# THE NORTHWEST SEAPORT ALLIANCE MEMORANDUM

## MANAGING MEMBERS STAFF BRIEFING

Item No. 10A

Date of Meeting May 7, 2024

- **DATE:** April 29, 2024
- TO: Managing Members
- FROM: John Wolfe, CEO

Sponsor: Tong Zhu, Chief Commercial & Strategy Officer

Project Manager: Stefan Wynn, Capital Program Leader, Port of Seattle

**SUBJECT:** Terminal 5 Modernization Program Wrap-up

# A. BRIEFING REQUESTED

Terminal 5 Modernization Wrap-up

# 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. With the substantial completion of the Terminal 5 Phase 2 (South Berth) modernization and subsequent successful MSC vessel shore power plug-in, in March 2024, the facility is now able to serve the largest vessels, currently calling the West Coast, at both the North and South berths. This will better enable the NWSA to compete for Super Post-Panamax vessel calls, increase current container volumes, support economic development, and create, as well as secure jobs in the region for the next thirty years and likely beyond.

# C. SYNOPSIS TERMINAL 5 MODERNIZATION PROGRAM WRAP-UP

## Scope

There have been no scope changes to the Terminal 5 Modernization Program since the last briefing provided.

<u>Berth Modernization:</u> The Phase 2 (South Berth) construction project was completed, per lease obligations, as of March 21, 2024. The ongoing dispute with the Contractor continues to add to the programs risk profile. An update regarding the Contractor dispute was provided to the NWSA Managing Members in a previous executive session. Final punch list related work for the wharf construction project is in process of completion. Other upland program elements will continue to be reported on in the semi-annual reports.

<u>Phase 1 (North Berth)</u>: Full dredge depth to -55 is believed to be complete. All fender spacers were installed in April. Under dock foam fill installation to address subgrade voids due to prior occurring tidal inundations beyond the bulkhead wall is in process.

Final repairs to the wharf's expansion joint are underway and miscellaneous grading and pavement work is in process and planned to be completed within the next six months.

## Phase 2 (South Berth):

All fender spacers have been installed and the fender system is ready to serve all vessel calls. Four fender spacers will need to be replaced and is planned to be completed in the next few months. Shore power improvements have been completed for all three vaults and an MSC vessel plug-in was successfully performed in March. Wharf construction, full dredge depth to -55, wharf paving, and the South Marine Building are all complete except for minor punch list items under coordination with SSA. Crane plug-ins to the vaults have also been completed. Crane vault modifications to improve crane bidirectional movement, as well as miscellaneous grading and pavement punch list work, are in process and planned to be completed within the next six months.

## Permit Conditions:

Construction of the final permit related elements, including the Rail Quiet Zone improvements, are underway and currently anticipated to be complete by Q3 2024.

## Budget

A 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 eight scales and for the South Reefer Restoration project as part of a partial settlement agreement of a then-pending dispute with the tenant. This increased the total program budget to \$392,500,000. In August 2022, \$61,500,000 was added to the program for the additional work addressed by the proposed Third Lease Amendment, bringing the program to a total of \$454,000,000.

Through March 31, 2024, the spent to date amount of \$323,771,873 is on track within the currently authorized \$454,000,000 amount.

#### Risk

The latest (April 2024 risk workshop) Stochastic Analysis and Risk Register updates indicate the program has an 85% probability of being sufficient with a value of \$451M and a 100% probability of being sufficient with a value of \$469M. All risks are being carefully managed within the P-85 level.

The primary shift to the P-85 value over last quarter are as follows:

Decrease

- Scope/Cost reduction associated with the proposed weigh in motion solution on the New Gate Complex project
- Reduced cost impact range for the Container Yard Expansion project structure upgrades

Increase

- Potential need for a 2024 fish window to finalize dredge and fill
- Added paving costs

#### Safety

Orion Marine Contractors (T5 Berth Modernization General Contractor) meets POS requirements with Health and Safety Plan and Site-Specific Safety plans. There have been no recordable incidents during the nearly 22,000 hours worked since Q3 2023.

