

Concourse & Parking Garage Low Voltage Electrical Upgrades

Design Authorization

Locations



Project Overview

Purpose:

Renew & replace electrical equipment throughout Concourses B, C, D, and the Parking Garage at STIA.

Summary:

- CIP C801280 – Concourse Low Voltage Upgrades
- CIP C800901 – Parking Garage Low Voltage Upgrades
- Projects have similar scope and will be implemented with a consistent approach; therefore, they have been combined into a single request
- Panels have been prioritized for replacement based on condition and highest risk of operational impact

Additional Project Information

Conditions of Existing Equipment:

- Beyond service life (40+ years in many cases)
- Poor condition
- Obsolescence / no spare parts available
- Lack of available spare circuit breakers
- Lack of available space in electrical rooms
- Panels with no individual disconnecting means

Project Benefits:

- ✓ Reduce the risk of failures and outages at STIA.
- ✓ Metering will provide opportunities for future energy conservation projects.
- ✓ Increase capacity for Airport Dining & Retail and other tenant and Port projects.

Project Scope

- Replacement of existing panelboards, motor control centers, switchboards, feeders, meters, and transformers
- Installation of new electrical closets for relocated panels
- Installation of a new electrical room in Concourse D
- Upgrade fire protection & HVAC systems as necessary to support electrical equipment



Concourses – Project Budget & Schedule

CIP: C801280

Budget: \$28,350,000

Key Schedule Milestones:

- Design Start: Q3 2022
- Construction Start: Q1 2024
- In-Use Date: Q3 2025

Parking Garage – Project Budget & Schedule

CIP: C800901

Plan of Finance Budget: \$3,267,428

Revised Budget: \$12,544,000

Budget increase is due to:

- Project complexity (panel tracing, cutovers, night work, etc.) not considered in original estimate
- Number of panels needing replacement
- Revised budget is based on actuals from Main Terminal Low Voltage (C800061)

Key Schedule Milestones:

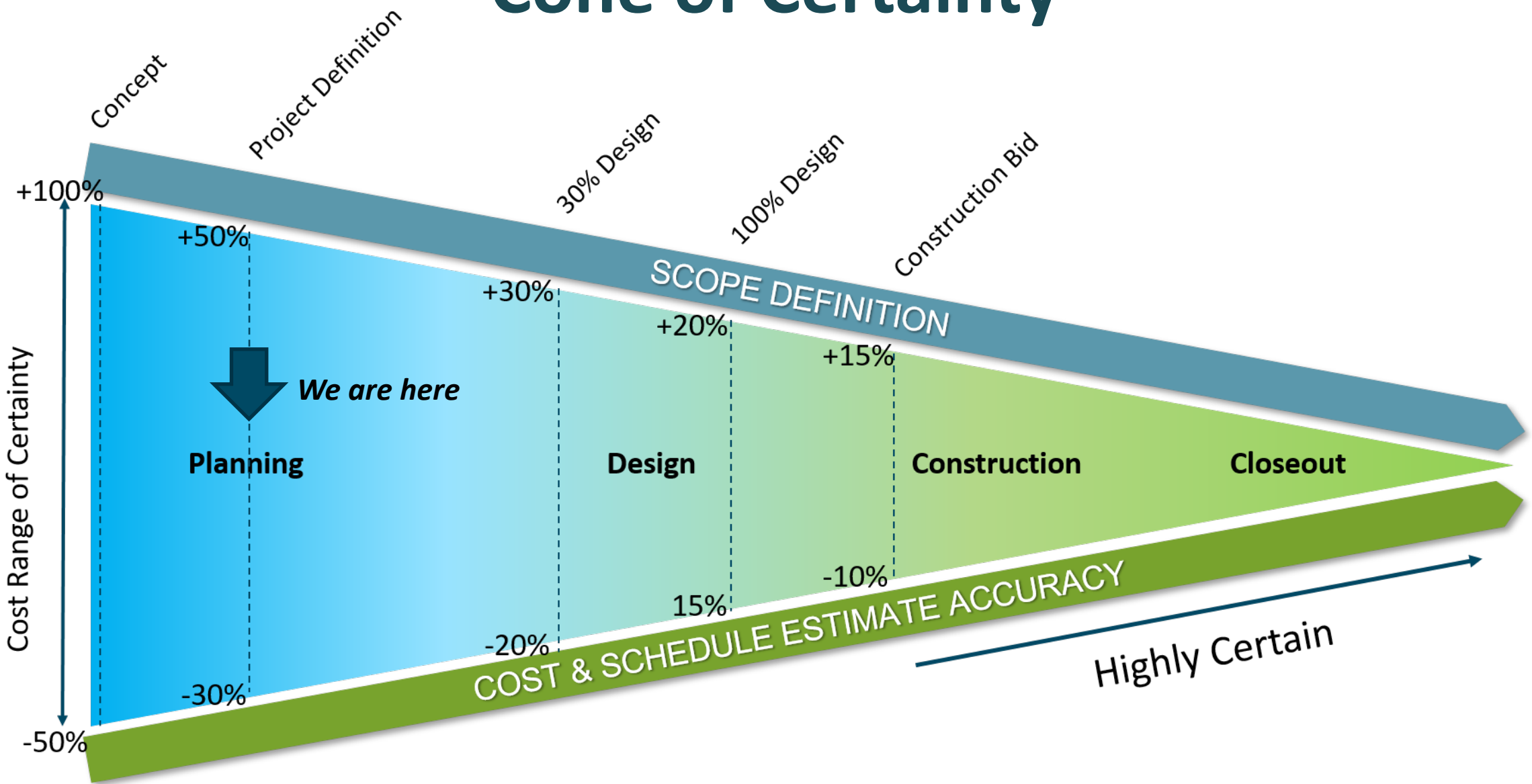
- Design Start: Q3 2022
- Construction Start: Q1 2024
- In-Use Date: Q1 2025

