

PORT OF SEATTLE
MEMORANDUM

COMMISSION AGENDA
ACTION ITEM

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| Item No. | 6e |
| Date of Meeting | October 22, 2013 |

DATE: October 16, 2013
TO: Tay Yoshitani, Chief Executive Officer
FROM: Michael Ehl, Director, Airport Operations
Wayne Grotheer, Director, Aviation Program Management Group

SUBJECT: NorthSTAR Concourse C Vertical Circulation Project (CIP #C800547)

| | | | |
|------------------------------------|--------------|-------------------------|--|
| Amount of This Request: | \$16,145,000 | Source of Funds: | Airport Development Fund, Existing Bonds, and Future Revenue Bonds |
| Est. Total Project Cost: | \$19,300,000 | | |
| Est. State and Local Taxes: | \$1,094,800 | | |

ACTION REQUESTED

Request Commission authorization for the Chief Executive Officer to: (1) advertise for bids and execute a major construction contract; (2) execute a tenant reimbursement agreement with Alaska Air Group for Port's portion of construction under the Airport's AV-2 Policy; and (3) use Port crews to provide construction services for the Concourse C Vertical Circulation Project at Seattle-Tacoma International Airport in an amount not to exceed \$16,145,000. The total estimated project cost is \$19,300,000.

SYNOPSIS

This project is a component of the North Sea-Tac Airport Renovation (NorthSTAR) program. The purpose of this project is to install exterior walkways to improve passenger circulation and safety, enhance customer service, and improve operational efficiency at three locations on Concourse C. The new walkways replace existing stairs used for ground enplaning/deplaning with covered, weather protected, bi-directional sloped walkways and elevators, which will result in a safer path of travel. Completing this project also allows more efficient use of Concourse C by regional carriers and will better support future passenger growth. Sustainable materials and energy efficient elevators will be utilized. This project was included in the 2013-2017 capital budget and plan of finance.

Alaska Air Group (AAG) concurs with the scope, schedule, and budget for this project in accordance with the NorthSTAR Program Letter of Understanding dated April 5, 2012. New interior hold rooms and ground level covered walkways to the aircraft will be provided by AAG as a tenant improvement project at their cost to complement the new circulation cores. AAG will also incorporate sustainable materials into their project. A cost sharing agreement is being

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negotiated with AAG where the Port is sharing in portions of the costs incurred by AAG for constructing temporary passenger walkways to access aircraft during construction and for permanent directional signage in the walkways.

BACKGROUND

The Concourse C Vertical Circulation Project is one project within the NorthSTAR program. The project consolidates all AAG regional aircraft operations at Concourse C in preparation and support of the future renovation of the North Satellite. Currently, AAG's regional aircraft are located on Concourse C and at the northwest end of the North Satellite. Concourse C is currently configured for regional aircraft at Gates C2, C10, C12, C14 and C16. Gate C2 uses exterior stairs and a single hydraulic elevator from the concourse for ground loading/unloading of passengers. Gates C10, C12, C14 and C16 are configured using passenger loading bridges for mainline passenger jets and exterior stairs for regional aircraft. The proposed project will improve the safety of the vertical circulation and provide for new vertical circulation cores to the regional aircraft at each of these gates.

The project will be performed using a combination of a major works contract and Port crews. Port Construction Services crews will perform the removal of the Port-owned passenger loading bridges at C10, C12, C14 and C16, the relocation of electric ground service equipment (EGSE) charging stations, and any incidental regulated materials management. The removal of the C16 loading bridge was not in the original scope, but the loading bridge becomes inoperable due to the installation of the ground level walkway at the gate. AAG has requested the Port remove the loading bridge. It will be decided later whether to surplus and sell or store this loading bridge for refurbishment and re-use. Surplus of the loading bridge is not part of this project or authorization.

