



# **Terminal 5 Uplands Modernization and Rehabilitation Project Final Phase**

U.S. DEPARTMENT OF TRANSPORTATION  
National Infrastructure Investments  
DTOS59-20-RA-BUILD

## **APPENDIX C**

### **PROJECT COST ESTIMATES**



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June 24th, 2019

SSA Terminals  
Attn: Joe Arnold  
RE: Terminal 5 Parking Lot Rehabilitation  
Subject: Scope Letter

Dear Mr. Arnold:

I am writing to thank you for considering ICON for pricing and performance for the rehabilitation of the North end of Terminal 5. My interpretation of our meeting is that SSA Terminals is seeking a qualified contractor with the capacity to provide the necessary experience, expertise, manpower and equipment to meet the expectations of the project. It is the intent of ICON Materials to not only meet these expectations, but exceed them. In order to do so, our proposal will be comprehensive and include the highest quality material, skills, equipment and support. Please note, our goal is to provide the highest quality and greatest value. In order to achieve this, we have added measures that may not be considered by other contractors. To achieve this goal and to gain the trust of SSA Terminals, the following overview of our intended scope follows.

First, we propose to provide a project specific HMA (Hot Mix Asphalt) design. Included will be consultation with our accredited testing lab, engineers, liquid asphalt supplier representatives as well as ICON's quality control and team. While the exact aggregate structure is still being determined, the design will include a polymer modified asphalt binder that will best perform for the project. ICON will also propose to incorporate a Material Transfer Vehicle (MTV) in the paving operation to protect against thermal segregation of the HMA. Lastly, we will provide compaction testing and submit compaction reports to SSA. For compaction requirements, we will defer to WSDOT specifications. I would look forward to the opportunity to further discuss the details of our proposal. We hope the understanding of value and quality is considered while reviewing our proposal, as we believe we have taken added measures to ensure the success of what we consider to be a very high profile project.

Please feel free to correct me if I have misinterpreted the meeting information and/or misrepresented SSA's overall intentions for the project.



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### INCLUSIONS

Mill to an average depth of 4". Remove and dispose of spoils. Clean asphalt for overlay. Provide and place tack coat and pave with 4" HMA in one lift.

### EXCLUSIONS

Permits, Weekend/Overtime Shifts, Survey, Crack Fill/Sealing, Seal Coating, Traffic Control/Flagging/Traffic Control Plans, Pavement Markings/Temp Striping, Curbing, Utility Adjustment/Utility Patching, Compliance with Goals for Apprentices/Minorities/Women, Locates, Removal and Replacement of Wheel Stops and Ecology Blocks, Paving Fabric, Drug Testing, Project Specific Training or any Other Requirements for Site Access. Removing Pavement in areas behind Bollards/Fencing/Ecology Blocks. Price is based on getting within 2' of fence line on North end of project.

### PAVEMENT REPAIR

No pavement repair is included in the pricing at this point. If necessary, scope of pavement repair to be determined by collaboration between Owner and Contractor. Upon agreement and approval of scope, pricing will be provided.

Respectfully submitted,

Steve Eichelberger  
Project Manager/253-329-8914  
Steve.eichelberger@iconmaterials.com



**ICON Materials**  
**1508 Valentine Ave. SE**  
**Pacific WA 98047**  
**(206) 575-3200 ♦ Fax (206) 575-0319**  
**www.iconmaterials.com**

# Project Quote

<b>To:</b>	SSA Terminals	<b>Contact:</b>	Joey Arnold
<b>Address:</b>	1359 SW Lander St. Seattle, WA 98134	<b>Phone:</b>	206-654-3770
<b>Project Name:</b>	Terminal 5 Mill & Fill	<b>Fax:</b>	206-381-5145
<b>Project Location:</b>	Terminal 5, Seattle, WA	<b>Bid Number:</b>	
		<b>Bid Date:</b>	6/25/2019

## ASPHALT PAVING PROPOSAL CONTRACT (APPC)

Item #	Item Description	Estimated Quantity	Unit	Unit Price	Total Price
001	Mobilization	1.00	LS	\$100,000.00	\$100,000.00
002	Grind & Pave	75,000.00	TON	\$112.00	\$8,400,000.00
003	Random Coring To Determine Existing Hma Depth	10.00	EACH	\$250.00	\$2,500.00

**Total Bid Price: \$8,502,500.00**

### Notes:

- **PAYMENT WILL BE BASED ON TONS OF HMA PLACED. CONTRACTOR WILL PROVIDE CERTIFIED SCALE TICKETS FOR ALL HMA TRUCKS**
- Please see Scope Letter for additional information.

