Item No. 8e supp

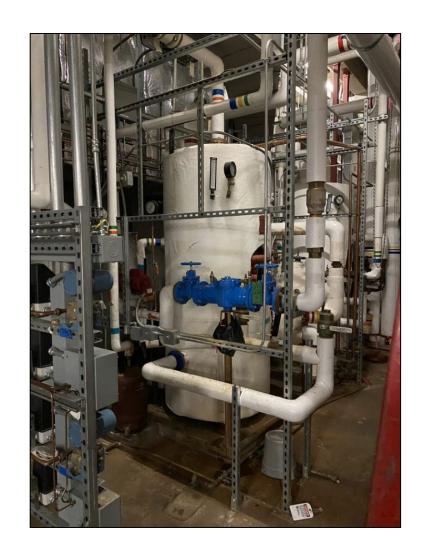
Meeting Date: October 12, 2021

South Satellite Domestic Hot Water



Background

- Two hot water tanks provide domestic hot water to South Satellite facility
 - Essential for restrooms and Airport Dining and Retail
 - Installed in 2005
- One tank failed
 - Not repairable
- Second tank at risk of failure
 - Failure would result in closure of ADR and potential full closure of the Satellite



SSAT Hot Water Tank Replacement Scope

- Replace two hot water tanks with new hot water tanks including all associated infrastructure
- Estimated total cost \$1.1 million



Energy Efficiency & Asset Life

• The new tanks are semi-instantaneous heat, which should reduce the energy demand as they will not be constantly heating water (even if no demand exists as the previous tanks did).

• The previous tanks had an asset life of 40 years, however, the tank failed at 15 years. Other areas of the airport had tanks fail around the 15-year time frame. Maintenance, along with Facilities and Infrastructure are moving forward with new tanks having an asset life of 15-20 years in the future.

Complexity of the Work

 The mechanical room where these tanks are located has been modified multiple times since installation. Currently, there is not enough space to remove the old tanks in one piece and will require the tanks be cut up for removal.

• New equipment was designed to be small enough to fit in the room and still meet the operational needs. However, the new tanks will have to be lowered around 20 feet from an access hatch on the ramp level.

• Other modification are needed to the plumbing components to properly operate the newer type of hot water tank.



Schedule

- Design completed: Q3 2021
- Critical work authorized:
 September 2021
- Construction begin: October 2021
- Asset-In Use: Q1 2022

Questions