Please see Tab <u>8D</u> for Terminal 5 Modernization Program Quarterly Update memo

Item No.:10A Date of Meeting: August 1, 2023

TERMINAL 5 Q2 2023 BRIEFING



Name of Presenter: Thais Howard Position: Director of Engineering, NWSA

August 1, 2023



Terminal 5 – Program Overview Primary Elements of Scope

Berth Modernization

- Crane Rails
- Dock Rehabilitation
- Slope Stabilization
- Berth Deepening
- Power Supply/ Distribution
- Uplands Improvements
 - Permit Conditions
 - Lease Obligations
 - Stormwater
 - Marine Buildings
 - Reefers
 - Gate
 - Container Yard Expansion
 - Paving
 - Transtainer Runs

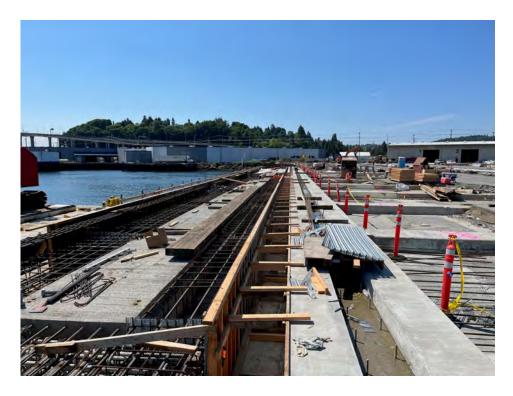




Terminal 5 – Q2 2023 Progress

Berth Modernization Project

- South Berth: tie in of north and south rebar
- Concrete pours progressing well
- Electrical work for cranes and shorepower underway
- Uplands Improvements Projects
 - Permit Conditions
 - Quiet Zone construction start
 - Lease Obligations
 - Stormwater Phase 1 Start of Operations
 - Reefers 90% design
 - South Marine Building Construction Start
 - Third Lease Amendment signed by Tenant
 ³





