Item No. <u>10b supp</u>
Meeting Date: <u>February 8, 2022</u>

## Telecommunication Meet Me Room (MMR)

**Denise Dennis** 

AV F&I – Manager Engineer Electrical

Tyler Salisbury
AV PMG – Capital Project
Manager





### **Project Overview**

Establish new permanent telecommunication facility and connection pathway into the Airport

- Telephone services
- Internet and Intranet
  - Wi-Fi connectivity and Office connections
  - Airport Reservation System and Airport Check-in System
- Cable Television

#### Benefits:

- Relocate legacy connections and upgrade from copper to high-speed fiber.
- Bring new services and service providers into the Airport.
- Provide connection redundancy and resiliency (Dual Pathway).

#### Request:

- Funding approval for design and construction of the building
- Funding approval for design of fiber optic cable

Note: This project was put on hold (February 2020-September 2021) during the COVID-19 workplace disruption.

### Project Scope

#### Building Scope

- Construct a secure facility with access gate and finish landscaping.
- Install underground pathways to connect the building to the Airport and Service providers.
- Build out secure areas within the building for the Port and Service providers to house equipment.

#### Fiber Scope

- Install fiber interconnections between Service providers and Port equipment.
- Install fiber in a primary pathway to each Main Distribution Room (MDR).
- Install fiber in a secondary pathway to each MDR.
  - New tray and conduit pathways are required to keep the connections separated.

# **Project Opportunities**

Opportunity	DESCRIPTION
Increased Resiliency	The project will be identifying and installing a secondary pathway to each MDR from the MMR. This will provide data redundancy and resiliency to the airport which is not currently available with the legacy connections.
Diversity of services and providers	The MMR will have space for new service providers to access the airport. These providers can bring additional and competing services into the airport.
Synergies with the Utility Master Plan and future capacity	This project aligns with recommendations in the Utility Master Plan for increased resiliency and capacity for future growth.

# Project Risks and Mitigation

RISK	DESCRIPTION	MITIGATION PLAN
Supply Chain - Building	Availability of some construction materials have added significant time to construction schedules.	<ul> <li>Design Build team will investigate using a pre-fabricated building that can be procured at an early design stage.</li> <li>Prepare work packages that can be executed while materials are procured.</li> </ul>
Supplier Audit – Fiber count	The legacy connections are a combination of multiple installations over 50 years or more. Multiple efforts are underway to identify the active circuits that will need to be migrated.	<ul> <li>Work with our legacy supplier during their audit while initial pathway designs are starting.</li> <li>Establish the fiber count midway through design and finalize by 90%.</li> </ul>

### Schedule

- Building Scope
  - Design-Build (DB) procurement 2Q2022
  - DB Contract award 4Q (2022)
  - Design Start 4Q (2022)
  - Construction Start 1Q (2023)
  - Substantial Completion Building2Q 2024

- Fiber Scope
  - Design Start 2Q 2022
  - Commission for construction authorization 2Q 2023
  - Construction Start 3Q 2023
  - Substantial Completion Fiber 1Q2025

# **Budget and Authorization**

Budget	Description	Estimate	Change
Building	Previously Bid in July 2019 – Irregular bid that was greater than 35% of Engineers estimate. Revised estimate using current construction environment.	\$7,700,000	\$2,550,000
Fiber	Previous authorizations did not include the fiber scope. Installs approximately 2,000 new fiber strands. Install a secondary pathway; requiring new tray and conduit to each MDR. Pathway lengths range from 2,900-5,900 ft long (6 total).	\$12,000,000	\$12,000,000
	Project Total	\$19,700,000	\$14,550,000

Authorization	Amount	Note
Previous authorization	\$3,928,000	September 2017
This Request	\$7,725,000	Building – Full funding (Design Build) Fiber – Design funding only
Total Authorized	\$11,703,000	
Total Remaining	\$7,997,000	Fiber – Construction Funding

#### **Cone of Certainty** Project Definition Concept +100% +50% SCOPE DEFINITION +30%; +15% **Cost Range of Certainty** We are here **Planning** Design Construction Closeout COST & SCHEDULE ESTIMATE ACCURACY Highly Certain -30% -50%

## **Action Requested**

- Increase project budget by \$14.55M
  - New Project budget \$19.7M
- Authorization to advertise, award, and execute a major works Design Build contract to construct the building
- Authorization to prepare design and construction documents for the fiber scope
  - Project team will return for fiber construction authorization
- Use of Port of Seattle Crews for design support and pre-construction activities
- This request is to authorize \$7.725M
  - Total authorization is \$11.703M

# Questions?