



**COMMISSION
AGENDA MEMORANDUM**

Item No. 4b

ACTION ITEM

Date of Meeting January 24, 2017

DATE: January 17, 2017

TO: Ted Fick, Chief Executive Officer

FROM: Rod Jackson, Capital Project Manager
Melinda Miller, Director, Portfolio & Asset Management
Lily Ninburg, Property Manager

SUBJECT: Terminal 91 – Building C-173 Roof Overlay (CIP #800829)

Amount of this request: \$1,311,000

Total estimated project cost: \$1,561,000

ACTION REQUESTED

Request Commission authorization for the Chief Executive Officer to (1) proceed with the construction phase of the Terminal 91 Building C-173 Roof Overlay; (2) advertise and execute a major public works contract for the roof overlay, all for an amount not to exceed \$1,311,000 with a total estimated project cost of \$1,561,000.

EXECUTIVE SUMMARY

The project will overlay the existing standing seam corrugated metal roof with a PVC membrane to extend the life of the building structure at Terminal 91 Building. The design phase is complete. The total estimated project cost is \$1,561,000, which is the same as the amount shared with the Commission at the design phase funding request on September 13, 2016.

JUSTIFICATION

The proposed project will preserve important building assets and revenues associated with the leased storage space, extend the life of the building structure, and minimize the Port's liability. Proactive asset stewardship is the key to reducing the total cost of ownership to the Port over time. Building C-173 is advantageously situated on Pier 90 with easy access to multiple vessel berthing spaces. Currently, there are two tenants in C-173; the main tenant is American Seafoods leasing 46,777 square feet of warehouse space with a lease expiration date of July 31, 2018, and the other tenant is Marel occupying 11,544 square feet of warehouse space with a lease expiration date of August 31, 2017. Both are major players in the maritime industry and fishing and seafood industry. American Seafoods has tentatively expressed intent to stay beyond current lease expiration date. Per lease agreements with affected tenants, the maintenance and repair of the roof is an obligation of the Port. This project also supports the Port's Century Agenda strategy to "position the Puget Sound region as a premier international

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logistics hub” by doubling the economic value of the fishing and maritime cluster and be the greenest and most energy efficient port in North America. This project was included in the 2017 Plan of Finance.

Due to the type of project, elements within this scope of work support certified small businesses (SCS) and/or Office of Minority and Women Business Enterprise (OMWBE) utilization. The project team is targeting an overall SBE utilization of 23% for this project.

DETAILS

The Terminal 91 C-173 Building was built in 1987. The existing roofing system covers approximately 59,000 square feet in total and is 29 years old. A roof inspection was performed on the building in November 2015 recommending replacement or overlaying. The consultant report indicated the building is currently at structural capacity and the roof is showing signs of deterioration with kinks in the metal roof panels, rust spots, deficient sheet metal repairs, roosting birds, and uplift during strong winds.

On September 13, 2016, Commission authorized design funding and now the final design for a new 30-year-life roofing overlay system is complete. The project also evaluated installation of a rain-barrel stormwater treatment system for roof runoff. With the new PVC membrane overlay installation, rain barrel stormwater treatment was determined to have relatively low benefit and thus not recommended for implementation. The feasibility of adding solar panels to C-173 was also considered during preliminary design, but staff does not recommend this, as the extra structural upgrade costs needed to support the panels on the roof are significant. This is further outlined in the alternatives below.

Scope of Work

The scope of work for the Terminal 91 Building C-173 Roof includes the construction and installation for the following:

- Clean and sweep the existing roof;
- Overlay the building with approximately 59,000 square feet of a durable roof membrane and associated roof appurtenances;
- Install a bird deterrent system;
- Installation of security access ladder to the roof;
- Install a code-compliant fall protection and attachments to the roof;
- Utilize environmentally sustainable components and construction methods, as appropriate, such as: idling control measures, waste minimization, and selecting materials with limited toxicity and greenhouse gas emissions.

Schedule

The design and permitting phase will be completed by December 2016 with the construction phase expected to begin in Q2/2017 and be fully complete by Q4/2017.

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Activity

Commission design authorization	2016 Quarter 3
Design start	2016 Quarter 3
Commission construction authorization	2017 Quarter 1
Construction start	2017 Quarter 2
In-use date	2017 Quarter 4

Cost Breakdown

	This Request	Total Project
Design	\$0	\$250,000
Construction	\$1,311,000	\$1,311,000
Total	\$1,311,000	\$1,561,000

ALTERNATIVES AND IMPLICATIONS CONSIDERED

Alternative 1 – Maintain status quo and delay replacement of the C-173 roof overlay. Maintenance costs of \$9,814.10 annually (averaged over nine months) will continue.

Cost Implications: \$1,561,000 of project funding will not be needed.

Pros:

- (1) No additional major capital funding would be required.
- (2) Allows Port to reallocate capital investment dollars.

Cons:

- (1) Increases the chances that the interior of the facility will be damaged due to water infiltration.
- (2) Increase of probable construction costs in the future while emergency repair costs continue to increase.
- (3) The cost of a future roofing project in the event of roof failure would be higher, which would include the cost of this request and costs associated with escalation, implementation of emergency work, lost revenue, and equipment and property damages.
- (4) Safety of the tenant could be compromised due to the slip hazard from leaks to tenant and employees.
- (5) Indefinite deferral could also lead to the risk of catastrophic failure.
- (6) Maintenance cost will continue.

This is not the recommended alternative.

Alternative 2 – Coat the entire existing roof with a 10-year-life roof-roll-on coating system while installing a new security ladder, gutter, and fall protection system.

Cost Implications: Total project costs would be more than the anticipated budget with the installation of the 10-year coating system because the roof will require recoating after 10 years

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and again after 20 years. This cost differential is for the coating material and labor. \$2,145,000 in project funding would be needed.