### Payment Terms:

Terms of Payment are net thirty (30) days, subject to approval or modification by ICON MATERIALS credit department according to Exhibit "B".

### ACCEPTED:

The above prices, specifications and conditions are satisfactory and are hereby accepted.

**Buyer:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Date of Acceptance:** \_\_\_\_\_

### CONFIRMED:

**ICON Materials (dba Of CPM Development Corp.)**

**Authorized Signature:** \_\_\_\_\_

**Estimator:** Steve Eichelberger

253-329-8914 seichelberger@oldcastlematerials.com



Exhibit 7.1 - Estimate of Probable Capital Construction Cost

Project: Terminal 5 Industrial Stormwater Master Plan  
Subject: Estimate of Probable Capital Construction Cost  
Client: SSA Terminals LLC.  
By: E. Beckwith, P.E., N. Watson, P.E.  
Job #: 1900037  
Date: 24-Dec-19



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Client: SSA Terminals LLC.  
By: E. Beckwith, P.E., N. Watson, P.E.  
Job #: 1900037  
Date: 24-Dec-19

TERMINAL 5 INDUSTRIAL STORMWATER MASTER PLAN  
ESTIMATE OF PROBABLE CAPITAL CONSTRUCTION COST

ITEM NO.	DESCRIPTION OF WORK	UNITS	Treatment System A - Phase 1 SB 9/11 (67.19 acres)			Treatment System B - Phase 1 SB 6/7/10/13 (66.90 acres)			Treatment System C - Phase 2 SB 2/3/4/5 (31.51 acres)			Treatment System D - Phase 2 SB 1 (26.14 acres)			Project Total 191.74 acres		
			QUANT	UNIT PRICE	TOTAL (\$2019)	QUANT	UNIT PRICE	TOTAL (\$2019)	QUANT	UNIT PRICE	TOTAL (\$2019)	QUANT	UNIT PRICE	TOTAL (\$2019)	QUANT	UNITS	TOTAL (\$2019)
1	Mobilization and Demobilization	LS	1	\$ 347,000	\$ 347,000	1	\$ 529,000	\$ 529,000	1	\$ 357,000	\$ 357,000	1	\$ 246,000	\$ 246,000	1	LS	\$ 1,479,000
2	Survey	LS	1	\$ 55,000	\$ 55,000	1	\$ 90,000	\$ 90,000	1	\$ 90,000	\$ 90,000	1	\$ 30,000	\$ 30,000	1	LS	\$ 265,000
3	Material Testing	LS	1	\$ 50,000	\$ 50,000	1	\$ 70,000	\$ 70,000	1	\$ 70,000	\$ 70,000	1	\$ 50,000	\$ 50,000	1	LS	\$ 240,000
4	Temporary Erosion and Sediment Control	LS	1	\$ 50,000	\$ 50,000	1	\$ 90,000	\$ 90,000	1	\$ 70,000	\$ 70,000	1	\$ 40,000	\$ 40,000	1	LS	\$ 250,000
5	Temporary Water Treatment and Disposal	LS	1	\$ 290,000	\$ 290,000	1	\$ 460,000	\$ 460,000	1	\$ 460,000	\$ 460,000	1	\$ 170,000	\$ 170,000	1	LS	\$ 1,380,000
6	Temporary Stormwater Re-route	LS	1	\$ 260,000	\$ 260,000	1	\$ 200,000	\$ 200,000	1	\$ 170,000	\$ 170,000	1	\$ 100,000	\$ 100,000	1	LS	\$ 730,000
7	Construction Dewatering	LS	1	\$ 240,000	\$ 240,000	1	\$ 360,000	\$ 360,000	1	\$ 330,000	\$ 330,000	1	\$ 170,000	\$ 170,000	1	LS	\$ 1,100,000
8	Demolition	LS	1	\$ 150,000	\$ 150,000	1	\$ 200,000	\$ 200,000	1	\$ 200,000	\$ 200,000	1	\$ 100,000	\$ 100,000	1	LS	\$ 650,000
9	Shoring and Trench Safety Systems	LS	1	\$ 570,000	\$ 570,000	1	\$ 750,000	\$ 750,000	1	\$ 620,000	\$ 620,000	1	\$ 370,000	\$ 370,000	1	LS	\$ 2,310,000
10	Earthwork	LS	1	\$ 120,000	\$ 120,000	1	\$ 240,000	\$ 240,000	1	\$ 130,000	\$ 130,000	1	\$ 100,000	\$ 100,000	1	LS	\$ 590,000
11	Soil Transportation and Disposal	TONS	2,680	\$ 75	\$ 201,000	5,130	\$ 75	\$ 385,000	2,690	\$ 75	\$ 202,000	1,180	\$ 75	\$ 89,000	11,680	TONS	\$ 877,000
12	Hazardous Waste Characterization Transport and Disposal	LS	1	\$ 80,000	\$ 80,000										1	LS	\$ 80,000
