PORT OF SEATTLE MEMORANDUM

COMMISSION AGENDA Item No. 6a

Date of Meeting November 30, 2010

DATE: November 3, 2010

TO: Tay Yoshitani, Chief Executive Officer

FROM: David Soike, Director, Aviation Facilities and Capital Program

Wayne Grotheer, Director, Aviation Project Management Group

SUBJECT: South End Main Terminal Re-roof Project at Seattle-Tacoma International Airport

(CIP # C800360).

This Request: \$2,520,000 **Source of Funds:** Airport Development **Total Project Budget:** \$2,640,000 Fund and existing Revenue Bond Proceeds

Sales Tax Paid: \$188,000 Jobs Created: 20

ACTION REQUESTED:

Request Commission authorization for the Chief Executive Officer to advertise for construction bids, award and execute the contract and construct a new roofing system on the South End of the Main Terminal at Seattle-Tacoma International Airport. The amount of this request is \$2,520,000. The total cost of the project is estimated to be \$2,640,000.

SYNOPSIS:

This memorandum requests authorization to proceed with the bid, award, execute the contract and proceed with the removal and replacement of the current roofing system on the south end of the Main Terminal in order to avoid leaks that cause damage to the underlying infrastructure, equipment, and interior facilities. Portions of the roof being replaced were installed in 1993, 1994 and 1996 and will be at or beyond their useful life expectancy when replacement takes place. The airlines have approved this project.

BACKGROUND:

In 1991, the Airport began a major Terminal Facility re-roofing program that was completed in 1997. Since 1997, certain Airport roofs have been replaced on a project/roof specific basis.

This project is initiating the next cycle of roof replacements. The Airport's current roofs have a 15 year life expectancy of which a large percentage have expired or will expire shortly.

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The Airport's roof replacement program has been prioritized and phased over the next 6-10 years by a team comprised of Engineering, Maintenance, and Project Management. This first phase of the program was triggered by leaks and the discovery of fractured roof membranes over the last several years. Replacement reduces the potential for facility damage and liability risks associated with roof leaks. This is necessary in order to provide safe and reliable facilities to our business partners, tenants, and the traveling public.

PROJECT DESCRIPTION/SCOPE OF WORK:

Project Objectives:

This project will remove and replace the existing roof system at the south end of the Main Terminal, eliminating costly leak repair and potential damage to existing infrastructure.

Scope of Work:

Remove and replace existing roof system and install a new 65 millimeter elastomeric roofing system on the south end of the Main Terminal, sections: M-1, M-2, M-10, M-12, MP-2 and MP-3 (see attached map), which totals approximately 90,000 square feet.

STRATEGIC OBJECTIVES:

Ensure Airport and Seaport Vitality

This project supports the Port-wide strategic objective of Ensuring Airport and Seaport Vitality. This project will maximize facility and asset utilization by replacing the Airport's roof systems before they fail through a systemic and timely roof replacement program. Secure and dry terminal spaces help to facilitate use of the Airport by the traveling public.

Exhibit Environmental Stewardship through Our Actions

This project is consistent with the Port's goal of improving the long-term sustainability of its facilities and operations by replacing equipment that has reached the end of its useful life. This project will reduce risk and liability issues, and safeguard the integrity of the building envelope and underlying infrastructure from water infiltration due to failing roof systems.

FINANCIAL IMPLICATIONS:

Budget/Authorization Summary

Original Budget	\$ 2,640,000
Budget increase	\$0
Budget Transfers	
Revised Budget	\$ 2,640,000
Previous Authorizations	\$ 120,000
Current request for authorization	\$ 2,520,000

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Total Authorizations, including this request	\$ 2,64	0,000
Remaining budget to be authorized	\$	0

	This	<u>Total</u>
Project Cost Breakdown (This Authorization)	Request	Project
Construction costs	\$ 1,992,000	\$ 1,992,000
Design		\$ 76,000
Project Management and other soft costs	\$ 340,000	\$ 384,000
Sales tax	\$ 188,000	\$ 188,000
Outside professional services	\$ 0	\$ 0
Other	\$ 0	\$ 0
Total	\$ 2,520,000	\$ 2,640,000

Source of Funds

This project, CIP # C800360, is included in the 2010 – 2014 capital budget and plan of finance as a business plan prospective project. The funding source for this project will be the Airport Development Fund and existing revenue bond proceeds. The airline representatives reviewed this project in February 2010, voiced positive support, and voted favorably through a Majority-In-Interest vote in March 2010. In February, the airlines were made aware of other future roof replacements that would be presented to them for vote on a project-by-project basis.

