

Snow Storage Expansion Project (C801171)

Mike Tasker & Chris Coulter

AVPMG

C801171

October 26, 2021

Action Requested

Request Commission authorization to design and prepare construction documents for the Snow Storage Expansion Project (CIP 801171) at Seattle Tacoma International Airport. The total request for this action will be \$2,500,000 for a total project authorization to date of \$2,794,000. The estimated overall cost of the project is \$17,500,000.

Project Overview

- This is a regulatory project
- Provide Additional Snow Storage Capacity Connected to Industrial Waste System (IWS)
 - Existing capacity is inadequate
 - All snow melt areas must be connected to IWS for NPDES Permit Compliance
 - Historical excess snow storage areas now occupied by Cargo/RON aircraft
- Increase operational safety for snow operations vehicles
- Reduce operational expenses from rehandling snow
- Snow storage capacity at completion of the project:
 - Target: single snowfall of 12 Inches plus 20% extra capacity for smaller storms



Snow Storage Expansion Sites

Scope Summary

- Phase 1-2023 Construction
 - North Snow Storage Area
 - Expand existing asphalt pad and upgrade the IWS Pump Station
 - South Snow Storage Area*
 - Expand existing truck turnaround for maneuverability and safety
 - Vehicle Service Road (south and west of RW 34R)
 - Widen asphalt surface for snow removal vehicle safety
- Phase 2-2024 Construction
 - Construct New Storage Area NE of Lagoon 3
 - Includes wetland mitigation

**SAMP TW A/B project will remove this snow storage area, decreasing overall capacity by 10,000 CY*

Construction Schedule

- Phase 1
 - Commission Authorization for Construction Q4 2022
 - Issue Notice to Proceed: Q1 2023
 - In-Service: Q4 2023
- Phase 2
 - Commission Authorization for Construction Q4 2023
 - Issue Notice to Proceed: Q1 2024
 - In-Service Q4 2024

Budget

| Snow Storage Expansion Project (C801171) | This Request | Total Program |
|--|--------------|---------------|
| Design | \$2,500,000 | \$2,794,000 |
| Construction | \$0 | \$14,706,000 |
| Total | \$2,500,000 | \$17,500,000 |

Project Risks

| RISK | DESCRIPTION | PROBLEM | IMPACT | MITIGATION PLAN |
|----------------------------|--|---------|--------|---|
| Permitting Delays | Wetland permit and mitigation implementation could delay construction of Phase 2 | Med ● | Med ● | Separate design schedule for Phase 2 that allows for permitting and agency negotiation period |
| Increased Cost | Wetland permit conditions and mitigation requirements will be further refined during design phase affecting potential cost of mitigation | Med ● | High ● | Increase project contingency due to risk. |
| Unforeseen Site Conditions | Possible conditions include: <ul style="list-style-type: none"> • Buried debris • Archaeological • Unsuitable soil conditions | Med ● | Med ● | Implement monitoring and action plan for construction for possible discoveries. |

Project Opportunities

- Support other program scopes and schedules
 - Airfield Pavement and Supporting Infrastructure Replacement Program
 - Perimeter Intrusion detection System (PIDS)
 - Mid-field Checkpoints
- Reduce operational impacts and safety risks by bundling