



**COMMISSION
AGENDA MEMORANDUM**

Item No. 7b

BRIEFING ITEM

Date of Meeting September 11, 2018

DATE: September 7, 2018

TO: Stephen P. Metruck, Executive Director

FROM: Dave Soike, Chief Operating Officer

SUBJECT: International Arrivals Facility Program update including the Guaranteed Maximum Price and the Independent Executive Review Panel Recommendations

Executive Summary

The purpose of this briefing is to:

1. Briefly explain of the progressive design build project delivery model;
2. Summarize Commission and Executive Director actions to date;
3. Summarize current status of the project and context of necessary changes and challenges associated with the project;
4. Identify the proposed guaranteed maximum price and time schedule of the project;
5. Allow for a presentation by an independent Expert Review Panel retained by the Commission to consider the project; and
6. Allow for a discussion between the Commission and design builder and port staff.

On the same day as this briefing, the Commission's Executive Review Panel, hired to provide an independent review of the project, will provide the results of its work including any recommendations.

1. The Progressive Design Build Project Model

The Port contracted a Design-Build team, Clark/SOM, to design and construct a new International Arrivals Facility (IAF) at Seattle-Tacoma International Airport (the Airport) using a Progressive Design Build (PDB) project delivery model. Simply stated, in progressive design build, the construction of the project begins during preliminary design and continues while the design progresses. During this period, the project is guided by a target budget and target schedule. When the design is sufficiently complete to identify and allocate cost and schedule risk, the owner and the design-builder negotiate a guaranteed maximum price (GMP) for the work along with a final schedule. On the IAF project, the scope of the project has increased and the project has been negatively affected by other factors, all of which have increased the

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project cost and lengthened the schedule, as well as delaying the expected agreement on the GMP Amendment. Currently, the majority of the project is at approximately 100% design and the construction is approximately 20% complete.

2. Executive Director and Commission Actions:

In Spring of this year, Commissioners grew concerned that the project was encountering significant problems. As a result, they retained an independent Executive Review Panel (ERP) to, among other things:

- Evaluate the project;
- Recommend to the Commission whether to continue to move forward with the project as currently contracted with Clark/SOM;
 - if so, provide recommendations for the project;
- Provide recommendations to prevent future large projects from encountering similar problems.

The ERP has interviewed the key personnel from all of the major project participants (Port, Clark, SOM, etc.) involved in various aspects of the project, and has thoroughly reviewed pertinent documents relating to the project.

The Executive Director simultaneously took early actions relating to the project. He engaged with the President of Clark Construction and held an in person meeting in Seattle. He assigned the Port Chief Operating Officer to personally take on the project along with Clark's Vice President of Operations in order to find a solution to the ongoing problems. Subsequently new leadership was inserted at the top of the project for both parties. Port staff changed existing IAF subcontracts to allow financial portability among various subcontractor contracts to provide flexibility among contingencies to speed payment processes to ensure timely material ordering and site progress. Construction progress with growing stability was a key goal of the Executive Director along with a requirement that the parties reach a long awaited GMP and committed timeline to enable a quality facility to be delivered in the fastest, least costly, and safest manner possible.

3. Summary of Project Status and Project Changes/Challenges:

The project has encountered time delays and cost increases in both design and in construction. The dynamics of the growing airport have increased needs that necessitated significant design and construction scope additions to the project. For example additional basement level space was added to accommodate baggage operations while making necessary space available for US Customs and Border Protection staff. Two additional aircraft gates capable of allowing international arrivals were added early in design due to growing numbers of international

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airlines arriving at Sea-Tac. More recent design additions included outbound baggage carousels, conveyor systems, and federal inspection machines to speed the delivery of bags from the IAF to connecting passengers next aircraft along with life safety refinements to the design related to fire systems and emergency electrical generators. All scope additions will allow the completed IAF project to perform better for the airport operators and for passenger benefit in terms of their processing speed and convenience moving through the airport.

Recent changes have also affected construction cost and schedule. Examples include a robust long-term baggage system rather than an interim system and an emergency generator scope addition noted above. That necessary change was made relatively late in design and affected the ongoing construction work because additional underground vaults and conduit for electrical power had to be installed that delayed or impacted building foundation work that was already in progress. In addition contaminated soils were discovered in the areas of foundations and underground utilities, and as a result delayed foundations and steel framing above. These construction impacts were compounded by a tight construction site squeezed on three sides by existing buildings and road and train infrastructure that limited construction access to only one narrow site road. Another recent but minor example of a change was to add steel framing and decking for an escalator to complement future customs processing to eliminate waiting delays for passengers at peak times.