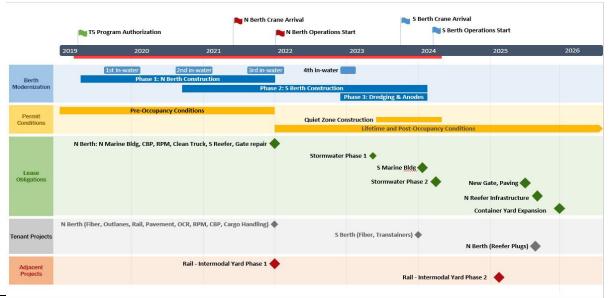
### D. PROGRAM SCHEDULE

The Program has currently achieved the following major milestones:

- South Berth Modernization project completed except for minor punch list items. Final letter for Phase 2 substantial completion was issued in March 2024.
- Three south berth vessel shore power plug-ins completed
- Full dredge depth to -55 completed
- South Marine Building completed
- Transtainer Runs installed
- Intermodal Yard Rail Improvements bids opened 2/06 and contractor mobilization anticipated in mid-May
- Crane vault modifications, to allow crane bidirectional movement, in process of contracting

Scheduled upcoming program efforts:

- Permit Conditions are expected to be complete by Q3 2024.
- An alternate Design-Build delivery method has been approved and started for the Container Yard Expansion project to expedite the project schedule. Substantial completion is currently targeted by end of Q4 2025.
- Adjacent projects: the T5 Intermodal Yard Phase 2 project scheduled for Q4 2023 completion was postponed to reduce risks around winter work. The currently planned completion by Q1 2025 aligns with terminal operator projected use of the facility and will have lower costs.
- Currently delayed projects include: North Reefer Infrastructure, South Berth Paving, Container Yard Expansion, and Gate Complex.



The Northwest Seaport Alliance

## BUDGET (THROUGH MARCH 31, 2024)

Budget numbers are updated through March 31, 2024, excluding overhead. 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. Several factors including supply chain issues, overall escalation, and an ongoing dispute with the contractor have increased the risk profile of the program; however, the current program budget remains sufficient at this time.
- Berth Modernization project budget is 98% spent.

Construction nearly complete.

\$812,976 was moved out of Management Reserve in Q1 2024.

•	Reduce MARAD 2022 Grant Administration budget	-\$262,500

- T5 North Berth Seawall budget increase \$136,000
- T5 Operational Expense budget increase \$939,476

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

Total project cost projections show some variance in relation to the authorizations. The T5 Berth project and the T5 Stormwater Upgrade will overrun their project budgets and the remaining Phase 1 Management Reserve. The wide estimate accuracy range on the large lease obligation projects still in design (Reefers, New Gate, South Berth Paving, Container Yard Expansion) drives continued uncertainty on project costs.

However, the current total program authorization of \$454M is greater than the P-85 and likely sufficient to cover all project costs.

P-85: \$403.7M P-100: \$415.1M	Original Authorized Project Cost	Current Authorized Project Cost	Th	is Request	T	otal Project Cost	(	ost to Date	Rei	naining Cost
T5 Berth + Design + SCL	\$ 276,000,000	\$ 274,800,000	\$		\$	286,000,000	\$	265,388,275	\$	20,611,725
T5 Permit + Tribes	\$ 14,000,000	\$ 14,000,000	\$		\$	15,000,000	\$	7,714,842	\$	7,285,158
T5 Stormwater Treatment	\$ 30,000,000	\$ 32,000,000	\$	×	\$	32,200,000	\$	29,855,554	\$	2,344,446
T5 Management Reserve/Risk	\$ 20,000,000	\$ 25,804,000	\$		\$	-	\$	-	\$	
T5 Clean Truck (CLOSED)	\$ -	\$ 55,000	\$	( <u>-</u> )	\$	55,000	\$	55,000	\$	
T5 Marine Buildings	\$	\$ 11,200,000	\$	-	\$	10,500,000	\$	9,889,460	\$	610,540
T5 RPM + CBP (CLOSED)	\$ -	\$ 396,000	\$		\$	396,000	\$	396,000	\$	-
T5 Reefers	\$ 14	\$ 19,180,000	\$	100	\$	30,400,000	\$	2,906,467	\$	27,493,533
T5 Gate Complex	\$	\$ 13,000,000	\$		\$	21,400,000	\$	3,285,549	\$	18,114,451
T5 Operational	\$ 	\$ 1,360,000	\$		\$	2,300,000	\$	1,091,005	\$	1,208,995
T5 MARAD Grant Admin	\$ -	\$ 705,000	\$	3 <b>*</b> 9)	\$	700,000	\$	293,393	\$	406,607
Total	\$ 340,000,000	\$ 392,500,000	\$		\$	398,951,000	\$	320,875,545	\$	78,075,455

