Item No. <u>6c supp</u> Meeting Date: April 28, 2020

Concourse C New Power Center (CIP #C800724)

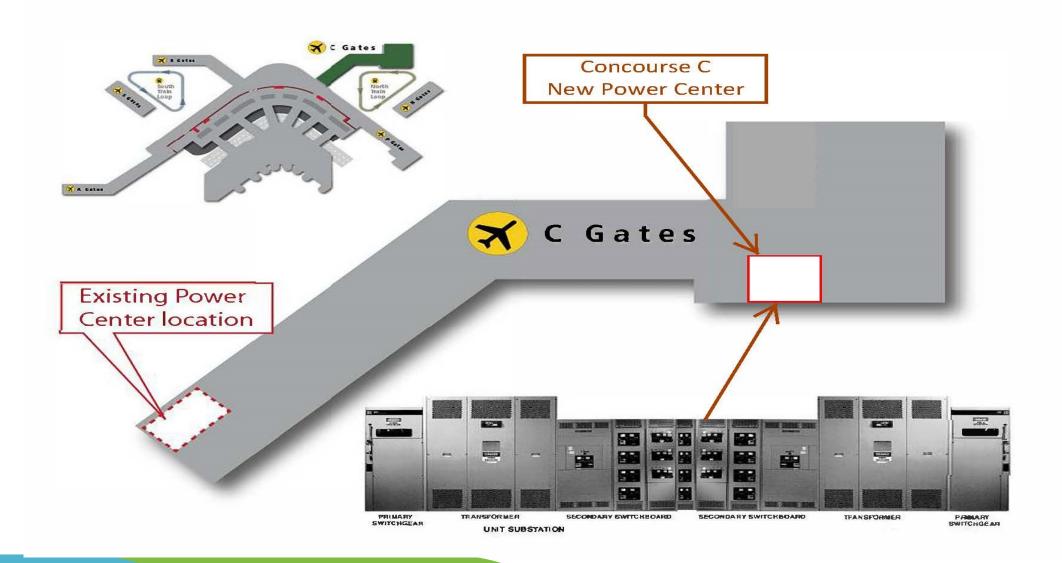
Construction Authorization



Project Scope

- Retrofit existing space to create a new electrical room
- Install new 3,200 amp electrical Power Center
- Install new 480V 1600 amp Switchboards
- Replace multiple obsolete electrical panels
- Restore fire zones, by transferring 4 loads from existing power centers to new power center.

New Power Center Location



Example of Similar Power Center



Example Obsolete Panel



Replacement breakers not available – failure will result in extended outage

Meters not networked – manual meter readings required

Modules no longer manufactured – cannot add new tenant services

Budget

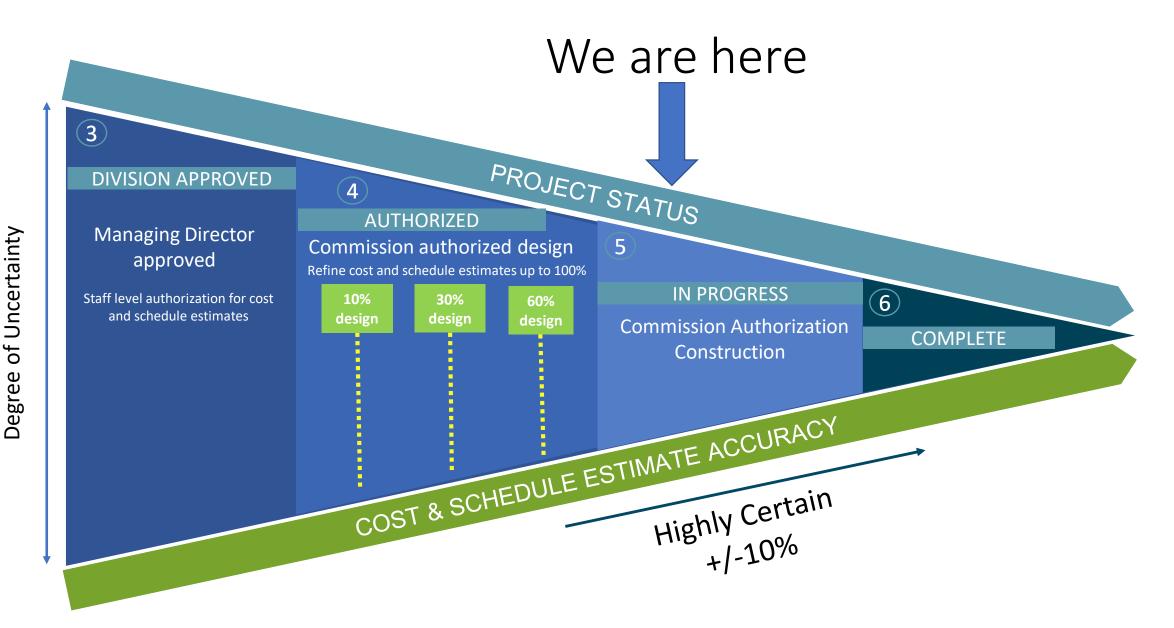
	Approved Budget	Expended to-date	Estimate at Completion
Design	\$2.0M	\$1.3M	\$2.0M
Construction	\$8.5M	\$0	\$8.5M
Total	\$10.5M	\$1.3M	\$10.5M

Schedule

•	Commission Construction Authorization (Today)	Q2 2020
•	Advertise for Bid	Q2 2020
•	Construction Start	Q1 2021
•	In-Use Date	Q4 2022

RISKS

Project Risk	Budget/Schedule Impact	Mitigation Plan
Existing underground conduits may not be useable for new medium voltage feeders	 Increase cost for redesign and construction of new overhead conduits 8+ months delay 	PCS small works project was executed and confirmed existing conduits are reusable
Existing Medium Voltage trench T9 has potential code challenges	Additional retrofit of existing trench may be required to bring it up to code	Collaborative evaluation by design consultant, F&I, and Maintenance staff to confirm proposed design.
Poor as-built information of congested area in and around the construction site	Potential for construction change order due to unforeseen discovery.	Greater level of design field investigation was performed



Alternative 1

Maintain the status quo. Do nothing

<u>Cost Implications</u>: An estimated \$1,355,235 in costs to date will need to be expensed if this option is pursued.

Pros:

No additional capital cost.

Cons:

- Does not provide electrical power for capacity growth of Concourse C.
- If no action is taken, the existing power center will operate at maximum electrical power capacity, increasing the risk of system overloading and power outages.

This is not the recommended alternative.

Alternative 2

Install a new power center on the north end of Concourse C.

Cost Implications: \$10,500,000

Pros:

- This alternative will provide the best solution in providing additional electrical power capacity for future growth on all of Concourse C.
- This alternative will provide the following for Concourse C: Capacity for future growth; Robust/reliable distribution system; Infrastructure to support future tenant projects and airline utilization equipment on the north end; Re-establish the fire zones and eliminate a hazardous situation in the event of an emergency.

Cons:

Large capital project required to build out this new electrical infrastructure facility.

This is the recommended alternative.

Today's Meeting Request

Request authorization to:

 Advertise and award Concourse C New Power Center Project for Construction