PORT OF SEATTLE MEMORANDUM

COMMISSION AGENDA

Item No.	6e		
Date of Meeting	March 23, 2010		

DATE: March 1, 2010

TO: Tay Yoshitani, Chief Executive Officer

FROM: Michael McLaughlin, Director, Cruise and Industrial Properties

Rod Jackson, Capital Construction Project Manager, Seaport

SUBJECT: Terminal 86 Facility Modernization Project– Tower Upgrades

CIP #C800133

Amount of this request: \$2,440,000 **Source of Funds:** General Operating Funds.

Total Project Cost: (Estimate) \$2,500,000

State and Local Taxes to be paid: (Estimate) \$148,000

Estimated Workers Employed: 17

ACTION REQUESTED:

Request authorization for the Chief Executive Officer to advertise for bids and execute a contract for upgrades at the Seaport's Terminal 86 (T-86) Grain Facility for a total Port capital investment estimated at \$2,500,000. The scope of work would focus on the grain terminal's ship loading systems on towers 2, 3 and 5 in the amount of \$2,440,000, for a total authorization of \$2,500,000.

This authorization is combining two steps of the Resolution No. 3605 process (authorization to design and authorization to advertise and execute a contract) into one to expedite a project which has been identified as a safety concern related to potential failure of ship loading systems on towers 2, 3 and 5 like those that have occurred on equipment failures of loadings systems on towers 1 and 4.

SYNOPSIS:

This is a request to reduce risks by proactively repairing aging structural and mechanical components on Towers 2, 3 and 5 at T-86. Doing so stands to reduce life safety risks and to preserve revenue flows. Similar components were replaced on Towers 1 and 4 after they failed and collapsed in recent years.

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T-86 has been in operation as a grain facility since 1969. T-86 is leased to Louis Dreyfus Corporation ("Tenant"). Under this lease agreement, the Tenant operates, manages and maintains the grain facility. The Port is generally responsible for repairs stemming from "damage and destruction". The facility has five ship loading systems, comprised of towers and spouts, located on the pier structure serving the vessel berth.

In 2006 and 2007, there were two major equipment and structural failures on towers 1 and 4. The Port undertook repairs on towers 1 and 4, and they have resumed full service. Prior to 2006, there was a failure at tower 5, with portions of the tower repaired, but to a lesser level of repair than on towers 1 and 4.

These three recent failures raised concerns of potential for additional failures on towers 2, 3, and 5. As a result, ship loading systems on towers 2, 3 and 5 were inspected and evaluated. The engineering risk analysis is complete with recommendations to perform the same type of upgrade work on towers 2, 3 and 5 that was recently completed on towers 1 and 4.

The total cost of investment to upgrade towers and ship loading systems on towers 2, 3 and 5 is estimated at \$2.9 million. The Port would expend approximately \$2.5 million; the Tenant would expend an estimated \$419,000. The Tenant would be responsible for design, fabrication and delivery of three new pendants, booms and related equipment which the Port would install. The Tenant will also exercise its five (5) year option for lease extension. The Port would be responsible for the cost of design and construction to replace equipment and components as needed on towers 2, 3, and 5 plus the cost for design, permitting and construction related to the recommended tower strengthening on towers 2, 3 and 5.

Construction work at the Terminal, which will be done in (2) phases will be scheduled during the seasonal slow periods over the next (18) eighteen months to minimize impact on grain throughput at the Terminal. All work described in this request is expected to be substantially complete by October 1, 2011.

Completing this work will reduce risk of ship loading system failures at T-86. Such failures pose significant life-safety risks. Moreover, such failures shut down vessel loading, with financial implications for the Port and Tenant, alike.

Under the current lease agreement, the Tenant has two 5-year options to extend the term of the agreement through November 15, 2020. Pending approval of this request, Port staff has received notification that the Tenant would exercise its option to extend the lease term for five (5) years, commencing November 14, 2010. This extension is subject to a 10% increase in base rent and also allows for discussion of the tonnage rate schedule.

Port staff and Louis Dreyfus management have agreed to continue negotiations regarding a new long term lease agreement which will include major reinvestment in the facility to

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extend the life of the aging terminal. Staff will return to the Port Commission in the future with a new lease proposal if and when a letter of agreement is complete defining the terms of a new lease.

BACKGROUND:

T-86 is an export grain terminal that receives stores and loads grain to bulk ships for export to Asia, notably China, and other foreign markets. Constructed in the late 1960s, T-86 was originally designed to export wheat; today it handles primarily corn, soybean and sorghum from the Midwest.

T-86 is unique in its ability to load bulk ships directly from rail or via its network of silos. Direct loading of ships from railcars reduces handling costs and breakage of product (preserving its quality); silos enable products to be received from rail prior to arrival of the ship, reducing costs associated with demurrage of railcars. Silos also allow a variety of types and grades of grain to be received. Ship holds can be filled with different commodities and, by blending various grades from the silos, a shipment can be prepared to meet exacting standards.