#### T-5 Berth Modernization Program Wrap-up May 7, 2024 Page 5 of 8

LEASE AMENDMENT P-85: \$47.2M; P-100: \$54.0 M										
N Reefer Expansion - Demarc	\$	15,200,000	\$	2	\$	10,000,000	\$	-	\$	10,000,000
Phase II South Paving	\$	15,000,000	\$	-	\$	15,000,000	\$	127,703	\$	14,872,297
Container Yard Expansion	\$	11,800,000	\$	5	\$	11,800,000	\$	169,506	\$	11,630,494
T5 Transtainer runs	\$	6,000,000	\$	12	\$	2,700,000	\$	2,599,119	\$	100,881
Phase II Mgmt Reserve	\$	13,500,000	\$		\$	15,549,000	\$	-	\$	15,549,000
Total	\$	61,500,000	\$	-	\$	55,049,000	\$	2,896,328	\$	52,152,672
Previously Authorized	\$	-	\$	-	\$	-				
<b>Revised Total Authorization</b>	\$	454,000,000	\$	-	\$	454,000,000	\$	323,771,873	\$	130,228,127
MARAD 2020 PIDP Grant					\$	10,016,767				
WA Ecology - Stormwater					\$	5,320,926				
WA Commerce - Shorepower					\$	4,268,000				
WA Commerce - Reefers					\$	4,316,500				
MARAD 2022 PIDP Grant					\$	17,035,900				
National Highway Freight Prog					\$	1,513,750				
Authorization - Grants					\$	411,528,157				
T5 ERL (POS Only)	\$ - \$	1,100,000	Ś	1	Ś	3,500,000	Ś	1,515,493	Ś	1,984,507

# CONTINGENCY AND RISK

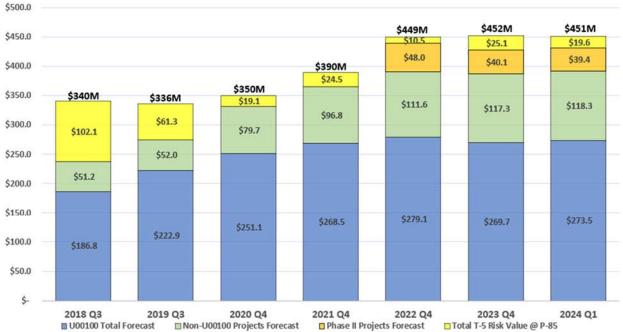
The contingency and risk section provide the Managing Members early visibility to emerging issues and associated costs in T5 Modernization Program implementation.

## Stochastic Analysis and Risk Register (updated quarterly in 2021-current)

T5 key staff meet quarterly with the T5 Program risk consultant to model variables around future T5 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 risks to the program are cost uncertainty around uplands paving and the Container Yard Expansion project, and a dispute with the contractor regarding the toe wall and project delays. Recent Stochastic Analysis and Risk Register updates from April 2024 indicate the program currently has a P-85 value (85% probability of being sufficient) of \$450.9M

The current expected cost of the program is \$408.4M (P-85 value \$450.9M minus grant funding \$42.5M).



T-5 PROGRAM FORECAST + P85 RISK

Emerging and continuing risks:

- Phase 1 & 2 Toe Wall Claim
- Cost uncertainty of upland projects in early stages of design
- Potential for temp power for reefers
- Potential need for a 2024 fish window

## E. OPPORTUNITIES

The opportunities section provides a status update on the T5 grant agreements. Net grant funding to date for the T5 program totals: \$42,471,917. Reimbursements are on track with forecast milestones. Below are the current grants and the awarded amounts.

