

**THE NORTHWEST SEAPORT ALLIANCE**  
**MEMORANDUM**

**MANAGING MEMBERS**  
**STAFF BRIEFING**

<b>Item No.</b>	10A
<b>Date of Meeting</b>	November 1, 2022

**DATE:** October 21, 2022

**TO:** Managing Members

**FROM:** John Wolfe, CEO  
Project Manager: Emma Del Vento, Capital Program Leader, Port of Seattle

**SUBJECT:** **Terminal 5 Modernization Program Quarterly Update Q3 2022**

**A. SYNOPSIS**

Regular Q3 2022 Terminal 5 Modernization Program Update.

**B. BACKGROUND**

In April 2019, The Northwest Seaport Alliance (NWSA) entered a long-term lease for the redevelopment of Terminal 5 in the Seattle Harbor to create a modern international container terminal for ultra-large container ships. Once the Terminal 5 Modernization Program is completed, the facility will have the capability to handle the largest vessels currently calling the West Coast, allowing the NWSA to compete for the super post-Panamax vessels, increasing current container volumes, supporting economic development and both creating and securing current jobs in the region for the next thirty years and likely beyond.

**C. SYNOPSIS QUARTERLY PROGRAM UPDATE TERMINAL 5 MODERNIZATION**

**Scope and Recent Updates**

**Program wide updates:** Phase 1 (North Berth) Ongoing conversations with Pilots and operators on least depth continue. Remaining high spots will be dredged and cathodic protection installed in the 2022/23 dredge window. Sinkholes have emerged and repairs are underway. The first shore power plug in was scheduled for early October and had to be postponed due to configuration issues. A solution to the issues is being coordinated between the shipping line, the terminal operator, Port of Seattle, and NWSA.

Phase 2 (South Berth) In water work performed in Q1 was accepted by the Agencies and there is limited need for in water work this in water window.

**Berth Modernization:** There have been no scope changes to the Berth Modernization since the last briefing. The Dispute Resolution Board (DRB) adjudication has increased the risk profile of the project; however, the current budget remains sufficient at this time.

**Permit Conditions:** Construction of the final elements is planned to start in early 2023.

**Lease Obligations:** NWSA's Lease Obligations are in progress per agreements with the Tenant.

### **Budget**

Program Budget of \$340,000,000 was approved in April 2019. \$50,000,000 was added in July 2021 for a total Program budget of \$390,000,000. Per Managing Member action on December 21, 2021, \$2,500,000 was approved for the purchase and installation of 8 scales and for the south reefer restoration project as part of the partial settlement agreement. This increased the total Program budget to \$392,500,000. In August 2022, \$61,500,000 was added to the Program for the Third Lease Amendment, bringing the Program to a total of \$454,000,000.

Through September 30, 2022, the spent to date amounts of \$264,063,037 are on track with forecast estimate at completion and progress.

### **Risk**

Recent Stochastic Analysis and Risk Register updates indicate the program has an 85% probability of being sufficient with a value of \$442.8M and a 100% probability of being sufficient with a value of \$460.9M.

Risk exposure above the forecast continues to decrease as risk is embedded into the forecast.

### **Schedule**

Phase 2 (South Berth) construction project is currently behind the contract schedule date of December 31, 2022. Likely completion is September 2023, in time for the delivery of the South Berth cranes. Dredging is on track to be completed per contract before March 2023.

Permit Conditions will be complete in late 2023.

Phase II Lease Obligation project schedules (South Marine Building, New Gate Complex, North Reefer Infrastructure, Phase 2 Stormwater) and adjacent projects (Intermodal Yard Rail Improvements) will be completed before the start of South Berth Operations and/or per the Lease agreements.

### **Safety**

Orion Marine Contractors (T-5 Berth Modernization General Contractor) meets POS requirements with Health and Safety Plan and Site-Specific Safety plans. Orion has regularly had after action reviews with crews and has been responsive to all NWSA/POS direction. There have been no recordable incidents this quarter for almost 12,000 hours worked.

#### **D. PROJECT PROGRESS AND SCHEDULE**

Berth Modernization Project:

- South Berth: Activities are behind schedule due to concrete strike and the additional scope of the pile repair.
- Seattle City Light (SCL) on site work is complete, pending pre-final invoice in Q4 2022 and final invoice in Q3 2023.

