8l. Memo from Regular Meeting held Nov 08, 2022 12:00pm at Pier 69



2022 11 08 RM 8l Memo Pier-66-Fender-Overhaul.pdf

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COMMISSION

AGENDA MEMORANDUM Item No. 81

ACTION ITEM Date of Meeting November 8, 2022

DATE: October 21, 2022

TO: Stephen P. Metruck, Executive Director

FROM: Marie Ellingson, Cruise Operations & Business Development Manager

Linda Springmann, Director of Cruise Operations & Maritime Marketing

Julie Yun, Capital Project Manager

SUBJECT: Construction Authorization for the Pier 66 Fender Overhaul (CIP #C800674)

Amount of this request: \$7,270,000

Total estimated project cost: \$7,980,000

ACTION REQUESTED

Request Commission authorization for the Executive Director to advertise and award a major public works contract to rehabilitate the Pier 66 fender system. The total request for this action is \$7,270,000 for a project total authorization of \$7,980,000.

EXECUTIVE SUMMARY

This project addresses the need for asset and revenue preservation for multi-vessel use of the west apron at Pier 66. The fender system was originally installed in 1998 with a design life of 15-25 years. Over the years it has experienced deterioration due to heavy use and exposure to the elements. (26) fender panel assemblies will be taken to an off-site facility to be refurbished. Damaged elements such as timber panels, rubber energy absorbers, and steel components will be replaced or rehabilitated. Six foam-filled floating fenders and their attachment hardware will be replaced, as well as all anodes on the steel sleeve elements. This project is planned to be completed over 2 permitted in-water work windows in coordination with Cruise operations. JUSTIFICATION

This project supports the following Century Agenda and Maritime Division priorities:

- (1) Advance this region as a leading tourism destination and business gateway
- (2) Asset Management Develop, maintain, and operate Maritime facilities to ensure longterm viability & efficiency, to meet our customer's needs.

Fender systems are a critical element of a marine facility, designed to absorb the energy imparted on the pier by vessels during berthing. Past inspections and condition assessments have provided evidence of damage and deterioration consistent with the use and age of the assets. Moderate

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COMMISSION AGENDA - Action Item No. 8I Page 2 of 5

Meeting Date: November 8, 2022

to severe deterioration, including section loss from marine borers, was observed on timber panels in underwater areas. The project proposes to rehabilitate the fender system, extending its useful life while protecting the port's asset, and allowing for continued safe, efficient, and reliable use of the berth.

Diversity in Contracting

There will be a 7% WMBE aspirational goal for this project.

DETAILS Scope of Work

The west apron of Pier 66, including the south apron area, measures approximately 1,540 linear feet and its fender system is comprised of modular assembly units with Ekki hardwood paneling bolted to welded steel fender frames supported by driven steel pipe piles. Each fender assembly has two steel pipe sleeves that fit over the driven piles. The fender panel assemblies are connected to the pier via energy-absorbing cylindrical rubber fenders and bolted attachment hardware. Six of the fender panels have foam-filled floating fenders attached to them with chains, fittings, and chain rollers.

The fender panels will be removed and taken to an off-site facility where they will be disassembled, high-pressure washed, inspected, and repaired prior to being reinstalled. Conditions of steel behind the timber panels is difficult to fully assess until panels have been removed. Proper contingency will need to be maintained. The project will be executed as low bid major construction contract.

Scope will include:

(1) Replacing all timber panels with recycled reinforced plastic lumber panels

8l. Memo from Regular Meeting held Nov 08, 2022 12:00pm at Pier 69



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- (2) Replacing six fender camels and attachment hardware
- (3) Replacing/rehabilitating damaged steel components
- (4) Replacing/rehabilitating rubber energy absorbers
- (5) Anode replacement on sleeve elements

Schedule

- This project will utilize the Port's Pile Systems Repair & Maintenance Programmatic Permit, which is currently under review for renewal. The existing permit expires at the end of the current in-water work window, and the renewed permit is expected to be in place by the start of the 2023/2024 in-water work window.
- Construction phasing will be coordinated within the permitted in-water work windows and outside Cruise season.
- o Phase 1: November 2023 to February 2024
- o Phase 2: November 2024 to February 2025

