	**$ 4,300,000**	**$ 47,000**	$ 4,253,000

Source of Funds

The current Capital Investment Plan (CIP) Budget allocates $6,550,000 for this project.

Financial Impact

Project costs will be capitalized and depreciated over an estimated 5-year life resulting in annual depreciation of $860,000.

The remaining net book value of existing assets will be approximately $197,000 at substantial completion. This value will be written off when the scope of work is completed. This will be a homeport expense.

This expenditure is considered major maintenance and is necessary to provide continued support to an existing revenue base that includes the auto and military business and the Ports America leased use of terminal 7 berths A-C.

Based on May financial results, East Sitcum Terminal has earned $2.8 million in income before depreciation and is budgeted to earn $5.1M in income before depreciation in 2018. Based on May financial results, T7A&B has earned $1.3 million in income before depreciation and is budgeted to earn $2.5 million in income before depreciation in 2018.

F. ALTERNATIVES CONSIDERED AND THEIR IMPLICATIONS

Alternative 1) Replace all remaining timber fender systems for Berths A, B, C and a portion of D in-kind. This proved to be the second most expensive option and would not help mitigate current problems with the interface between vessels and the fendering.

Alternative 2) Develop a new design for an all steel system similar to the one used in the North Harbor. The cost of this system was prohibitive and would not pencil-out for current revenue sources.

Alternative 3) Replicate the engineered hybrid system which employs a steel continuous chock but retains the timber piles. This is the least expensive option and it represents a clear improvement over the original system design and materials.

Alternative 3 is the recommended course.

G. ENVIRONMENTAL IMPACTS / REVIEW

Permitting:

The Port is in the process of renewing the state and federal governmental approvals and permits for the Port's programmatic pile repair and replacement program, which will provide permit coverage for this project. The City of Tacoma's Shoreline and Critical Area Exemption (SHR2013-40000215154) is still in effect. Staff anticipate obtaining state and federal approvals prior to the opening of the next in-water work window (July 16, 2018).

Remediation:

N/A

Water Quality:

Best Management Practices (BMPs) will be implemented to protect water quality during pile replacement, per requirements set forth in Ecology's water quality certification and WDFW's HPA.

Air Quality:

N/A

H. ATTACHMENTS TO THIS REQUEST

- Computer slide presentation.

I. PREVIOUS ACTIONS OR BRIEFINGS

Date	Action	Amount
February 14, 2018	Executive Authorization - NWSA-20180213.01 for Advance Work	$200,000
April 3, 2018	Managing Members Authorization – Advanced Procurement	$2,100,000
TOTAL		**$2,300,000**