13	Quarry Spalls	TONS	320	\$ 65	\$ 21,000	520	\$ 65	\$ 34,000	340	\$ 65	\$ 23,000	230	\$ 65	\$ 15,000	1,410	TONS	\$ 93,000
14	Aggregate Base Course	TONS	620	\$ 70	\$ 44,000	1,450	\$ 70	\$ 102,000	740	\$ 70	\$ 52,000	370	\$ 70	\$ 26,000	3,180	TONS	\$ 224,000
15	Bituminous Concrete Pavement	TONS	330	\$ 230	\$ 76,000	950	\$ 210	\$ 200,000	470	\$ 210	\$ 99,000	150	\$ 185	\$ 28,000	1,900	TONS	\$ 403,000
16	Storm Drainage Utilities	LS	1	\$ 180,000	\$ 180,000	1	\$ 570,000	\$ 570,000	1	\$ 340,000	\$ 340,000	1	\$ 230,000	\$ 230,000	1	LS	\$ 1,320,000
17	SB6 Lift Station - 160 gpm	LS				1	\$ 200,000	\$ 200,000							1	LS	\$ 200,000
18	SB7 Lift Station - 260 gpm	LS				1	\$ 220,000	\$ 220,000							1	LS	\$ 220,000
19	SB10A Lift Station - 1,900 gpm	LS				1	\$ 300,000	\$ 300,000							1	LS	\$ 300,000
20	SB10 Lift Station - 2,400 gpm	LS				1	\$ 320,000	\$ 320,000							1	LS	\$ 320,000
21	SB13 Lift Station - 80 gpm	LS				1	\$ 120,000	\$ 120,000							1	LS	\$ 120,000
22	SB 9 Lift Station - 2,400 gpm	LS	1	\$ 390,000	\$ 390,000										1	LS	\$ 390,000
23	SB 2 Lift Station - 350 gpm	LS							1	\$ 220,000	\$ 220,000				1	LS	\$ 220,000
24	SB 3 Lift Station - 170 gpm	LS							1	\$ 200,000	\$ 200,000				1	LS	\$ 200,000
25	SB 4 Lift Station - 1,130 gpm	LS							1	\$ 315,000	\$ 315,000				1	LS	\$ 315,000
26	SB 5 Lift Station - 540 gpm	LS							1	\$ 240,000	\$ 240,000				1	LS	\$ 240,000
27	SB 1A Lift Station - 740 gpm (simplex)	LS										1	\$ 250,000	\$ 250,000	1	LS	\$ 250,000
28	SB 1 Lift Station - 940 gpm	LS										1	\$ 300,000	\$ 300,000	1	LS	\$ 300,000
29	CESF Treatment System - 2,400 gpm	LS				1	\$ 1,500,000	\$ 1,500,000							1	LS	\$ 1,500,000
30	CESF Treatment System - 2,400gpm	LS	1	\$ 1,500,000	\$ 1,500,000										1	LS	\$ 1,500,000
31	CESF Treatment System - 1,130 gpm	LS							1	\$ 800,000	\$ 800,000				1	LS	\$ 800,000
32	CESF Treatment System - 940 gpm	LS										1	\$ 700,000	\$ 700,000	1	LS	\$ 700,000
33	Utility Reroutes	LS	1	\$ 25,000	\$ 25,000	1	\$ 25,000	\$ 25,000	1	\$ 25,000	\$ 25,000	1	\$ 25,000	\$ 25,000	1	LS	\$ 100,000
34	Temporary Water Main and Replacement - CoS	LF	80	\$ 500	\$ 40,000										80	LF	\$ 40,000
35	Bollards - 12-inch diam with rub rail	EA	33	\$ 1,850	\$ 62,000	49	\$ 1,850	\$ 91,000	20	\$ 1,850	\$ 37,000				102	EA	\$ 190,000
36	Hides Containment Restoration	LS										1	\$ 20,000	\$ 20,000	1	LS	\$ 20,000
37	Fence and Gates	LF										285	\$ 75	\$ 22,000	285	LF	\$ 22,000
38	Pavement Markings	LS	1	\$ 10,000	\$ 10,000	1	\$ 20,000	\$ 20,000	1	\$ 15,000	\$ 15,000	1	\$ 10,000	\$ 10,000	1	LS	\$ 55,000
39	Electrical	LS	1	\$ 540,000	\$ 540,000	1	\$ 1,000,000	\$ 1,000,000	1	\$ 400,000	\$ 385,000	1	\$ 660,000	\$ 660,000	1	LS	\$ 2,585,000
40	Subtotal (\$2019):				\$ 5,301,000			\$ 8,076,000			\$ 5,450,000			\$ 3,751,000			\$ 22,578,000
41	Sales Tax (10.1%)		10.1%		\$ 535,401	10.1%		\$ 815,676	10.1%		\$ 550,450	10.1%		\$ 378,851	10.1%		\$ 2,280,378
42	Subtotal + Sales Tax (\$2019)				\$ 5,837,000			\$ 8,892,000			\$ 6,000,000			\$ 4,130,000			\$ 24,859,000
43	Phase Subtotal (\$2019)				Phase 1 Subtotal \$ 14,729,000				Phase 2 Subtotal \$ 10,130,000								

