



**COMMISSION
AGENDA MEMORANDUM**

Item No. 8f

ACTION ITEM

Date of Meeting October 26, 2021

DATE: September 28, 2021

TO: Stephen P. Metruck, Executive Director

FROM: Mark Longridge, Capital Project Manager
Melinda Miller, Director, Real Estate Asset Management
Lily Ninburg, Real Estate Manger

SUBJECT: Authorization for Design and Permitting of the Pier 90 East Pile Cap Rehabilitation (CIP # C801163)

Amount of this request: \$140,000

Total estimated project cost: \$1,000,000

ACTION REQUESTED

Request Commission authorization for the Executive Director to complete design and permitting for the rehabilitation of the pile caps on the East side of Pier 90 at Terminal 91 (T91). This request will increase the total project authorization to date to \$200,000 out of a total preliminary estimated project cost of \$1,000,000.

EXECUTIVE SUMMARY

Design and permitting to remove and replace approximately 22 currently deteriorated timber pile caps supporting the eastern side of the C-173 building on Pier 90 of Terminal 91, identified in conditions surveys as having fungal rot and decay.

While most of the over water sections of Terminal 91 have been replaced with concrete piers, the C-173 building remains timber pile supported. A condition survey in 2016 of the support system showed the piles and protective wraps were in generally good condition; however, some deterioration of the timber pile caps above these piles showed potential deterioration.

Subsequent inspections in 2018 showed rot and fungal decay at the exposed end areas of these pile caps extending beyond the first support pile. This project will confirm the current extent of the affected areas, replace these deteriorated sections and protect the pile caps from further deterioration.

Meeting Date: October 26, 2021

JUSTIFICATION

While no displacement or significant failure of the support system has been noted to date, these pile caps are integral to the structure of the C-173 building and further deterioration could lead to significant limitation of the structure's capacity or add minimum use and loading restrictions for the building tenants. This work supports the Port's asset preservation efforts and directly contributes to the Century Agenda objective to advance maritime industries through capable management of Port facilities.

Diversity in Contracting

The project team will work with the Diversity in Contracting team to set WMBE aspirational goals during future construction phase.

DETAILS

It is proposed to update an existing design prepared in 2018 as the basis for construction documents for public bid. This would be completed by the original design consultant using a Category I design contract to include a reassessment of the current condition, inclusion of preventative measures in the design, update of construction cost estimate and support services during construction as needed.

Scope of Work

The design contract proposal includes a reassessment of the current condition, confirmation of the design approach, inclusion of preventative measures in the design, update of construction cost estimate and support services during construction as needed (to be executed by service directive after construction authorization). While this work is adjacent to the upcoming work to rehabilitate Berth 6&8 of Pier 90, the current plan is to address this need as soon as possible as a separate effort, rather than waiting for the full design and permitting of the larger project.

While the physical construction of this work will all be above the ordinary high-water mark and high tide line, it is expected that the scaffolding necessary to provide access will extend below these jurisdictional water levels and as such this work will require approval for in-water work from the US Army Corps of Engineers. If the existing programmatic permit is not able to be used for this work a nationwide permit (NWP-3, Maintenance) is preferred; however, the Corps will make the final determination of permit pathway. The project will also require a Shoreline Exemption and Hydraulic Project Approval (HPA). Permit documents will be prepared and submitted by Port Staff.

Along with replacement of deteriorated section the design will include flashing and other preventative measures and improvements to prevent further deterioration of the repaired and adjacent pile caps and extend the service life of these elements.

Meeting Date: October 26, 2021

Schedule

All in-water work will need to be performed during the permit fish window between August 1 and February 15 of each season according to the permitting assumptions above, pending tribal consultation. This schedule aligns well with the activity level on the terminal which is typically low during August and September. Therefore, to limit the construction impact to terminal operations the current plan is to start construction at the start of the fish window in August of 2022.

Activity

Commission design authorization	2021 Quarter 4
Design start	2021 Quarter 4
Commission construction authorization	2022 Quarter 2
Construction start	2022 Quarter 3
In-use date	2022 Quarter 4

Preliminary costs based on linear feet of pile cap needing replacement and assumed soft cost percentages. Construction cost estimates will be updated during design based on updated condition surveys included in the design proposal.

Cost Breakdown

	This Request	Total Project
Design	\$140,000	\$200,000
Construction	\$0	\$800,000
Total	\$140,000	\$1,000,000

ALTERNATIVES AND IMPLICATIONS CONSIDERED

Alternative 1 – Defer rehabilitation of pile cap elements and continue to monitor their condition.

Cost Implications: Low initial cost to monitor condition alone. This would not include any potential damage to structure which would be considerably more expensive to repair.

Pros:

- (1) Lower initial capital cost.
- (2) Allows continued use without construction shutdowns.

Cons:

- (1) Increasing risk to the structure if kept in use.
- (2) Significant risk of needing further load restriction up to and including full closure, heavily impacting C-173 building tenants.
- (3) If the structure fails or needs to be closed it would not be able to reopen until fully redesigned and permitted (approx. 18 months).
- (4) Construction costs continue to escalate so replacement would likely cost more in the future, and still may require shutdowns of the facility in the meantime.

Meeting Date: October 26, 2021

This is not the recommended alternative.

Alternative 2 – Rehabilitation of the deteriorated pile cap elements starting design in 2021

Cost Implications: \$1,000,000

Pros:

- (1) Addresses structural concerns before they become an emergency and disrupt operations.
- (2) Work incorporates preventative elements that should help extend the useful life of all pile caps and slow future deterioration.

Cons:

- (1) Higher capital cost.

This is the recommended alternative.

FINANCIAL IMPLICATIONS

<i>Cost Estimate/Authorization Summary</i>	Capital	Expense	Total
COST ESTIMATE			
Original estimate	\$1,000,000	\$0	\$1,000,000
AUTHORIZATION			
Previous authorizations	\$60,000	0	\$60,000
Current request for authorization	\$140,000	0	\$140,000
Total authorizations, including this request	\$200,000	0	\$200,000
Remaining amount to be authorized	\$800,000	\$0	\$800,000

Annual Budget Status and Source of Funds

The project was included in the 2021 Capital Plan under C801163 P90E Timber Pile Caps with a total project cost of \$980K. The additional cost of the project will be covered by C800002 MD Reserve.

This project is being funded by the General Fund.

Financial Analysis and Summary

Project cost for analysis	\$1,000,000
Business Unit (BU)	Maritime Portfolio Management
Effect on business performance (NOI after depreciation)	This project will preserve existing lease revenue and is expected to increase annual depreciation expense by approximately \$50K based on an expected useful life of 20 years.
IRR/NPV (if relevant)	NA
CPE Impact	NA

Meeting Date: October 26, 2021

ATTACHMENTS TO THIS REQUEST

- (1) Presentation slides

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

None