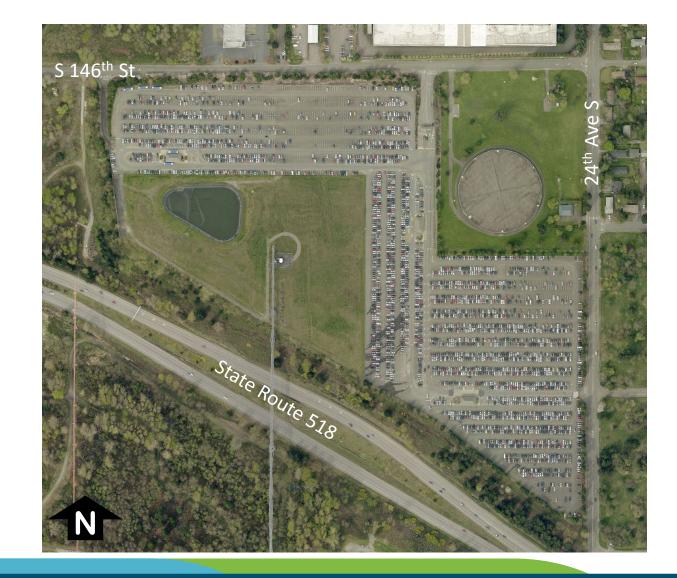
Item No.	8h_supp	
Date of Meeting	June 8, 2021	

# North Employee Parking Lot Improvements

**Design Authorization** 



### **Project Location**



North Employee Parking Lot (NEPL)

- Parking for airport employees
- 4,122 parking stalls
- 11,170 parking permits (maximum 12,000)

# **Project Purpose**

#### Purpose:

Extend the life of the North Employee Parking Lot and improve customer service and operational support.

### Phasing:

- Phase I: Improvements to the Bus Shelters and limited site features
- Phase II: Improvements to the parking areas including pavement, signage, and underlying infrastructure

# **Project Scope – Phase I**

- Remodel of Bus Shelters (restrooms and interiors)
- Permanent operational support area in Shelter 1 (including Wi-Fi)
- Code required monument sign
  modifications
- Replacement of vehicle gate
- Expansion of electric vehicle parking utilizing existing infrastructure



# **Project Scope – Phase II**

- Pavement and signage renewal
- Replace failing water main
- Replace failing storm water channel drains
- Replace failing rockery retaining wall
- Assessment of expansion of electric vehicle parking\*

\*additional budget will be required to support expansion of existing infrastructure and additional charging stations



# **Project Budget – Phase I**

Commission authorization for design and construction October 2018

#### Original Budget: \$615,000

Revised Budget: \$1,595,000

#### Budget increase due to:

- Cost estimate error for General Conditions (\$444,000)
- Port Standards/Accessibility Requirements (\$166,000)
- Wi-Fi Discretionary Change (\$61,000)
- Stop/Restart COVID-19 Delay (\$309,000)

### **Project Schedule – Phase I**

### **Key Schedule Milestones:**

- Design Start: May 2019
- Design Delayed: June 2020
- Design Restarted: January 2021
- Construction Start: Q1 2022
- In-Use Date: Q3 2022