Product is loaded to ship holds via a network of conveyors, which feed five spouts. Each spout is mounted to a tower and can be articulated, much like the boom of a crane, to distribute product evenly throughout each hold. Typically, two spouts operate at any given time during loading. However, to fill all of a ship's holds, all five spouts are used intermittently to eliminate the time and expense of repositioning the ship to fill its array of holds.

Based on an analysis of the three failures of grain spouts on towers 1, 4 and 5, it has been determined each occurred for unrelated reasons. Nevertheless, as a risk assessment measure, a thorough review of all five towers, spouts and assemblies was performed. Repairs of the failed spouts #1 and #4 were completed based upon results of that review.

Towers 2, 3, and 5 and their ship loading systems have been inspected during the past year and are approved for operation, subject to monthly inspections and testing. Completion of the requested improvements would reduce risks for the short and longer terms.

Impacts to operations from unexpected spout/tower failures have been and could be substantial. They result in facility shut downs to secure the Terminal prior to resuming operations on an interim basis with a reduced number of loading spouts. The facility subsequently must be shut down to undertake repairs. Such shutdowns reduce throughput volumes (and revenues to the Port and Tenant) and increase demurrage charges for railcars and vessels, alike.

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PROJECT DESCRIPTION AND JUSTIFICATION:

Project Statement:

This is a request to advertise for bids to undertake upgrades to ship loading tower systems 2, 3 and 5. The estimate for this work is approximately \$2,900,000, with the Port being responsible for \$2,500,000 and the Tenant approximately \$400,000. The Tenant will also exercise its five (5) year option to extend the lease term.

Project Objectives:

- Reduce risk of future spout failures
- Minimize disruptions to terminal operations during construction.
- Minimize future maintenance & repair work.
- Project will be managed and completed on budget.
- Project will be delivered on time to meet schedule milestones.
- Return facility to acceptable operational standards.
- Upgrade spouts #2, #3 and #5 for longer life and less maintenance.
- Meet customer schedule needs.
- Meet strategic asset management criteria.

Scope of Work and Schedule:

Upgrades will be performed in a two-phase approach:

Phase I - Replace equipment components on towers 2, 3, and 5

This project would involve the Port contracting to:

- Remove three (3) existing pendants and replace them with three (3) new pendants/assemblies (supplied by the Tenant) on towers 2, 3 and 5, and to
- Remove three (3) existing booms and replace them with three (3) new booms/assemblies (supplied by the Tenant) on towers 2, 3 and 5.

March 2010 through May 2010

The tenant will provide design, fabrication and delivery to the site of (3) three new Pendants and (3) three new booms, along with assemblies, fittings and equipment. The Port will create construction documents for advertisement, bidding and award to install the new tenant provided equipment. If the contractor installation cost for Phase I is within the project budget, the contract will be awarded via Port Major Works contracts.

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May 2010 through September 30, 2010

Phase I construction will proceed to remove and install new equipment components on Towers 2, 3 and 5. Work to be substantially complete by September 30, 2010.

Phase II – Tower and Bullwheel strengthening on towers 2, 3 and 5

March 2010 through April 2011

Structural analysis will be performed on towers 2, 3 and 5 followed by engineering/design for tower strengthening of each tower. Design documents will be finalized for bullwheel replacements on towers 2, 3 and 5. Port will apply for building permits. The Port will create construction documents for advertisement, bidding and award to perform all work described for Phase II. If the contractor installation cost for Phase II is within the project budget, the contract will be awarded via Port Major Works contracts.

May 2011 through September 30, 2011

With building permit issued, Phase II construction will proceed to strengthen towers and replace bullwheel assemblies on towers 2, 3 and 5. Work to be substantially complete by September 30, 2011

STRATEGIC OBJECTIVES:

This project supports the Port strategy to "Ensure Airport and Seaport Vitality" through renewing and replacing vital Seaport Infrastructure to the Port of Seattle Waterfront operations.

Best management practices will be deployed by the Port staff and tenant in the selection of materials, work practices and ongoing total cost of ownership.

BUSINESS PLAN OBJECTIVES:

This project is aligned with the 2010 Seaport business plan objectives to protect our current business. It also will serve to: maintain safe reliable facilities and assets which provide customers with compelling value; protect jobs in our region and future revenue sources for the division; and maintain business partnerships with our core customers. This is a renewal and replacement project to upgrade the equipment and strengthen structures on towers 2, 3, and 5.

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FINANCIAL ANALYSIS:

Budget/Authorization Summary

Original Budget	\$0
Previous Authorizations (Seaport Deputy Managing Director)	\$60,000
Current request for authorization	\$2,440,000
Total Authorizations, including this request (estimated construction costs)	\$2,500,000
Remaining budget to be authorized (pending final design)	\$0

Project Cost Breakdown

Construction	\$1,652,000
Construction Management	\$330,000
Design	\$235,000
Project Management	\$120,000
Permitting	\$15,000
State & Local Taxes (estimated)	\$148,000
Total	\$2,500,000

Source of Funds

The project was included in the 2010 Plan of Finance under Business Plan Prospective CIP# C800133, T86 Grain Facility Modernization, in the amount of \$9,900,000. The cost of this project will be funded from the General Fund.

