

COMMISSION AGENDA

Item No: 7B

Meeting: 10/21/21

DATE: October 1, 2021

TO: Port Commission

FROM: Eric D. Johnson, Executive Director
Sponsor: Jason Jordan, Director, Environmental and Planning Services
Project Manager: Hughes Wike, Engineering Project Manager II

SUBJECT: Project authorization increase for work associated with the Parcel 86 Bank Stabilization Project

A. ACTION REQUESTED

As referenced in Resolution No. 2021-08-PT, Exhibit A, Delegation of Authority Master Policy, Paragraph IV.B.(2), states project costs exceeding \$300,000 require approval from Port Commission.

Request project authorization increase in the amount \$140,000 for a total authorized amount of \$650,000, for work associated with the Parcel 86 Bank Stabilization Project, Master Identification No. 101493.01.

B. SYNOPSIS

Following authorization of construction funds by the Port of Tacoma Commission on June 17, 2021, the project design was completed and the construction contract was advertised. Based on results from the subsequent bid opening on September 16, 2021, the low bid value was significantly greater than the engineer's estimate. Authorization of additional funds is requested to accommodate this increased construction contract value and allow the project to proceed with implementation.

C. BACKGROUND

Parcel 86, located at 3701 Taylor Way, is a cleanup site, regulated by the Washington State Department of Ecology (Ecology). The property runs adjacent to the south bank of the Hylebos Creek. The former owner and operator, Louisiana Pacific, placed Asarco slag and road ballast across the site to stabilize the ground for operation of heavy log-yard machinery. Ecology issued an Enforcement Order (DE92TC-S312) to Louisiana Pacific in 1992 requiring the log yard operator to address soil and surface water runoff contamination from the slag. The remedy was implemented in 1993 and consists of a low-permeability roller compacted concrete cap, a stormwater drainage system, and a Restrictive Covenant. The Port of Tacoma purchased the property in 2006 and is responsible for ensuring the remedy continues to be effective. Site groundwater quality is assessed by the Port every 18 months and the environmental cap is monitored and maintained, groundwater monitoring results and cap maintenance activities are reported to Ecology.

The Enforcement Order and Restrictive Covenant prohibit disturbance of the cap and exposure to contaminated soil and slag under the cap. However, erosion of the shoreline bank in the southeast corner has progressed landward having exposed a manhole that is part of the Parcel 86 stormwater management system. At present, the area of erosion is within clean backfill surrounding the exposed manhole.

This bank instability threatens the integrity of the environmental cap and stormwater infrastructure on the property. Following investigation of the site and assessment of potential solutions, the Port proposed to eliminate continued erosion by constructing a strategically placed sheet pile bulkhead wall.

Review of Bid Results and Basis of Design

The low bid for the project's construction contract was approximately \$104,000 (88%) above the engineer's estimate. A total of four bids were received and all were above the engineer's estimate. Based on feedback from the project's design consultant and the low-bidding contractor, the two primary factors leading to the difference between the contract bid vs. estimate are 1) a continued increase in the price of steel needed for the project's sheet pile bulkhead and 2) the cost of equipment to install the bulkhead.

Preliminary design work for this project included completion of a Conceptual Design Options Evaluation Report. In addition to the current design, the report also evaluated options to armor the full slope of the bank. However, these alternatives were not optimal as they would require filling below the Ordinary High Water (OHW) mark, which would lead to more extensive permitting requirements and mitigation for the change in habitat substrate type. The current sheet pile bulkhead design was recommended as the lowest cost solution with the shortest project duration and least disturbance to the Hylebos Creek habitat.

The project design also specifies the use of a press-in installation method for the sheet pile bulkhead. Although the equipment needed for this work is not as readily available as other methods (e.g., vibratory or impact driving), it was specified to minimize the probability of inducing vibrations that would cause failure of the slope, settlement of the adjacent Tacoma Rail tracks, and erosion of the soils that serve as the foundation for the rail bridge abutment.

D. PROJECT DETAILS

Project Objective

The objective of this project is to protect the environmental cap and stormwater system infrastructure on Parcel 86 by eliminating continued erosion of the Hylebos Creek bank.

Scope of Work

The scope of work will include:

- Design, specifications, and permitting for public works project.
- Project and construction management.
- Advertisement and award of construction contract.