The Port vertical cores and the AAG's ground level walkways will be constructed concurrently by their respective contractors. Due to the complex phasing associated with the construction of both projects, temporary passenger walkways are required. Since these temporary walkways will be physically located adjacent to the AAG ground level walkways, the Port has agreed to have AAG's contractor install and reconfigure them as needed during construction. The Port has agreed to compensate AAG for a portion of the costs of these temporary walkways based on the impacts to AAG caused by the project. Further, the Port has agreed to reimburse AAG for a portion of the signage in the Port vertical cores since the main component of the signage will be airline flight-related information with Port directional signs incorporated into the AAG sign.

PROJECT JUSTIFICATION AND DETAILS

The current Concourse C regional operation utilizes exterior stairs with inadequate elevator capacity. This configuration creates a safety concern for passengers that carry luggage down the stairways. Due to the need to utilize stairs, use of the elevator is higher than typical, especially for mobility-impaired passengers. The elevator is small, limited to just one wheelchair with an attendant, and has reached the end of its useful life. As a result, the existing arrangements do not promote passenger safety and customer service and do not achieve operational efficiency for the

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airline. Further, the current configuration of the gates and aircraft do not permit further consolidation of regional aircraft operations on Concourse C.

The project will enhance customer service and safety by providing new exterior, weather-protected walkways with larger elevators, improving passenger circulation and safety between the aircraft and concourse level, and improve airline operational efficiency. The covered 1:20 sloped walkways with elevator(s) will provide a higher level of service with improved safety to passengers than the existing stairs and single elevator at Gate C2. The slope of walkways is less steep than typical 1:12 ramps, thus encouraging use by passengers and minimizing lines/waiting time at the elevator(s). The walkways will also be low maintenance. The new elevators will be non-hydraulic and energy efficient, providing faster and more reliable service than the current hydraulic elevator, enhancing passenger circulation capacity and improving service for mobility-challenged passengers.

Project Objectives

- Upgrade the Concourse C facilities for regional operations consistent with the NorthSTAR program projections.
- Provide safer access to the aircraft ground level by providing weather protected sloped walkways and elevators.
- Improve customer service and safety by providing new vertical circulation cores between the concourse and ground level for access to/from regional aircraft.
- Improve efficiency of the regional operations through consolidation of regional aircraft on Concourse C.
- Complete the project in the needed time frame to facilitate the schedule for the other NorthSTAR program improvements.

Scope of Work

- Three sets of 1:20 sloped weather-protected exterior walkways from concourse to ground level at Gates C2, C10-12, and C14 on Concourse C.
- Machine-room-less elevators at each gate location; 2 at C2 and 1 each at C10-12 and C14, for a total of four new elevators.
- Steel frame structure with concrete slab over metal decking.
- Glass side panels and translucent roofing weather enclosures.
- Relocation of the EGSE charging stations at C2 impacted by the sloped walkways and the AAG ground level walkways.
- Demolition of existing exterior stairs where applicable, interior hydraulic elevator C2 at Gate C2, and removal of passenger loading bridges at Gate C10, C12, C14, and C16.

Schedule

Commission Authorization to Advertise Construction

October 2013

Construction Start

March 2014

Construction Complete

March 2015

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The construction completion date was extended five months compared to the completion date in the November 2012 Commission design authorization. This delay is due to additional time required to revise the vertical circulation core footprints due to utility conflicts and to address construction phasing challenges due to the confined ramp space and to maintain airline operations during construction.

FINANCIAL IMPLICATIONS

Budget/Authorization Summary

| | Capital | Expense | Total Project |
|--|---------------|-----------|---------------|
| Original Budget | \$19,300,000 | \$0 | \$19,300,000 |
| Budget changes | -\$775,000 | \$775,000 | \$0 |
| Revised budget | \$18,525,000 | \$775,000 | \$19,300,000 |
| Previous Authorizations | \$3,155,000 | \$0 | \$3,155,000 |
| Current request for authorization | \$15,3705,000 | \$775,000 | \$16,145,000 |
| Total Authorizations, including this request | \$18,525,000 | \$775,000 | \$19,300,000 |
| Remaining budget to be authorized | \$0 | \$0 | \$0 |
| Total Estimated Project Cost | \$18,525,000 | \$775,000 | \$19,300,000 |

