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Item No.: 8h\_Supp  
Date of Meeting: February 13, 2024  
Terminal 91 Domestic  
Waterline Renewal  
Robert Hoyman,  
Facilities Project Manager

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#### Scope

- Remove existing galvanized pipe, fittings, supports and flex-Connections. Approximately 8,000 LF of replacement & upgrades.
- Replace all materials with new stainless steel grooved pipe, fittings, supports, bracing and flex-connections/expansion joints.
- Code Upgrades: Seismic Bracing, added support, expansion/isolation joints.
- Work will be performed with the least impact to operations and other project work.

#### Limitations

- Work at Pier 91-South will be performed outside the Cruise Season (October to April)
- Work hours under the piers will be contingent on tidal action.
- Work to be planned over extended duration based on level of need and coordination with other project work and operational needs.

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#### Range of Need

- Timeline Perspective

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#### Project Risks

##### RISK DESCRIPTION PROBABILITY IMPACT MITIGATION

Permitting Compliance with Low Med Perform work using skiffs or floating Federal In-Water Permit platforms rather than attached During Fish Window scaffold.

Cruise Work at Pier 91 outside Low Med Perform work at Pier 91 October Schedule of Cruise Season thru April

##### Coordination

Major Avoidance of re-work or Low Med Schedule work to avoid overlapping Construction interference by other construction activities. Coordinate

Activities project work being replacement to avoid re-work. performed over the next

8-years

Material Availability of 316 Med High Prepurchase quantities of pipe and Availability Stainless Pipe and fittings to avoid timing challenges. fittings.

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#### Major Project Coordination

- Impact-Coordination Perspective

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Budget and Cost Drivers

- T91 Domestic Waterline at Piers 90 & 91 \$4,750,000
  - 2021 \$250,000 Design, Permitting & Emergency Work
  - 2024 \$4,500,000 Construction funding over eight years
- Primary cost drivers:
  - Material costs (316 stainless steel) for longevity.
  - Code upgrades: seismic bracing, expansion joints and added supports.
  - Construction logistics, coordination with operations & Cruise schedules, other major projects.

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Current State

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Extended Approach

- Use of Port Crews
  - Schedule Flexibility
  - Aversion to construction impacts, change orders
  - Avoidance of Re-Work related to other Capital Projects
  - Contract Costs control
  - Opportunities to utilize WMBE Firms and Small Businesses in conjunction with self-performed work.
  - Job Protection (Plumbers, Carpenters, Laborers, Millwrights), opportunities for apprenticeships within the Port
  - Reduction in construction cost

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Project Schedule

Item Anticipated Date

Design Completion Q4 2023

Permit Drawings, Environmental Permitting Q1 2024

Commission Authorization, Major Construction Q1 2024

Construction Duration 2024-2032

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