These recent scope additions have been necessary and wise to help make this signature airport facility efficient for airlines, federal partners, and travelers over its estimated 30-50 year life. Changes made later in design have a compounding effect upon schedule. As a result necessary changes have contributed to lengthening the construction portion of the schedule for the main part of the facility by 8 months from September 2019 to May 2020. Two additional international capable gates will reach construction completion 6 months later in November 2020. Additional time to complete projects requires additional time from site workers, equipment, suppliers, office staff, etc. that all drive costs to rise. Added schedule time driven by subcontractor concerns and contamination found on site and design refinements continued to drive up costs in the last several months.

The exceptionally busy Seattle construction market has also affected costs. The Seattle market is the busiest construction area in the US for the last three years as evidenced by leading the country in the number of construction cranes. This, combined with the security and other challenges associated with performing construction at an operating international airport, led to fewer bidders on each particular construction package bid for the project. At times 4 to 6 firms would show interest in a package, but it was not uncommon to only have 2 bidders, sometimes only 1. This is because contractors are very busy and other faster time-cycle projects on less restrictive sites (without security badging requirements, etc.) can be viewed as more attractive. This is such a competitive market that in the last 4 months, additional cost requests from IAF subcontractors totaled over \$8 million.

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Port staff and the design builder have been working to reach a final cost and schedule commitment (in the form of a GMP Amendment to the base contract) as construction has gotten underway. The project on-site construction is approximately 20% complete and construction activity is gaining speed as underground and foundation work is completed. Most designs are nearly 100%; however, the baggage handling system design is approximately 85% complete. Renewed emphasis on negotiations to move the project forward in the last few months, along with design and construction progress yield a cost and schedule picture that has allowed a GMP with accompanying schedule to be set. An agreement framework was reached July 24th after lengthy negotiations between Port and design builder leaders.

4. Guaranteed Maximum Price and Schedule:

The proposal for Commission consideration from the design builder and Port staff is a Guaranteed Maximum Price, GMP, for the construction elements at \$773,945,385 with a substantial completion of construction work on May 30, 2020. Following substantial completion, Operational Readiness and Activation Testing will commence, and contingency time reserved for any issues unforeseeable at this time, are expected to take up to 60 days to ensure the entire 537,062 square feet physical facility is functional, all port and federal employees are trained, and all building systems are robustly tested to ensure 24/7/365 operational uptime. This culminates in a projected in-service opening date for airline customer operations of July 30, 2020.

This in-service date includes three major components of the project:

- First, the IAF landside grand hall that houses baggage reclaim, US Customs and Border Protection customs and immigration functions, and US Transportation Security Administration checkpoint and baggage functions. The lower level of the grand hall includes operational space and equipment for combined airport and airline baggage operations.
- Second, three flexible airside swing-gate structures that allow both domestic and international airlines to share and operate on the aircraft gates depending upon their time-of-day operations.
- Third, the pedestrian overhead walkway that links the South Satellite gates to the airside international swing gate overhead walkway corridor and on to the IAF grand hall where traditional baggage claim and passport control occur.

A long-planned, separate, and later substantial completion of construction work date is November 20, 2020 for the fourth major portion of the project that is comprised of three swing gates that includes two international swing-gates and one domestic gate. This completion would be followed by similar necessary activation and readiness testing work that leads to an in-use date for airlines and travelers of December 31, 2020.

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The overall program budget requested for the IAF program is \$968,445,000 to administer the entire program.

The GMP Amendment itself was the result of substantial negotiation between the Port and Clark/SOM, with the assistance of senior leaders of both the Port and the design builder, outside counsel for both parties, and many contributing team members. Generally speaking, and if the Commission approves its execution, it will reset the project as of the date of execution of the GMP Amendment.

FINANCIAL IMPLICATIONS

The GMP as presented in this memo would increase total program cost from \$790,000,000 to \$968,445,000. This program cost includes the following:

Description	CIP #	Cost
International Arrivals Facility	C800583	\$931,445,000
International Arrivals Facility - Expense	N/A	\$13,000,000
SSAT Narrow Body Gates	C800781	\$5,500,000
Outbound Baggage	C800836	\$18,500,000
Total		\$968,445,000

The funding plan for the IAF includes \$200 million of cash (Airport Development Fund), \$100 million of Passenger Facility Charges (PFCs) with the remainder funded by revenue bonds.

Financial Analysis and Summary

The costs of the IAF will be included in the Federal Inspection Services (FIS) cost center. All costs are recovered from the airlines that use the FIS based on a per passenger charge. In order to reduce the FIS cost, the \$200 million of cash to fund construction costs will not be amortized in the airline rate base (per provision in the Signatory Lease and Operating Agreement). Additionally, as with all PFC funded projects, the \$100 million of capital costs funded with PFCs will be excluded from the airline rate base. The funding plan also includes the use of PFCs to pay some level of ongoing revenue bond debt service. Debt service paid by PFCs is also excluded from the airline rate base. The amount of PFCs applied to this project will vary over time depending on availability of PFCs each year (e.g., 1998 PFC backed bonds will be fully amortized in 2023, thus freeing up considerable capacity), rate management decisions (i.e., allocation of PFCs among airfield, terminal and FIS cost centers), and other FIS rate considerations (e.g., O&M costs, FIS passenger volume, FIS rates at competing airports). Consistent with the commission funding motion of May 26, 2015 and the funding plan update presented on May 17, 2016, the Port’s goal is to maintain a competitive FIS rate compared to peer airports. To the extent possible, and considering other rate management priorities, sufficient PFCs will be used to pay ongoing revenue bond debt service to manage the FIS rate base, and thus the FIS rate, to a competitive level.