MARAD PIDP Grant 2020 - NWSA	\$ 10,016,767
WA Ecology - Stormwater	\$ 5,321,000
WA Commerce – Shore Power	\$ 4,268,000
WA Commerce - Reefers	\$ 4,316,500
MARAD PIDP Grant 2022	\$17,035,900
National Highway Freight Program	\$ 1,513,750

#### F. COMMUNITY OUTREACH

External relations issued a joint press release and offered community delivery vessel lookout locations related to the arrival of the two new Super Post-Panamax cranes and rubber tire gantries (RTGs).

### T-5 Berth Modernization Program Wrap-up May 7, 2024 Page 7 of 8

Community updates are in process for the T-5 South Berth opening as well as the Quiet Zone improvements.

Date	Action	Amount		
November 7, 2023	T-5 Modernization – Program Update	\$0		
August 01, 2023	Acceptance of Terminal 5 MARAD 2022 PIDP Grant Agreement and 2023 National Highway Freight Program (NHFP) grant for a total amount of \$18,785,900	\$0		
August 01, 2023	T-5 Modernization – Program Update	\$0		
May 2, 2023	T-5 Modernization – Program Update	\$0		
February 7, 2023	T-5 Modernization – Program Update	\$0		
November 1, 2022	T-5 Modernization – Program Update	\$0		
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		
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 Managing Members	\$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		

# G. PREVIOUS ACTIONS OR BRIEFINGS

# T-5 Berth Modernization Program Wrap-up May 7, 2024 Page 8 of 8

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 Program	\$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
	TOTAL	\$454,000,000

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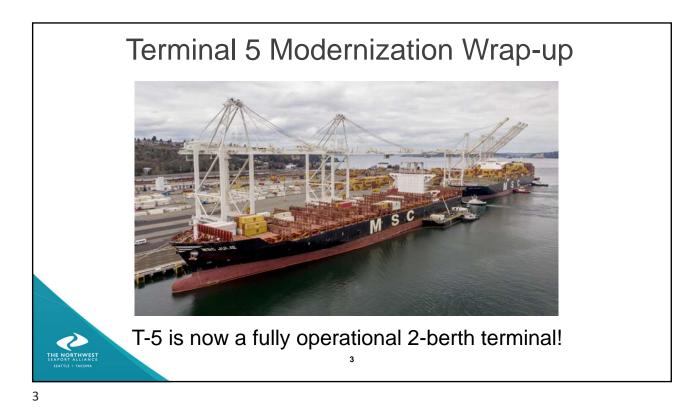
# **TERMINAL 5 Modernization Wrap-up**



Presenter: Stefan Wynn, Capital Program Leader, Port of Seattle

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# **Terminal 5 Modernization Wrap-up**

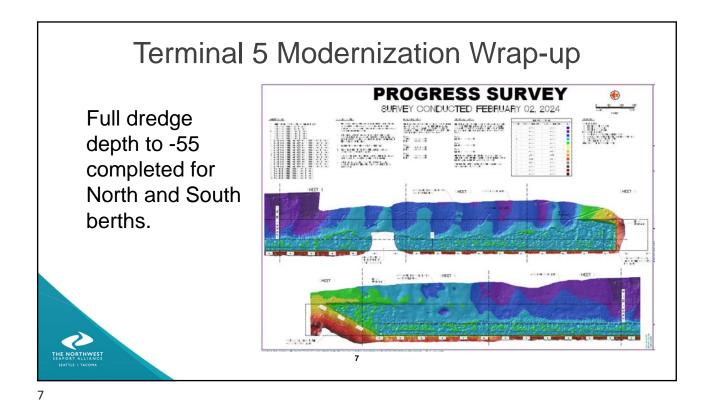
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- Berth Modernization Project
  - South berth substantially completed except minor in-progress punch list items
  - North berth dredging and fender spacers completed
- Uplands Improvements Projects
  - Permit Conditions
    - Quiet Zone construction underway
    - Lease Obligations
    - Reefers 100% design
    - South Marine Building Construction
      Completion
    - Container Yard Expansion project in design
      - Phase 2 Uplands Paving in design