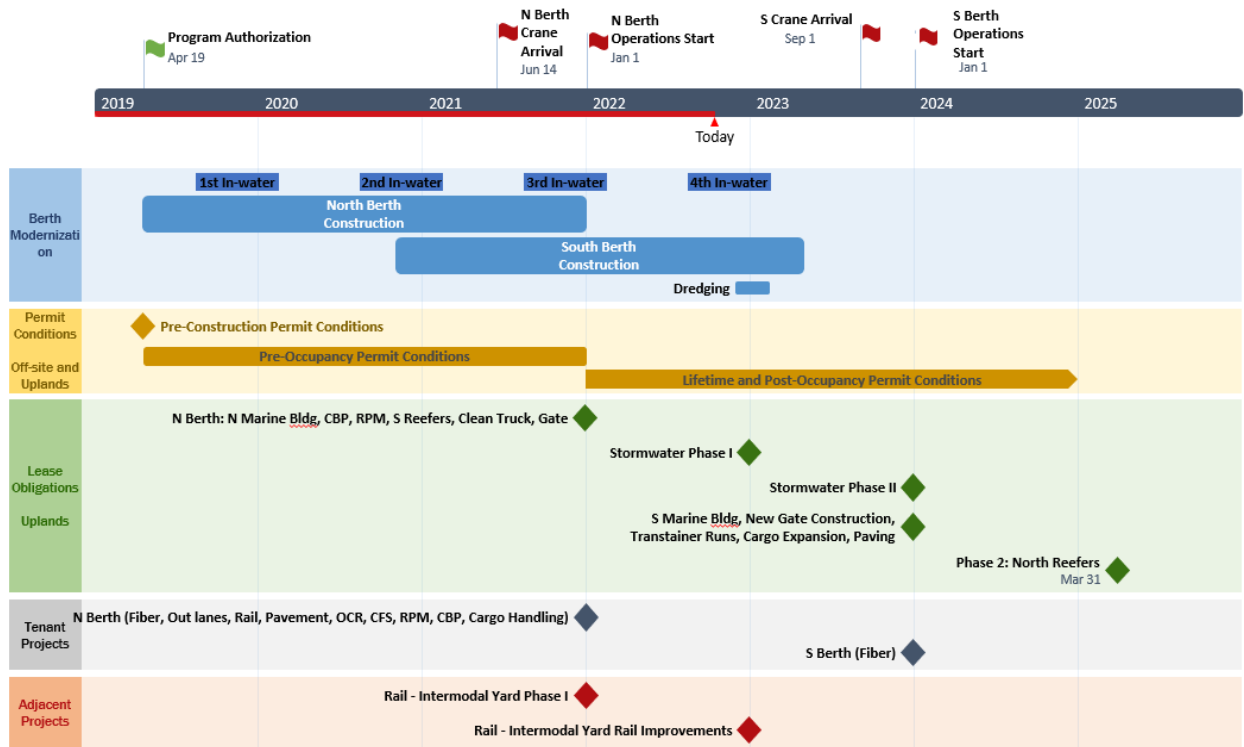
Major milestones for Permit Conditions and Lease Obligations through Q3 2022 include:

- Quiet Zone – design complete; City to advertise in Q4 2022
- Stormwater Treatment – Phase 1 construction completion in Q4 2022; Phase 2 started construction.
- S Marine Building – Preparing for Bid Advertisement.
- North Reefer Infrastructure –Tenant design underway.
- New Gate (per Lease Amendment 2; Phase 2 deliverable) – 90% Design received permitting review comments. Construction timeline dependent on pending MARAD FY 2022 selection notification.
- South Paving - Visual inspection will be completed and start of design this quarter.
- Transtainer Runs - Currently in permitting review.

#### ***Schedule***

The T-5 Berth Modernization construction project is currently behind schedule to complete South Berth by the original schedule date of December 31, 2022. The current likely date of South Berth completion has not been negotiated and is estimated to be in September 2023.

The most significant element of risk to the Phase 2 delivery schedule is agreement on the grading and material delays.



**E. BUDGET (to September 30, 2022)**

Budget numbers are updated through September 30, 2022. Numbers including overhead are posted the 10<sup>th</sup> of every month, except at year-end when they are posted January 21.

