Item No. 8d_supp
Meeting Date: December 12, 2023

Surface Area Management Project
Additional Authorizations (CIP #800650)

December 12, 2023
Commission Meeting Date

Project Phases and Progress
• Phases 1 through 3 – Established the system, software and integration with other systems. Completed in 2021.
• Phase 4 – Sensor, Camera and Infrastructure Delivery. Broken into two packages: one underway and the remaining package to be bid in Q1 2024. This phase requires additional funding.

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Realized Benefits from Delivered Phases
• Ramp Tower and Federal Aviation Administration (FAA) have significantly improved coordination during construction impacts to aircraft movement areas
• One airline has instituted a process change as a result of the gate hold reporting feature of the system leading to fewer airplanes waiting for gates upon arrival
• 67 of the Airport's 89 gates are currently under automated monitoring surveillance providing time stamps of up to 36 critical milestones throughout the progression of a turn which establishes a record to gauge vendor performance and predict when gates become available

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Phase 4 Infrastructure Delivery
• Delivery of infrastructure (structures, power, communications and hardware) to 21 locations to provide information to the Surface Area Management system.
• Broken into two Construction Packages
– Priority Sensors to address critical need
• Construction underway; anticipated complete in Q2 2024
– Remaining Sensors to complete the system
• Construction bids to be sought in Q1 2024; anticipated complete in Q2 2025

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Sensor Locations
Legend
RU XX Priority Sensors
RU XX Remaining Sensors

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Project Delays During Design
Design took longer than anticipated
• Extensive site investigations
• Emerging compliance measures for safety and airfield adjacency took time to resolve
• Value engineering exercise
• Design Changes after 60% design
• An emerging and immediate need for aircraft position information led to breaking the construction into two packages
• Staffing changes and the impact of two construction packages

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Program Capital Budget Status
Cost Categories Budget Estimate at Completion Variance
Port Labor $695,000 $649,000 ($46,000)
Construction, CM and AVPMG $9,414,000 $11,533,000 $2,119,000
Hardware Purchase $1,072,000 $1,869,000 $797,000
Vendor Services $620,000 $724,000 $104,000
3rd Party Vendor Integration $400,000 $379,000 ($21,000)
Software License $50,000 $0 ($50,000)
Technology Contingency $720,000 $311,000 ($409,000)

Totals $12, 971,000 $15,465,000 $2,494,000
Total Request for Additional Project Budget $2,494,000

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Construction, CM and AVPMG Budget Status:
Cost Categories Budget Estimate at Completion Variance
CONSTRUCTION $6,119,000 $6,402,000 $283,000
CONSTRUCTION MANAGEMENT $794,000 $1,118,000 $324,000
DESIGN $1,080,000 $1,696,000 $616,000
PROJECT MANAGEMENT $432,000 $1,074,000 $642,000
ENVIRONMENTAL $45,000 $51,000 $6,000
ADMINISTRATIVE $78,000 $117,000 $39,000
CONTRACT ADMINISTRATION $55,000 $75,000 $20,000
PROJECT CONTINGENCY $811,000 $1,000,000 $189,000

TOTALS $9,414,000 $11,533,000 $2,119,000

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Project Risks
Risks Mitigations
Cost escalation and market conditions Include sufficient budget contingency; include sufficient lead time for some materials and equipment
Construction bid climate Include sufficient budget contingency
Vendor coordination during construction Include sufficient contingency for additional effort to coordinate Vendor preparation and access to sites;
include sufficient schedule duration to cover required
effort
Weather impacts Include sufficient schedule duration to cover inclement
weather; include sufficient budget contingency to cover

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Lessons Learned
Lessons learned because of the challenges this project has faced include:
• Recognition that technology projects often lead to a more iterative and therefore

lengthy design phase for the physical installation. Often technology projects incorporate emerging technologies that do not have historical practices on which to base a design schedule and budget.
• Early collaboration among departments delivering technology projects to facilitate better scoping of the physical infrastructure requirements for such shared projects will allow for improved budgeting and scheduling of these unique projects.
• Better understanding of the benefits and limitations of the utilization of Job Order Contracting (JOC) contracts at the Port will allow for a more informed decision when the Project Delivery Method is selected. The Port is limited in the number of JOC contracts it can utilize, and broad use of the JOC contract for other projects at the Port limited the contracting capacity available for this project.
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Questions?

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