Project Cost Breakdown

| | This Request | Total Project |
|---------------------------------|--------------|---------------|
| Construction | \$11,599,200 | \$11,515,200 |
| Tenant Reimbursement | \$300,000 | \$300,000 |
| Construction Management | \$1,606,000 | \$1,946,000 |
| Design | (\$418,700) | \$1,386,300 |
| Project Management | \$660,400 | \$1,550,000 |
| Permitting | \$94,800 | \$244,800 |
| Art Program and Scope Reserve | \$433,500 | \$613,800 |
| State & Local Taxes (estimated) | \$1,094,800 | \$1,094,800 |
| Expense Items | \$775,000 | \$775,000 |
| Total | \$16,145,000 | \$19,300,000 |

Budget Status and Source of Funds

The Concourse C Vertical Circulation Project CIP #C800547 was included in the 2013 – 2017 capital budget and plan of finance with a budget of \$19.3 million. The expense elements of the project include the relocation of EGSE charging stations at gate C2 and the removal and storage of the passenger loading bridges at gates C14 and C16. These costs are included in the 2014-operating budget. The funding sources for this project will include the Airport Development Fund, existing bond revenues, and future revenue bonds.

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Financial Analysis and Summary

| | |
|---------------------------------------|---|
| CIP Category | NorthSTAR - Terminal Improvements |
| Project Type | Major Construction |
| Risk adjusted discount rate | N/A |
| Key risk factors | N/A |
| Project cost for analysis | \$19,300,000 |
| Business Unit (BU) | Terminal Building |
| Effect on business performance | NOI after depreciation will increase |
| IRR/NPV | |
| CPE Impact | The 2014 operating costs will increase CPE by \$.03. The capital costs will increase CPE by \$0.08 in 2015, but no change to business plan forecast as this project was included. |

Lifecycle Cost and Savings

Through the utilization of 1:20 sloped walkways versus escalators for the primary means of access/egress; the additional yearly escalator maintenance cost of \$100,000 per year will be avoided when considering the long-term maintenance costs associated with escalators as the alternative. The six escalators that would have been added would have been an additional \$100,000 per year total for all six at current rates (approximately \$1,500 per escalator per month). Elevators for the mobility-impaired passengers are required.

The new elevators will add a net of \$66,000 to the maintenance cost per year. This is the net result of four traction elevators being added, and one hydraulic elevator being removed. This addition would still be required for either option to accommodate mobility-impaired passengers and carts not suitable for escalators. Most important, if walkways are installed, vertical circulation will not be impeded by escalator accidents, power failure, or maintenance downtime thus providing unimpeded customer service reliability.

We will also be removing four passenger-loading bridges at C10, C12, C14, and C16 as a result of this project. However, the reduced maintenance costs by removing these passenger loading bridges will be re-deployed to support the bridges added to the Port's responsibility as a result of the Airline Realignment program, new gate locations such as gate B1, and to support other additional bridges that transition to Port ownership in the future at no net savings in this area.

STRATEGIES AND OBJECTIVES

The project supports the Century Agenda goal of meeting the region's air transportation needs at Sea-Tac Airport for the next 25 years. The upgrade of the vertical circulation between the concourse and aircraft ground levels through provision of weather protected gently sloped walkways and elevators will enhance the customer service experience compared to the current access/egress via stairs and limited elevator access. Further, the upgraded vertical circulation will better support future passenger growth for regional air service passengers. In addition,

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completion of this project will facilitate further improvements at the North Satellite as part of the NorthSTAR program.

TRIPLE BOTTOM LINE

Economic Development

This project will promote air service development through provision of more efficient access/egress between the concourse and aircraft, increasing customer service, and allows our business partners to expand their operations.

Environmental Responsibility

This project will include energy efficient elevator equipment, LED lighting systems, recycling of demolished materials, recycled and/or regional materials for the structure, low-emitting materials, other sustainable materials and products relative to indoor environmental quality.

Community Benefits

The Office of Social Responsibility has established a 6% goal for utilization of Small Contractors and Suppliers for the major construction project in accordance with the small business resolution 3618.