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COMMISSION AGENDA - Action Item No. 8I Page 3 of 5

Meeting Date: November 8, 2022

Activity

Commission design authorization Q4 2021

Design start Q4 2021

Commission construction authorization Q4 2022

Advertise Construction Q1 2023

Construction start Q4 2023

In-use date Q1 2025

Cost Breakdown This Request Total Project

Design (previously authorized) \$0 \$710,000

Construction \$7.270.000 \$7.270.000

Total \$7,270,000 \$7,980,000

ALTERNATIVES AND IMPLICATIONS CONSIDERED

Alternative 1 – Defer execution of this project scope.

Cost Implications: Reduces 2023-2025 capital spend by \$7,270,000.

Pros

- (1) Retains Port capital for other priority projects and financial initiatives.
- (2) Defers temporary construction impacts.

Cons:

- (1) Continued deterioration of the fender panels.
- (2) Increased risk of failure: while risk is not imminent, over time the panels could fail under the load of multi-vessel use. This would prevent loading of a ship during medium to low tides. It could also cause damage to the passenger gangway on the cruise ship(s).
- (3) Potential impact to revenue.

This is not the recommended alternative.

Alternative 2 – Proceed with execution of fender system rehabilitation as proposed.

Cost Implications: Requires allocation of \$7,270,000 in the Capital Plan.

Pros:

- (1) Preservation of a critical asset that supports revenue generation and long-term multivessel use of the berth.
- (2) Maintain fender system as the first line of defense against structural damage to the existing pier.
- (3) Demonstrate Port commitment to sustainability through selection of materials (recycled plastic lumber).
- (4) Minimize risk of operational disruption.

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COMMISSION AGENDA - Action Item No. 8l Page 4 of 5

Meeting Date: November 8, 2022

Cons:

- (1) Upfront capital cost.
- (2) Berth will not be available during rehabilitation of the fender panels.

This is the recommended alternative.

FINANCIAL IMPLICATIONS

Cost Estimate/Authorization Summary Capital Expense Total

8l. Memo from Regular Meeting held Nov 08, 2022 12:00pm at Pier 69



2022 11 08 RM 8l Memo Pier-66-Fender-Overhaul.pdf

COST ESTIMATE

Original estimate \$5,000,000 \$0 \$5,000,000 Current change \$2,980,000 0 \$2,980,000 Revised estimate \$7,980,000 0 \$7,980,000

AUTHORIZATION

Previous authorizations \$710,000 0 \$710,000

Current request for authorization \$7,270,000 0 \$7,270,000

Total authorizations, including this request \$7,980,000 0 \$7,980,000

Remaining amount to be authorized \$0 \$0 \$0

Annual Budget Status and Source of Funds

This project was included in the 2022 Capital Plan under C800674 P66 Fender Overhaul for a total project cost of \$5.3 million. The additional cost will be covered from C800002 Maritime

Management Reserve. Since then, the project has been included in the Draft 2023 Capital Plan with a total project cost of \$8 million.

This project is funded by the General Fund.

Financial Analysis and Summary

Project cost for analysis \$7.98 million

Business Unit (BU) Cruise Operations

Effect on business performance The project will increase annual depreciation expense by (NOI after depreciation) approximately \$400K based on an expected useful life of 20 years.

IRR/NPV (if relevant) NA

CPE Impact NA

ADDITIONAL BACKGROUND

 A Competition Waiver for recycled plastic lumber is currently in circulation for final approval. Recycled plastic lumber was selected for its improved sustainability, durability, and structural qualities to replace the existing fender panel facing material (endangered species of African tropical hardwood). Only one manufacturer was identified to supply

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COMMISSION AGENDA - Action Item No. 8I Page 5 of 5

Meeting Date: November 8, 2022

plastic lumber at the minimum specifications required for this project, per market study conducted by the Central Procurement Organization (CPO).

ATTACHMENTS TO THIS REQUEST

(1) Presentation

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

October 26, 2021 – The Commission authorized Design funding in the amount of \$550,000.

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