# **Terminal 5 Modernization Wrap-up**

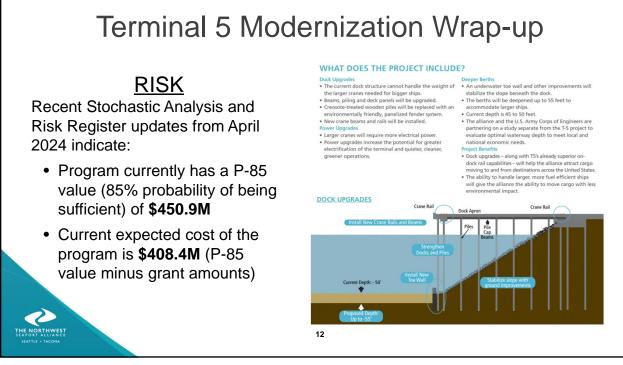


Crane power system completed and cranes relocated to South berth for vessel operations. Additional vault modifications in progress to allow bidirectional crane movement.



**Terminal 5** P-85: \$403.7M Total Proj Cost to Date This Req P-100: \$415.1M Cost T5 Berth + Design + SCL T5 Permit + Tribes \$ 276,000,000 \$ 274,800,000 \$ \$ 14,000,000 \$ 14,000,000 \$ \$ 286,000,000 265,388,275 \$ 20,611,725 **Modernization** Ś \$ 15,000,000 7,714,842 7,285,158 \$ T5 Stormwater Treatment \$ 30,000,000 \$ 32,000,000 \$ 32,200,000 29,855,554 2,344,446 Ś T5 Management Reserve/Risk \$ 20,000,000 \$ 25,804,000 T5 Clean Truck (CLOSED) Wrap-up 55.000 55.000 T5 Marine Buildings \$ 11,200,000 \$ 9,889,460 \$ 610,540 \$ 10,500,000 \$ 396,000 \$ 30,400,000 T5 RPM + CBP (CLOSED) 396,000 \$ 2,906,467 \$ 27,493,533 T5 Reefers \$ 19,180,000 \$ T5 Gate Complex \$ 13,000,000 \$ 21,400,000 3,285,549 \$ 18,114,451 \$ \$ 1,360,000 \$ 2,300,000 1,091,005 \$ 1,208,995 T5 Operational \$ T5 MARAD Grant Adm 705 000 700 000 293,393 \$ 406 607 Total \$ 340,000,000 \$ 392,500,000 \$ \$ 398,951,000 320,875,545 \$ 78,075,455 Budget by Project LEASE AMENDMENT P-85: \$47.2M; P-100: \$54.0 M March 31, 2024 N Reefer Expansion - Demarc \$ 15,200,000 10,000,000 127,703 \$ 14,872,297 169,506 \$ 11,630,494 Phase II South Paving \$ 15,000,000 \$ 15,000,000 \$812,976 was moved out of Management Reserve in Q1 2024. Container Yard Expansion T5 Transtainer runs \$ 11,800,000 11,800,000 \$ 2,700,000 \$ 15,549,000 2,599,119 \$ 100,881 - \$ 15,549,000 \$ 6,000,000 hase II Mgmt Reserve \$ 13,500,000 55,049,000 2,896,328 \$ 52,152,672 Tota \$ 61,500,000 \$ Previously Authorized \$ -\$ 454,000,000 \$ 454,000,000 \$ 323,771,873 \$ 130,228,127 **Revised Total Authorization** MARAD 2020 PIDP Grant \$ 10,016,767 \$ 5,320,926 WA Ecology - Stormwater WA Commerce - Shorepowe \$ 4,268,000 \$ 4,316,500 WA Commerce - Reefers MARAD 2022 PIDP Grant \$ 17,035,900 National Highway Freight Prog \$ 1,513,750 Authorization - Grants \$ 411,528,157 T5 ERL (POS Only) 1,100,000 \$ 3,500,000 \$ 1,515,493 \$ 1,984,507 \$ \$ 10





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