- Program forecast currently exceeds the overall budget if all risks hit the Program at the high end. The Dispute Resolution Board (DRB) adjudication has increased the risk profile of the project; however, the current budget remains sufficient at this time.
- Construction is 89% spent and 83% complete (discrepancy is due to mobilization and early material purchase).
- Management Reserve
  - \$5.5M was moved out of Management Reserve and into the Marine Buildings budget.
  - \$300K was moved out of the Management Reserve and into a new project, T5 North Berth Seawall Repair. Staff are exploring using 2023 HMT (Harbor Maintenance Tax) funds for this work.

The budget table below shows the budget breakdown for each project, or grouping of similar scopes (reefers, gate, permit conditions).

Total project costs are currently aligned with the authorizations. The T5 Berth project will overrun its budget. The current program authorization is sufficient to cover the overruns.

P-85: \$389.9M P-100: \$399.4M	Original Authorized Project Cost	Current Authorized Project Cost	This Request	Total Project Cost	Cost to Date	Remaining Cost
T5 Berth + Design + SCL	\$ 276,000,000	\$ 274,800,000	\$ -	\$ 281,000,000	\$ 229,997,992	\$ 51,002,008
T5 Permit + Tribes	\$ 14,000,000	\$ 14,000,000	\$ -	\$ 14,000,000	\$ 6,508,008	\$ 7,491,992
T5 Stormwater Treatment	\$ 30,000,000	\$ 32,000,000	\$ -	\$ 32,000,000	\$ 18,329,631	\$ 13,670,369
T5 Management Reserve/Ris	\$ 20,000,000	\$ 25,200,000	\$ -	\$ 880,000	\$ -	\$ 880,000
T5 Clean Truck	\$ -	\$ 55,000	\$ -	\$ 55,000	\$ 55,000	\$ -
T5 Marine Buildings	\$ -	\$ 11,200,000	\$ -	\$ 11,200,000	\$ 4,989,737	\$ 6,210,263
T5 RPM + CBP	\$ -	\$ 1,000,000	\$ -	\$ 1,000,000	\$ 393,486	\$ 606,514
T5 Reefers	\$ -	\$ 19,180,000	\$ -	\$ 24,200,000	\$ 1,505,613	\$ 22,694,387
T5 Gate Complex	\$ -	\$ 13,000,000	\$ -	\$ 26,100,000	\$ 1,529,674	\$ 24,570,326
T5 Operational	\$ -	\$ 1,360,000	\$ -	\$ 1,360,000	\$ 707,113	\$ 652,887
T5 MARAD Grant Admin	\$ -	\$ 705,000	\$ -	\$ 705,000	\$ 44,693	\$ 660,307
<b>Total</b>	<b>\$ 340,000,000</b>	<b>\$ 392,500,000</b>	<b>\$ -</b>	<b>\$ 392,500,000</b>	<b>\$ 264,060,947</b>	<b>\$ 128,439,053</b>
<b>LEASE AMENDMENT</b> P-85: \$52.9M; P-100: \$61.5M						
N Reefer Expansion - Demarc	\$ 15,200,000	\$ 15,200,000	\$ -	\$ 15,200,000	\$ -	\$ 15,200,000
Phase II South Paving	\$ 15,000,000	\$ 15,000,000	\$ -	\$ 15,000,000	\$ 1,150	\$ 14,998,850
Phase II Container Yard	\$ 11,800,000	\$ 11,800,000	\$ -	\$ 11,800,000	\$ -	\$ 11,800,000
Phase II Transtainer runs	\$ 6,000,000	\$ 6,000,000	\$ -	\$ 6,000,000	\$ 1,243	\$ 5,998,757
Phase II Mgmt Reserve	\$ 13,500,000	\$ 13,500,000	\$ -	\$ 13,500,000	\$ -	\$ 13,500,000
<b>Total</b>	<b>\$ 61,500,000</b>	<b>\$ 61,500,000</b>	<b>\$ -</b>	<b>\$ 61,500,000</b>	<b>\$ 2,393</b>	<b>\$ 61,497,607</b>
<b>Previously Authorized</b>			<b>\$ 52,500,000</b>			
<b>Revised Total Authorization</b>			<b>\$ 454,000,000</b>			
MARAD PIDP Grant - NWSA			\$ 7,481,133			
WA Ecology - Stormwater			\$ 5,000,000			
WA Commerce - Shorepower			\$ 4,268,000			
WA Commerce - Reefers			\$ 4,316,500			
<b>Authorization - Grants</b>			<b>\$ 432,934,367</b>			
T5 ERL (POS Only)	\$ -	\$ -	\$ 700,000	\$ 700,000	\$ -	\$ 700,000

**F. CONTINGENCY AND RISK**

The contingency and risk section provide the Managing Members early visibility to emerging issues and associated costs in T5 Modernization Program implementation.