Budget by Project June 30, 2023



P-85: \$405.8M P-100: \$413.8M		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	\$	-	\$	282,000,000	\$	247,386,813	\$	34,613,187	
T5 Permit + Tribes	\$	14,000,000	\$	14,000,000	\$		\$	15,000,000	\$	6,785,477	\$	8,214,523	
T5 Stormwater Treatment	\$	30,000,000	\$	32,000,000	\$	-	\$	33,400,000	\$	27,013,410	\$	6,386,590	
T5 Management Reserve/Risk	\$	20,000,000	\$	25,804,000	\$	+	\$	-	\$	÷	\$	-	
T5 Clean Truck (CLOSED)	\$		\$	55,000	\$	-	\$	55,000	\$	55,000	\$		
T5 Marine Buildings	\$	-	\$	11,200,000	\$	42	\$	11,200,000	\$	5,937,377	\$	5,262,623	
T5 RPM + CBP (CLOSED)	\$	-	Ś	396,000	S		Ś	396,000	\$	396,000	\$	-	
T5 Reefers	\$		\$	19,180,000	\$	-	\$	30,900,000	\$	2,248,120	\$	28,651,880	
T5 Gate Complex	\$	-	\$	13,000,000	\$		\$	27,300,000	\$	3,012,883	\$	24,287,117	
T5 Operational	\$	-	\$	1,360,000	\$	+	\$	1,360,000	\$	987,071	\$	372,92	
T5 MARAD Grant Admin	\$	1.1.1.1	\$	705,000	\$		\$	705,000	\$	196,495	\$	508,50	
Total	\$	340,000,000	Ś	392,500,000	\$		Ś	402,316,000	\$	294,018,646	\$	108,297,354	
P-85: \$48.0M; P-100: \$54.6M													
N Reefer Expansion - Demarc Phase II South Paving			\$	15,200,000 15,000,000	\$	-	\$	14,800,000 15,000,000	\$	28,074	\$	14,971,920	
N Reefer Expansion - Demarc Phase II South Paving Phase II Container Yard			\$	15,000,000 11,800,000	\$	-	\$	15,000,000 11,800,000	\$	28,074 24,348	\$	14,971,92 11,775,65	
N Reefer Expansion - Demarc Phase II South Paving Phase II Container Yard Phase II Transtainer runs			\$\$	15,000,000 11,800,000 6,000,000	\$\$	-	\$\$	15,000,000 11,800,000 6,000,000	\$ \$ \$	28,074	\$ \$ \$	14,971,92 11,775,65 5,987,16	
N Reefer Expansion - Demarc Phase II South Paving Phase II Container Yard Phase II Transtainer runs Phase II Mgmt Reserve			\$ \$ \$	15,000,000 11,800,000 6,000,000 13,500,000	\$ \$ \$		\$ \$ \$	15,000,000 11,800,000 6,000,000 4,084,000	\$ \$ \$	28,074 24,348 12,832	\$ \$ \$	14,971,92 11,775,65 5,987,16 4,084,00	
N Reefer Expansion - Demarc Phase II South Paving Phase II Container Yard Phase II Transtainer runs			\$ \$ \$ \$	15,000,000 11,800,000 6,000,000	\$ \$ \$ \$	-	\$\$	15,000,000 11,800,000 6,000,000	\$ \$ \$	28,074 24,348	\$ \$ \$	14,971,920 11,775,655 5,987,165 4,084,000	
N Reefer Expansion - Demarc Phase II South Paving Phase II Container Yard Phase II Transtainer runs Phase II Mgmt Reserve Total Previously Authorized			\$ \$ \$ \$ \$ \$ \$ \$	15,000,000 11,800,000 6,000,000 13,500,000 61,500,000	\$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$	15,000,000 11,800,000 6,000,000 4,084,000 51,684,000	\$ \$ \$ \$ \$	28,074 24,348 12,832 - 65,254	\$ \$ \$ \$	14,971,92 11,775,65 5,987,16 4,084,00 51,618,74	
N Reefer Expansion - Demarc Phase II South Paving Phase II Container Yard Phase II Transtainer runs Phase II Mgmt Reserve Total			\$ \$ \$ \$ \$ \$ \$ \$	15,000,000 11,800,000 6,000,000 13,500,000	\$ \$ \$ \$	-	\$ \$ \$ \$ \$ \$ \$ \$ \$	15,000,000 11,800,000 6,000,000 4,084,000	\$ \$ \$	28,074 24,348 12,832	\$ \$ \$ \$	14,971,920 11,775,655 5,987,165 4,084,000 51,618,74	
N Reefer Expansion - Demarc Phase II South Paving Phase II Container Yard Phase II Transtainer runs Phase II Mgmt Reserve Total Previously Authorized			\$ \$ \$ \$ \$ \$ \$ \$	15,000,000 11,800,000 6,000,000 13,500,000 61,500,000	\$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$	15,000,000 11,800,000 6,000,000 4,084,000 51,684,000	\$ \$ \$ \$ \$	28,074 24,348 12,832 - 65,254	\$ \$ \$ \$	14,971,920 11,775,655 5,987,165 4,084,000 51,618,74	