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Assuming that \$300 million of construction costs are excluded from the airline rate base (\$200 million cash and \$100 million of PFCs as described above), the project would add approximately \$2.08 to the Airport's passenger airline cost per enplaned passenger (CPE) in 2021.

Potential Future Request:

Following today's briefing, the Commission will consider the information in the briefing. Should the Commission deem it wise to continue with the project GMP proposal as identified, then staff would return with a request in the future requesting authorization for the unfunded balance ~~offe~~ the program, extension of the completion date, approval by the Executive Director of a contract amendment with both the design builder and necessary consultants to support the program in order to complete the entire program.

ATTACHMENTS TO THIS REQUEST

- (1) Presentation slides

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

March 20, 2018 – The Commission was briefed on IAF progress.

November 14, 2017 – The Commission was briefed on 3rd quarter 2017 progress.

August 15, 2017 – The Commission authorized the balance of IAF funding in a joint request with the NSAT project.

March 28, 2017 - The Commission authorized additional IAF funding.

October 11, 2016 – The Commission authorized IAF to add balance of Phase 2 for accelerated execution.

September 27, 2016 – The Commission was briefed on IAF reconsidering phasing and project update.

September 13, 2016 – The Commission authorized IAF FAA reimbursement agreement.

July 12, 2016 – The Commission authorized IAF to add Phase 2 scope to meet continuing rapid growth.

June 28, 2016 – The Commission was briefed on two additional international aircraft gates at IAF to meet continuing rapid growth briefing.

May 17, 2016 – The Commission was briefed on Plan of Finance update.

April 26, 2016 – The Commission was briefed on IAF 1Q2016 update.

February 9, 2016 - The Commission was briefed on IAF 4Q2015 update.

December 8, 2015 – IAF guaranteed maximum price (GMP) Development Period authorization (presented in combination with NSAT authorization request).

November 10, 2015 – The Commission was briefed on IAF update.

August 11, 2015 – The Commission lead a special meeting, roundtable with airline representatives.

July 28, 2015 – The Commission lead an IAF forum.

July 14, 2015 – The Commission lead an IAF forum.

June 23, 2015 – The Commission authorized execution of the IAF Design-Build Contract.

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- May 26, 2015 – The Commission approved IAF preliminary funding plan motion.
- April 28, 2015 – The Commission authorized a service agreement for Commissioning Services.
- April 28, 2015 – The Commission authorized execution of a lease agreement with SEATAC VENTURES 2010 LLC for IAF program management office space near Sea-Tac International Airport.
- February 24, 2015 – The Commission authorized a service agreement for IAF consultant program leader.
- January 27, 2015 – The Commission was briefed on IAF funding plan.
- January 27, 2015 – The Commission approved IAF request for proposals advertisement.
- January 13, 2015 – The Commission was briefed on IAF update.
- December 2, 2014 – The Commission was briefed on IAF scope and budget update.
- October 28, 2014 – The Commission was briefed on IAF 3Q2014 update.
- August 19, 2014 – The Commission was briefed on IAF 2Q2014 update.
- August 5, 2014 – The Commission authorized IAF request for qualifications advertisement.
- July 22, 2014 – The Commission was briefed on IAF progress.
- June 10, 2014 – The Commission was briefed on IAF 1Q2014 update.
- May 6, 2014 – The Commission was briefed on IAF project delivery.
- April 22, 2014 – The Commission was briefed on capital program.
- March 11, 2014 – The Commission authorized IAF master planning.
- February 25, 2014 – The Commission was briefed on IAF program.
- November 19, 2013 – The Commission authorized IAF construction management, testing and inspection; surveying and locating and safety service agreements.
- July 23, 2013 – The Commission authorized IAF project and program support; and price factor design-build methodology.
- July 9, 2013 – The Commission was briefed on IAF.
- July 9, 2013 – The Commission was briefed on alternative public works contracting.
- April 9, 2013 – The Commission was briefed on IAF.
- June 26, 2012 – The Commission was briefed on airport terminal development challenges at Seattle-Tacoma International Airport.
- June 14, 2011 – The Commission was briefed on international air service growth and future facility.
- February 2, 2010 – The Commission was briefed on South Satellite passenger growth and facility considerations, Delta’s proposed airline lounge and other possible future aviation projects.