ALTERNATIVES AND IMPLICATIONS CONSIDERED

Alternative 1) - Do Nothing: The current use of stairs and restricted elevator access at Gate C2 would remain as is. Passenger circulation, customer service, and safety would not improve and these gates would be inefficient operationally. Nothing would be done to facilitate the expansion/upgrade of Concourse C operations in this area. This would not meet the intent of the Letter of Understanding between the Port and AAG, nor meet the program's vision, goals and objectives to enhance customer experience from curb to seat. Therefore, AAG does not support this alternative. This alternative is not recommended.

Alternative 2) - Vertical Circulation Cores with 1:12 Ramps and Elevator(s): This alternative provides for steeper 1:12 sloped ramps and elevator(s) at each of the three gate locations. The steeper ramps will require persons in wheelchairs to be assisted by airline personnel, losing an opportunity to lower airline personnel costs, and makes the ramps uninviting to mobility-challenged passengers. This approach results in increased use of the elevators that increases wait times/lines at the elevator(s) and reduces passenger loading/unloading efficiency. The smaller building footprint of the 1:12 ramp structure does potentially reduce the capital cost by 10% and has a less but undefined potential impact on Alaska's regional aircraft operations. This alternative does not meet the intent of the Letter of Understanding between the Port and AAG, in that the steeper slope does not fully meet the program's vision, goals and objectives to enhance customer experience from curb to seat. Therefore, AAG does not support this alternative. This alternative is not recommended.

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Alternative 3) - Vertical Circulation Cores with Escalators and Elevator(s): This alternative includes vertical circulation cores with two escalators at each of the three gate locations instead of walkways, as well as including elevator(s) as in the above alternatives. The escalators provide a smaller building footprint than the walkway option, resulting in a lower capital cost of approximately \$3 million and less impact on aircraft ramp space, however, the escalators do not accommodate mobility-impaired passengers. The long-term maintenance costs of the escalators over their 25-year life results in a higher lifecycle cost of approximately \$2 million more than constructing walkways. Further, the reliability of semi-exterior escalators is typically less than interior units, resulting in more downtime and use of the stairs by passengers. The life cycle cost of this alternative does not fully meet the intent of the Letter of Understanding between the Port and AAG, although the escalators do meet the program's vision, goals and objectives to enhance customer experience from curb to seat. Therefore, AAG does not support this alternative. This alternative is not recommended.

Alternative 4) - Vertical Circulation Cores with 1:20 Walkways and Elevator(s): This alternative provides the best combination of customer service, improved facilities, and additional capacity for future airline growth. The gently-sloped, 1:20 bi-directional walkways and elevator(s) at the three gate locations encourage efficient passenger access and flows between the concourse and ground levels, facilitating aircraft loading and unloading to improve customer service objectives. The slope of the 1:20 walkways provides easy access for passengers, encouraging use of the walkways and minimizing wait times/lines at the elevators. The walkways will be constructed of materials requiring a minimal level of maintenance, which offsets the higher capital cost associated with the larger building footprint when compared to escalators. This alternative meets the intent of the Letter of Understanding between the Port and AAG and the program's vision, goals and objectives to enhance customer experience from curb to seat. Therefore, AAG supports this alternative. **This is the recommended alternative.**

ATTACHMENTS TO THIS REQUEST

- Project Site Rendering

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

- September 24, 2013 – NorthSTAR Program status update.
- June 25, 2013 –NorthSTAR Program status update.
- April 9, 2013 – The Commission authorized the Chief Executive Officer to enter into a project labor agreement covering the NorthSTAR program's five major construction projects.
- March 26, 2013 –NorthSTAR Program status update.
- November 6, 2012 – the Commission authorized the design for the 1:20 sloped walkways and elevator(s) at Gates C2, C10-12, and C14 on Concourse C.
- June 26, 2012 – The Commission received a briefing on the status of the Airline Realignment Program and budget restructuring in association with the NorthSTAR Program.

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- April 4, 2012 – Authorizations for the North Sea-Tac Airport Renovations program for: 1) preliminary project funding; 2) execution of consulting contracts for design/construction support services and project management services; and 3) use of Port crews and consultants to conduct regulated materials management surveys and field support services for preliminary project planning tasks.