Financial Analysis Summary

CIP Category	Renewal/Enhancement
Project Type	Renewal & Replacement
Risk adjusted Discount Rate	N/A
Key risk factors	N/A
Project cost for analysis	\$2,640,000
Business Unit (BU)	Terminal
Effect on Business Performance	NOI after depreciation will increase
IRR/NPV	N/A
CPE Impact	\$0.01 in 2012 but no change compared to business plan forecast as this project was included.

As a cost recovery project, traditional financial analysis measures such as net present value (NPV) and internal rate of return (IRR) are not meaningful.

OPERATION & MAINTENANCE (O&M) IMPLICATIONS:

O&M costs would essentially remain the same. In order to maintain the warranty, the regular roof system preventive maintenance and inspection activities will be applied to the new roof.

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ECONOMIC IMPACTS:

The project does not create any incremental economic impacts apart from supporting the existing operations of the Airport.

ENVIRONMENTAL/COMMUNITY BENEFITS:

The new roof will be Energy Star rated and have a minimum solar reflective index that exceeds 78, which is the value required to obtain the LEED Credit NC7.2. This will reduce air conditioning loads and save energy. The insulating value of the new roof will be greater than that of the existing roof, because of new energy code requirements. By replacing the roof and preventing damage to the underlying building systems, the life of the existing building systems will be prolonged.

TRIPLE BOTTOM LINE SUMMARY:

This roof replacement project represents an investment in our current facility and supports the long-term vitality of the Airport, businesses within the Airport, and the traveling public. Installation of new Energy Star roofing system will reduce the energy demand of the Airport through insulating against heat loss. Replacing the roof will prevent water leak damage to other building systems, disruption of Airport operations, and will prevent perceptions of poor customer service.

PROJECT SCHEDULE:

The following is a list of key milestone dates for the Main Terminal South End Roof Replacement:

• Request for an Authorization to Award the Contract

April 2011

• Project Completion

November 2011

ALTERNATIVES CONSIDERED/RECOMMENDED ACTION:

Alternative 1: Develop a systematic replacement program for the Airport's roof systems. Phase the replacement program over multiple years, which allows the Airport to sustain serviceable roof systems and provide safe and productive environments for our business partners and passengers. Through roof inspection and analysis, the first phase of the roof replacement program has identified 90,000 square feet of roof at the south end of the Main Terminal. This phase is intended to be designed in 2010 with actual roof replacement to be accomplished 2011. The rest of this prioritized replacement program would be accomplished over the next ten years and be approved on a project-by-project basis. This process/alternative requires securing necessary approvals and funding for each specific phase of the roof replacement program. **This is the recommended alternative.**

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Alternative 2: Install a green roof system. Green roofs are complete roof systems comprised of vegetation, soil, drainage and waterproof membrane, requiring specific additional structural integrity not currently in place as part of the Airport structure. This alternative would create an environment that would attract birds and other wildlife, increase bird strike hazards, and escalate nuisance-wildlife control. Installing a green roof would be in direct conflict with the Airport's Wildlife Hazard Mitigation and Wildlife conservation Program and the FAA approved Airport Certification Manual. This is not the recommended alternative.

Alternative 3: Continue to patch and repair the leaks risking continued deterioration throughout the entire roof system (terminal and concourses). This alternative increases maintenance and emergency repair response and costs, not only due to the continual patching of the existing roof system but also due to ceiling, floor, and equipment damage caused by the leaks. This also increases liability should customers slip and fall. This is not the recommended alternative.

OTHER DOCUMENT ASSOCIATED WITH THIS REQUEST:

Roof Replacement Planning Map.

PREVIOUS COMMISSION ACTIONS AND BRIEFINGS:

On April 27, 2010, the Commission approved the design and preparation of bid documents for the replacement of approximately 90,000 square feet of roof systems located on the south end of the Main Terminal at Seattle-Tacoma International Airport (CIP # C800360) for a cost of \$120,000.

On September 22, 2009, the Commission was briefed on facility renewal projects that were necessary in future years. The Airport re-roofing program was included in the presentation.