# **Project Budget – Phase II**

#### Original Budget: \$6,020,000

#### Revised Budget: \$13,805,000

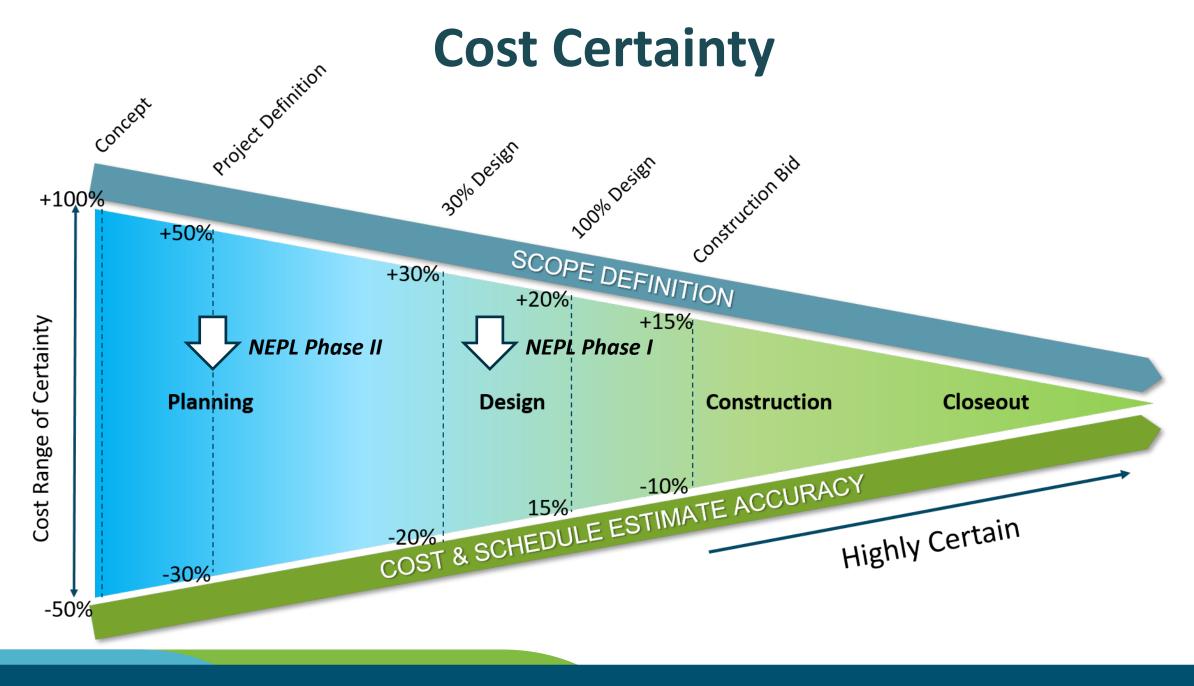
#### Budget increase due to:

- Scope additions to replace failing infrastructure
  - Retaining Wall (\$2,403,000)
  - Water Line (\$2,156,000)
  - Stormwater Drains (\$251,000)
- Port Standards (\$1,168,000)
- COVID-19 Delay (\$794,000)
- Additional Risks (\$633,000)
- Additional Soft Costs (\$380,000)

### **Project Schedule – Phase II**

### **Key Schedule Milestones:**

- Design Start: June 2021
- Early Work: Q3 2021
- Construction Start: Q2 2022
- In-Use Date: Q3 2023



# **Lessons Learned from other Projects**

Past Lesson Learned	Project Application		
Guide specification calls for Engineer to provide direction on tack coat application for pavement overlay	Guide specification will be revised to require tack coat application for pavement overlay		
Access for landscape maintenance is problematic on steep slopes	Consider maintenance access as part of replacement retaining wall design		
Project Manager planned additional project contingency to support risk of substandard pavement section in bus area	Determine potential for substandard pavement section during design and consider additional project contingency to support construction phase		
Asphalt pavement section at bus stops does not support employee parking busing operation	Aviation to update standards requiring a Portland cement concrete pavement section at bus stops		
Asphalt pavement section at bus stops does not support employee parking busing operation	Aviation to update standards requiring a Portland cement concrete pavement section at bus stops		

# **Project Risks – Phases I and II**

Risk	Description	Probability	Impact	Mitigation Plan
Compliance issues	Restroom revisions to support accessibility compliance may be more costly	Н	Μ	Considering non-gender specific and accessibility compliant restroom
Regulatory issues	Regulatory requirements increase costs (e.g., code required conductor removal)	М	М	PM working with designer to determine scope and cost impacts
Construction Bid	Cost of acquiring contractors in a competitive construction environment (anticipated in 2022)	L	М	Project will be bid as a unit price contract to reduce contractor risk
Additional Failure	Rockery retaining wall will continue to fail prior to construction	Μ	L	Place barriers in places of failure; monitor wall condition