Pros:

- (1) An entirely new 10-year roof-roll-on coating, replacing the security ladders, gutters and adding a fall protection system investment will protect our assets and have a 10-year life span.
- (2) Helps to assure a stronger positive tenant experience and avoids potential safety hazards.
- (3) Provides protection of Port assets.
- (4) Increase safety with the installation of fall protection.
- (5) This project would provide a warranted roof coating that will minimize the cost of repairs going forward for the foreseeable life of the roof.

Cons:

- (1) Additional cost for the roof coating is higher than the PVC roofing system (Alternative 4). Due to the added material, handling cost, and the need to re-coat the roof three times as compared to the 30-year roof. This is the most expensive alternative.
- (2) This alternative uses \$2.14 million of capital that might otherwise be made available for other uses on other projects.
- (3) The cost of a future roofing project in the event of roof failure would be higher, which would include the cost of this request and costs associated with escalation, implementation of emergency work, lost revenue, and equipment and property damages.

This is not the recommended alternative.

Alternative 3 – Replace the entire existing roofing system with a PVC Membrane Overlay that has a 30-year life while installing a new security ladder, gutter, and fall protection system; additionally procure and install solar panels and required structural upgrades to 100 percent of the building.

Cost Implications: An additional \$5.53 million (consisting of structural upgrades of \$3 million, solar panel costs of \$2 million, and approximately \$530,000 in infrastructure upgrades) is required to complete structural upgrades and include solar panels. This cost is above and beyond the base cost of \$1.56 million for Alternative 4's investment.

Pros:

- (1) Photovoltaic (PV) installation could potentially provide and generate approximately 300,000 kWh of power per year with the current usage being 291,800 kWh per year.
- (2) PV installation could potentially save approximately \$23,008 per year.
- (3) PV installation would have a one-time state rebate (5%) and federal incentive (30%) for the solar panel portion of the project only.
- (4) Replacing grid-produced electrical energy with renewable energy reduces greenhouse gas emissions by approximately 7,680 lbs. of CO₂/year.
- (5) Providing renewable power systems meets three Century Agenda goals: Reduces greenhouse gas emissions, increases renewable energy use, and conserves energy use to meet overall energy demand. Plays a role in building clean infrastructure and

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demonstrates the Port's leadership in competing globally to produce clean energy using Washington-based industries.

- (6) Matching installation of a new PVC roofing and gutter system with the solar PV system will harmonize the lifecycles of both systems.
- (7) To be eligible for grants, solar panels would be manufactured in Washington and provide support for a growing industry.
- (8) This project would provide for a warranted roof that will minimize the cost of roof repairs going forward.
- (9) This option provides the opportunity for future solar expansion.

Cons:

- (1) This alternative uses an additional \$5.53 million to include solar and structural upgrade or \$7.09 million of capital in aggregate that might otherwise be made available for other uses on other projects.
- (2) The cost of this solar installation does not meet normally accepted project financial criteria for new capital projects.

This is not the recommended alternative

Alternative 4 – Replace the entire existing roofing system with a PVC membrane overlay that has a 30-year life while installing a new security ladder, gutter, and fall protection system.

Cost Implications: \$1,561,000 of project funding is needed to implement the project.

Pros:

- (1) Install entirely new PVC membrane overlay roofing and gutter system that will protect our assets and have a 30-year life span and serve the Port and the tenants well.
- (2) Overlaying the roof and replacing the security ladder, gutters, and fall protection system including all required penetrations during construction will provide the lowest lifecycle cost.
- (3) Helps to assure a stronger positive tenant experience and avoids potential safety hazards.
- (4) Provides protection of Port assets.
- (5) Increase safety with the installation of fall protection.
- (6) Provides for the viability of the facility for the foreseeable future.
- (7) This project would provide for a warranted roof that will minimize the cost of roof repairs going forward for the foreseeable life of the roof.
- (8) Provides protection of Port assets. This option does the best job of supporting the goal of managing Port assets to minimize the long-term total cost of ownership.

Cons:

- (1) This alternative uses \$1.56 million of capital that might otherwise be made available for other uses on other projects.

This is the recommended alternative.

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FINANCIAL IMPLICATIONS

Cost Estimate/Authorization Summary

	Capital	Expense	Total
COST ESTIMATE			
Original estimate	\$1,561,000	\$0	\$1,561,000
Revised estimate	\$1,561,000	\$0	\$1,561,000
AUTHORIZATION			
Previous authorizations	\$250,000	\$0	\$250,000
Current request for authorization	\$1,311,000	\$0	\$1,311,000
Total authorizations, including this request	\$1,561,000	\$0	\$1,561,000
Remaining amount to be authorized	\$0	\$0	\$0

Annual Budget Status and Source of Funds

This project was included in the 2017 Plan of Finance under CIP #C800829 T91 Building C-173 Roof Overlay in the amount of \$1,560,000.

This project will be funded by the Tax Levy.

Financial Analysis and Summary

Project cost for analysis	\$1,561,000
Business Unit (BU)	Maritime Property Managed by Portfolio and Asset Management, Economic Development Division (EDD)
Effect on business performance (NOI after depreciation)	This project will retain annual lease revenue of approximately \$600,000 and is expected to reduce roof-related maintenance costs. The new roof will increase annual depreciation expense by approximately \$66,000.
NPV	The net present value of the project is over \$8.4 million based on a 30-year expected useful life for the roof and estimated revenues based on current occupancy.
CPE Impact	N/A

ATTACHMENTS TO THIS REQUEST

- (1) Presentation slides

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

September 13, 2016 – The Commission authorized design of the Terminal 91 Building C-173 Roof Overlay.