N Reefer Expansion - Demarc Phase II South Paving Phase II Container Yard Phase II Transtainer runs Phase II Mgmt Reserve Total Previously Authorized Revised Total Authorization			\$ \$ \$ \$ \$ \$ \$ \$	15,000,000 11,800,000 6,000,000 13,500,000 61,500,000	\$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	15,000,000 11,800,000 6,000,000 4,084,000 51,684,000 - 454,000,000	\$ \$ \$ \$ \$	28,074 24,348 12,832 - 65,254	\$ \$ \$ \$	14,971,920 11,775,655 5,987,165 4,084,000 51,618,74	
N Reefer Expansion - Demarc Phase II South Paving Phase II Container Yard Phase II Transtainer runs Phase II Mgmt Reserve Total Previously Authorized Revised Total Authorization MARAD 2020 PIDP Grant			\$ \$ \$ \$ \$ \$ \$ \$	15,000,000 11,800,000 6,000,000 13,500,000 61,500,000	\$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	15,000,000 11,800,000 6,000,000 4,084,000 51,684,000 - 454,000,000 7,481,133	\$ \$ \$ \$ \$	28,074 24,348 12,832 - 65,254	\$ \$ \$ \$	14,971,920 11,775,652 5,987,168 4,084,000	
N Reefer Expansion - Demarc Phase II South Paving Phase II Container Yard Phase II Transtainer runs Phase II Mgmt Reserve Total Previously Authorized Revised Total Authorization MARAD 2020 PIDP Grant WA Ecology - Stormwater			\$ \$ \$ \$ \$ \$ \$ \$	15,000,000 11,800,000 6,000,000 13,500,000 61,500,000	\$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	15,000,000 11,800,000 6,000,000 4,084,000 51,684,000 - 454,000,000 7,481,133 5,320,926 4,268,000	\$ \$ \$ \$ \$	28,074 24,348 12,832 - 65,254	\$ \$ \$ \$	14,971,920 11,775,652 5,987,163 4,084,000 51,618,74	
N Reefer Expansion - Demarc Phase II South Paving Phase II Container Yard Phase II Transtainer runs Phase II Mgmt Reserve Total Previously Authorized Revised Total Authorization MARAD 2020 PIDP Grant WA Ecology - Stormwater WA Commerce - Shorepower			\$ \$ \$ \$ \$ \$ \$ \$	15,000,000 11,800,000 6,000,000 13,500,000 61,500,000	\$ \$ \$ \$ \$		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	15,000,000 11,800,000 6,000,000 4,084,000 51,684,000 - 454,000,000 7,481,133 5,320,926 4,268,000	\$ \$ \$ \$ \$	28,074 24,348 12,832 - 65,254	\$ \$ \$ \$	14,971,920 11,775,655 5,987,165 4,084,000 51,618,74	
N Reefer Expansion - Demarc Phase II South Paving Phase II Container Yard Phase II Transtainer runs Phase II Mgmt Reserve Total Previously Authorized Revised Total Authorization MARAD 2020 PIDP Grant WA Ecology - Stormwater WA Commerce - Shorepower WA Commerce - Reefers			\$ \$ \$ \$ \$ \$ \$ \$	15,000,000 11,800,000 6,000,000 13,500,000 61,500,000	\$ \$ \$ \$ \$ \$ \$	-	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	15,000,000 11,800,000 6,000,000 4,084,000 51,684,000 - 454,000,000 7,481,133 5,320,926 4,268,000	\$ \$ \$ \$ \$	28,074 24,348 12,832 - 65,254	\$ \$ \$ \$	14,971,920 11,775,655 5,987,165 4,084,000 51,618,74	
N Reefer Expansion - Demarc Phase II South Paving Phase II Container Yard Phase II Transtainer runs Phase II Mgmt Reserve Total Previously Authorized Revised Total Authorization MARAD 2020 PIDP Grant WA Ecology - Stormwater WA Commerce - Shorepower WA Commerce - Reefers MARAD 2022 PIDP Grant			\$ \$ \$ \$ \$ \$ \$ \$	15,000,000 11,800,000 6,000,000 13,500,000 61,500,000	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	- - - - - - - - 17,035,900	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	15,000,000 11,800,000 6,000,000 4,084,000 51,684,000 - 454,000,000 7,481,133 5,320,926 4,268,000	\$ \$ \$ \$ \$	28,074 24,348 12,832 - 65,254	\$ \$ \$ \$	14,971,920 11,775,655 5,987,165 4,084,000 51,618,74	