**Stochastic Analysis and Risk Register** (is being updated quarterly in 2022)

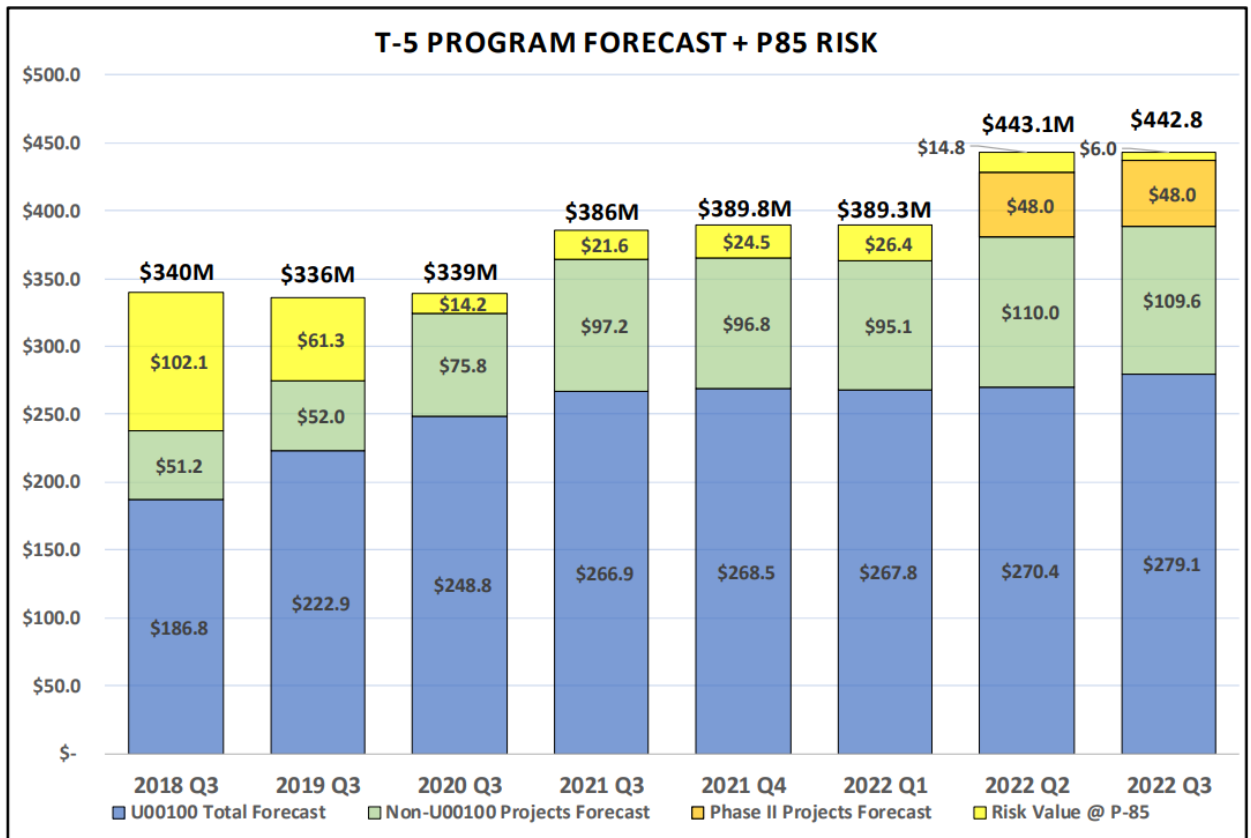
T-5 key staff meet quarterly with the T-5 Program risk consultant to model variables around future T-5 risk and update the risk register. Risks are identified by likelihood and impact to generate a score and are modelled into the forecast budget along with the actuals to date.

The largest risk to the program is the toe wall claim.

Recent Stochastic Analysis and Risk Register updates from September 2022 indicate:

- The program currently has a P-85 value (85% probability of being sufficient) of \$442.8M

The current expected cost of the program is \$432.9M (Authorization value \$454M minus grant funding \$21.07M).