The remaining \$7,400,000 in the capital plan for CIP# C800133 may be needed for future facility upgrades to be considered in conjunction with a new lease proposal, currently being negotiated.

Financial Analysis Summary

CIP Category	Renewal/Enhancement	
Project Type	Renewal & Replacement	
Risk adjusted Discount rate	N/A	
Key risk factors	 Negative financial impact to grain terminal operations if the upgrade project is not completed within the optimal timeframe, during the tenant's slow season. Potential cost overruns due to project complexity and time constraints. 	
Project cost for analysis	\$2,500,000 (current cost estimate)	
Business Unit (BU)	Bulk Terminals	

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Effect on business performance	revenue. However it	This asset replacement project will not generate any incremental revenue. However it will eliminate disruptions to the tenant's terminal operations and the tenant's customers from further grain spout failures.					
	at \$83,000/year, base	0 year as	se from this project is estimated year asset life. NOI after he associated depreciation from				
	NOI (in \$000's)	Year 1	Year 2	Year 3	Year 4	Year 5	
	NOI	\$0	\$0	\$0	\$0	\$0	
	Depreciation	(\$83)	(\$83)	(\$83)	(\$83)	(\$83)	
	NOI After Depreciation	(\$83)	(\$83)	(\$83)	(\$83)	(\$83)	
IRR/NPV	N/A						

ENVIRONMENTAL SUSTAINABILITY/COMMUNITY BENEFITS;

No impact to the environment is anticipated as a result of this project. Upgrades will be constructed with materials that have demonstrated long life and durability.

ALTERNATIVES CONSIDERED AND THEIR IMPLICATIONS:

<u>Alternative 1</u>: Do nothing more. Discontinue preliminary engineering and design work. Address future failures of equipment if and when they occur. The Port is obligated to undertake repairs stemming from damage and destruction. As a result of previous failures on towers 1, 4 and 5, and risks identified by engineers at towers 2, 3 and 5. Alternative 1 is not recommended.

Alternative 2: Undertake Phase I work, replacing pendants and booms on towers 2, 3 and 5, but do not undertake Phase II work. Phase II work addresses structural issues on Towers 2, 3 and 5 and end-of-life issues with the bullwheels on towers 2, 3 and 5. Foregoing structural repairs to these towers and replacement of these bullwheels poses safety and reliability issues over the longer term, with life-safety and financial implications, as well. Accordingly, Alternative 2 is not recommended.

<u>Alternative 3:</u> Continue the work underway for Phase I and II scopes of work (complete final design, prepare construction documents, procure necessary permits, advertise and award contracts to complete the designs, perform the site work). Phase I work - removal and replacement of 3 pendants, 3 booms and associated equipment provided by Tenant on towers 2, 3 and 5. Phase II work - tower strengthening and bullwheel replacement on towers 2, 3 and 5. <u>This is the</u> recommended alternative

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PREVIOUS COMMISSION ACTIONS OR BRIEFINGS:

Below is a chronology of events and staff actions, including funding authorizations via re-delegated authority:

October 2, 2006 – Spout #4 collapses.

January 2007 – Seaport management authorizes \$93,000 to design an in-kind replacement of spout #4. This authorization was subsequently increased by \$29,047 to a total of \$122,047. As of August 3, 2007, \$117,000 had been spent and this authorization is scheduled for close-out.

April 19, 2007 – Spout #1 collapses. Engineering authorizes by emergency declaration \$90,000 to remove spout #1 from the ship, secure the area and to determine the cause of the collapse.

April 24, 2007 – Staff was scheduled to request funding in Public Session to repair spout #4 – this Action Item was withdrawn due to the April 19th incident.

May 8, 2007 – Commission briefed in Public Session on collapse of spouts #1 and #4.

May 2007 – Staff determines need to undertake a new approach that will address repairs to both the spouts and towers at T86, with emphasis on spouts and towers #1 and #4.

May 22, 2007 – Seaport management authorized \$200,000 to begin preliminary design and alternative repairs.

August 28, 2007 – Commission authorized \$1,300,000 to design and install temporary and permanent repairs/upgrades on tower 1 and 4 for a total amount of \$1,500,000 in authorizations.

July 28, 2009 – Staff provided an overview to the Commission in public session regarding history of the Grain Terminal, the current situation and lease agreement, business outlook and the need for future capital investment in this aging facility.

November 10, 2009 – Commission authorization for the Chief Executive Officer to execute the 11th Amendment to the Lease between the Port of Seattle (Port) and Louis Dreyfus Corporation (Lessee) at the Terminal 86 Grain Terminal which extended the decision period by 6 months for next lease option to extend term 5 years.