Combined – Project Budget & Schedule

Project	Concourses (C801280)	Parking Garage (C800901)
Design start	2022 Quarter 3	2022 Quarter 3
Commission construction authorization	2024 Quarter 1	2023 Quarter 3
Construction start	2024 Quarter 1	2024 Quarter 1
In-use date	2025 Quarter 3	2025 Quarter 1

Project	Amount of this request	Total estimated project cost
CIP C801280 Concourse Low Voltage Upgrades	\$7,200,000	\$28,350,000
CIP C800901 Parking Garage Low Voltage Upgrades	\$4,000,000	\$12,544,000
Total	\$11,200,000	\$40,894,000

Cone of Certainty



Project Risks and Mitigation

RISK	DESCRIPTION	MITIGATION PLAN
Electrical Closet Space	Some panels will require relocation. There is risk that a location cannot be found within the assumed 50ft vicinity of the existing panel, requiring longer conduit runs, HVAC tie-ins, and other delays.	<ul style="list-style-type: none">• Identify closet space locations, as needed, as part of 30% design.• Consolidate relocated panels to the same closets where possible.
Circuit Tracing	Panels will be traced early in the project to confirm loads and reduce risk. The scope of the tracing effort includes some uncertainty due to outdated panel schedules on aging electrical panels.	<ul style="list-style-type: none">• GCCM and pre-construction services will be utilized after 30% design to trace identified panels.• Panel tracing costs and lessons learned from recent projects have been used as a basis for the estimate on this project.

Action Requested

- 1) Complete design;
- 2) Advertise and execute up to two professional services contracts for design services for the Concourse Low Voltage Upgrade project (CIP C801280) and the Parking Garage Low Voltage Upgrade project (CIP C800901);
- 3) Advertise and execute a General Contractor, Construction Manager (GCCM) construction contract and authorize pre-construction services for CIP C801280;
- 4) Issue a job order contract (JOC) to carry out pre-construction services for CIP 800901;
- 5) Use Port of Seattle crews for pre-construction activities for CIPs C801280 and C800901.

Thank You!



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