Terminal 5 - Opportunities

\$39,936,209

\$7,481,133

\$5,321,000

\$4,268,000

\$4,316,500

\$17,035,900

\$1,513,750

Awarded Amounts

Reimbursements are on track with forecast milestones.

Grants TOTAL

MARAD PIDP Grant 2020 - NWSA WA Ecology – Stormwater* *\$321,000 added this quarter WA Commerce - Shorepower

WA Commerce - Reefers

MARAD PIDP Grant 2022[°] National Highway Freight Program[°]

° Request for approval is a consent agenda item

<image>



Terminal 5 – Berth Modernization Trends

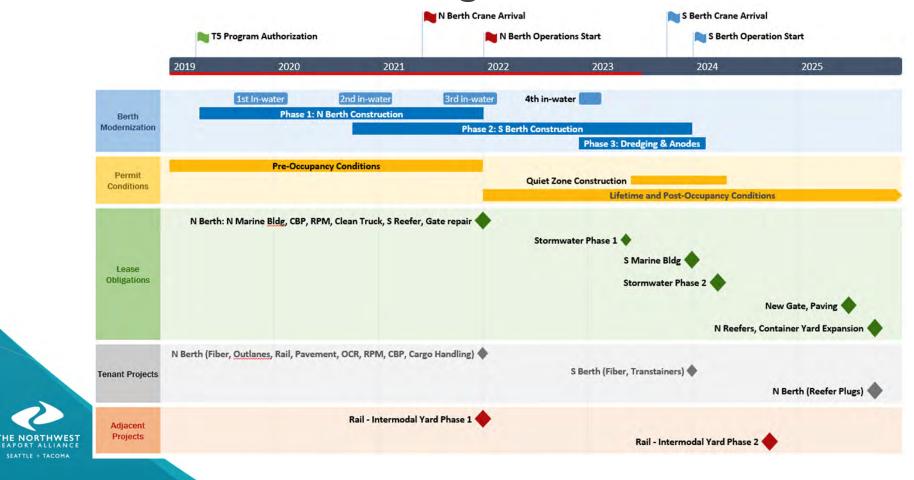
Recent Stochastic Analysis and Risk Register updates from June 2023 indicate:

- Program currently has a P-85 value (85% probability of being sufficient) of \$453.8M
- Current expected cost of the program is **\$414.1M**





Terminal 5 – Programmatic Schedule

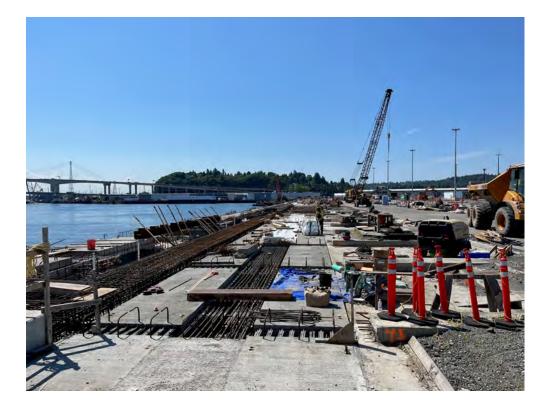


Terminal 5 – Community Outreach

Q2 2023

In Q2 2023, external relations and the T5 project team met with:

- South Park
- District 1 Community Network
- Port Community Action Team
- Held a Truck Safety Fair

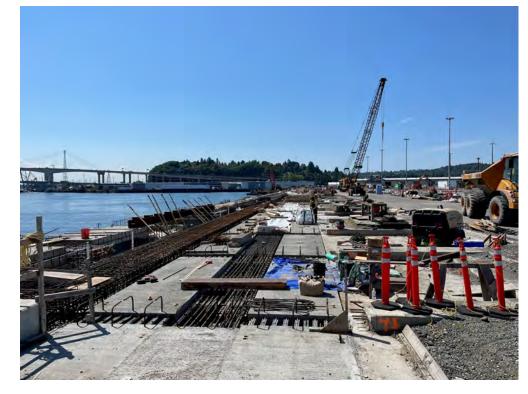




Terminal 5 – Look Ahead

Q3 2023

- South Berth: Structure ready to accept cranes, wharf electrical install completed for shorepower and cranes.
- Stormwater Phase 1 Substantial Completion.
- South Reefer project completion and close out.
- New Gate and North Reefers: 100% Design
- Transtainer Runs: Tenant reimbursement start of construction.
- South Berth Paving: start of phased investigation, design, and construction.



Terminal 5 – Site Map



ORTHWEST

#	Project
1	North Berth
2	South Berth
3	Primary Substation
4	Permit Conditions
5	Clean Truck Program
6	Existing Gate Repairs
7	RPM + CBP Utilities
8	S Reefer Repairs
9	Stormwater Phase 1
10	Stormwater Phase 2
11	N Marine Building
12	S Marine Building
13	Intermodal Yard (Rail)
14	N Reefers
15	Container Yard Expansion
16	New Gate Complex
17	South Berth Paving