- Fabrication and installation of new sheet pile bulkhead on upper bank of the Hylebos Creek above the mean higher high water (MHHW) mark.
- Backfilling behind new bulkhead.
- Clearing and re-planting of vegetation in select areas.

Scope of Work for this Request

This authorization request incorporates actual construction contract bid results received in September 2021. The total authorization amount for this project includes all tasks necessary for completion of the construction stage, including the use of internal and external engineering services, construction, and procurement.

Schedule

Bid Opening (Completed)	September 2021
Contract Execution	October 2021
Substantial Completion	February 2022

E. FINANCIAL SUMMARY

Estimated Cost of Project

The total project cost including all stages is estimated at \$650,000.

Estimated Cost for This Request

The total estimated cost of construction for this project is \$397,967. If the cost of this estimate is anticipated to exceed the authorized amount, additional Commission authorization will be requested.

Estimated Sales Tax

The total estimated sales tax to be paid to local and state governments for this project is \$27,459.

Project Cost Details

Phase	This Request	Total Previous Requests	Total Project Cost	Cost to Date	Remaining Cost
Design	\$0	\$287,243	\$252,033	\$217,401	\$34,632
Construction	\$140,000	\$222,757	\$397,967	\$0	\$397,967
Total	\$140,000	\$510,000	\$650,000	\$217,401	\$432,599

Source of Funds

The current Capital Investment Plan (CIP) allocates \$510,000 for this project. The budget will be updated as part of the 2022 budget process.

Financial Impact

Project costs will be expensed as incurred. Completion of the work should eliminate or reduce further erosion that, if left unchecked, could lead to an even greater financial impact to the Port from a more complicated and costly repair.

F. ECONOMIC INVESTMENT/JOB CREATION

The jobs of construction personnel will be supported during project implementation. By protecting continued operations on Parcel 86, the jobs of tenant staff members will also be supported.

G. ALTERNATIVES CONSIDERED AND THEIR IMPLICATIONS

Alternative 1: Cancel the project. Hylebos Creek bank erosion will continue in southeast corner of the Parcel 86 property. After an unknown period of time, bank instability will lead to failure of the stormwater system infrastructure and/or loss of integrity of the environmental cap.

Alternative 2: Revise project design and/or specify more readily available installation equipment, then proceed with a new bid process before awarding construction contract. Redesign work will lead to further delays and result in a scope of work with increased ground disturbance. As a consequence, additional cost would be incurred due to permitting impacts, additional monitoring for cultural resources during construction, and continued volatility in construction market pricing.

A change in installation equipment will lead to an increased chance of adverse impact to bank stability and the adjacent Tacoma Rail tracks during construction. Such a change would necessitate implementation of a vibration monitoring program, which would counterbalance potential cost savings.

Alternative 3: Proceed with award of the construction contract to the lowest bidder for the sheet pile bulkhead construction, as planned. Hylebos Creek bank stability will be restored, and localized erosion will be halted. Threat to environmental cap and stormwater system will be eliminated. Continued tenant operations on Parcel 86 will be protected.

Alternative 3 is the recommended course.

H. ENVIRONMENTAL IMPACTS/REVIEW

Permitting: US Army Corps of Engineers has determined that a Department of the Army (DA) permit is not required for the proposed scope of work. Project scope also meets site development permit exemption criteria and the City of Tacoma has approved shoreline substantial development permit exemption request. Building permit (BLDCN21-0058) has been issued.

Remediation: If the work is not completed and erosion continues, the Port may be out of compliance with the terms of Enforcement Order and the Restrictive Covenant.

Stormwater: Stormwater Best Management Practices (BMPs) will be developed and implemented to prevent erosion and/or sediment-laden water from leaving the project site. A project-specific Stormwater Pollution Prevention Plan (SWPPP) will be developed as part of the requirements set forth in the Port of Tacoma's MS4 program.

Air Quality: N/A

I. PREVIOUS ACTIONS OR BRIEFINGS

Date	Action	Amount
June 17, 2021	Commission Authorization – Port of Tacoma	\$222,757
December 2, 2020	Executive Authorization	\$180,368
June 17, 2020	Executive Authorization	\$106,875
TOTAL		\$510,000

J. ATTACHMENTS TO THIS REQUEST

Computer slide presentation.

K. NEXT STEPS

Execute construction contract and proceed with project implementation.