**Emerging and Continuing risks:**

- North Berth toe wall and entitlement
- Time impact for change order work cost uncertainty
- Sinkholes and Paving bid item overruns
- Time impacts claim potential for South Berth pile damage repairs
- Repairs to South Berth pile repairs cost uncertainty
- Reefer Projects' cost uncertainty
- Stormwater treatment system cost uncertainty
- New Gate cost uncertainty
- Rail Quiet Zone cost escalation

**G. OPPORTUNITIES**

The opportunities section provides a status update on the T-5 grant agreements and reimbursements to date. Reimbursements are on track with forecast milestones. Below are the current grants and the awarded amounts.

MARAD PIDP Grant - NWSA	\$7,481,133
WA Ecology - Stormwater	\$5,000,000
WA Commerce - Shorepower	\$4,268,000
WA Commerce - Reefers	\$4,316,500
MARAD PIDP Grant 2022	Award Notification Pending

**H. COMMUNITY OUTREACH**

- **Recently Completed**
  - South Park Neighborhood Association
  - Georgetown Community Council
- **Future**
  - Pigeon Point Community Council
  - District 1 Community Network
  - West Seattle Transportation Coalition

**I. Q4 2022 LOOK AHEAD**

- North and South Berth: Dredging Start
- Phase 1 Stormwater: Substantial Completion
- South Marine Building: Bid Opening
- New Gate: Permit Review
- Transtainer Runs: Permit Review
- Cargo Expansion: Project Initiation
- South Berth Paving: Investigation
- MARAD FY 2022 selection notification

**J. PREVIOUS ACTIONS OR BRIEFINGS**

Date	Action	Amount
August 2, 2022	T-5 Modernization – Program Update; Third Lease Amendment	\$61,500,000
May 2, 2022	T-5 Modernization – Program Update	\$0
February 1, 2022	T-5 Modernization – Program Update	\$0
December 21, 2021	Terminal 5 Partial Settlement Agreement with SSAT	\$2,500,000
November 2, 2021	T-5 Modernization – Program Update; Acceptance of T5 MARAD 2020 PIDP Grant Agreement; and POS only vote for ERL funding for T5 uplands soil disposal (\$700,000)	\$0
September 8, 2021	Terminal 5 ILA for Shore Power Grant with Department of Commerce	\$0

**T5 Quarterly Update**  
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July 7, 2021	T5 Program Update, Increased Authorization and N Reefer Construction Authorization	\$50,000,000
June 1, 2021	First Amendment to T5 Lease authorization by MMs	\$0
April 6, 2021	Quiet Zone MOU	\$0
March 2, 2021	T5 Modernization - Program Update	\$0
February 2, 2021	Approval for Construction of RPM, S Reefers, Clean Truck	\$0
October 6, 2020	T5 Modernization - Program Update	\$0
September 1, 2020	T5 Modernization - Tribal Agreement Update	\$0
August 4, 2020	T5 Marine Building - Approval to advertise for North Building construction only	\$0
July 2, 2020	T5 Marine Building - Authorization to advertise for North and South Buildings construction request	\$0
July 2, 2020	T5 Modernization - Program Update	\$0
April 7, 2020	T5 Modernization - Program Update	\$0
January 14, 2020	T5 Modernization - Program Update	\$0
October 1, 2019	T5 Modernization - Program Update	\$0
August 6, 2019	T5 Modernization - Program Update	\$0
June 4, 2019	T5 Program Update	\$0
May 20, 2019	Program Authorization for Construction of Berth Modernization Prog	\$0
April 2, 2019	Additional Program Funding and Authorization to Fund T5 Modernization Program	\$314,150,000
February 26, 2019	Authorization to advertise for construction	\$0
February 5, 2019	Pre-authorization Program Briefing	\$0
November 13, 2018	Motion to prepare construction documents for authorization to advertise	\$0
August 1, 2017	Railroad quiet zone funding, tribal payments, and Agreements	\$5,650,000
October 4, 2016	Additional Funding, Seattle City Light Agreement, and Project Labor Agreement	\$8,200,000
June 7, 2016	DEIS Briefing	\$0
November 4, 2015	Additional SEPA and Design Funding	\$2,000,000
October 13, 2015	Test Pile Bids Exceeded Engineer's Estimate	\$0
July 14, 2015	Additional Design Authorization	\$5,000,000
June 3, 2014	Initial Design Authorization	\$4,700,000
May 13, 2014	T5 Berth Modernization Briefing	\$0
March 12, 2014	Additional Pre-Design Authorization	\$150,000
October 27, 2013	Initial Pre-Design Authorization	\$150,000
<b>TOTAL</b>		<b>\$454,000,000</b>