T-5 PROJECT  
Stormwater Treatment System

Item 44	Escalation	4% for 2 years	\$ 2,029,000
Item 45	Soft Costs	16%	\$ 3,978,000
Item 46	Project Total		\$ 30,870,000
Item 47	Low Range	-15%	\$ 27,140,000
Item 48	High Range	30%	\$ 38,330,000

NOTES:

- General All unit rates and lump sum vaules are fully loaded inclusive of all contractor overhead and profit.
- General Subtotals are rounded up to the nearest one thousand and totals are rounded up to the nearest ten thousand
- Item 1 Mobilization is assumed to be 7.0% based on WSDOT mobilization criteria.
- Item 11 Assume all excavated material will be Subtitle D disposal and no on site material will be reused as backfill unless otherwise noted. Material above the geotextile indicator layer in SB11 work zone is assumed to be reusable
- Item 12 An allowance has been provided for material requiring disposal at a Subtitle C facility.
- Item 17-28 All lift stations are duplex lift stations unless otherwise noted.
- Item 44 Phase 1 construction is anticipated for summer 2021 and Phase 2 in summer 2022. Costs have been escalated to the mid point between the two phases. Escalation percent is based Mortenson Construction Cost Index - Seattle, WA 2019
- Item 45 Soft costs are approximate and are reported per email received from Port of Seattle dated 9/Oct/2019. Soft costs include anticipated design, project management, construction management and environmental/permitting costs as a percent of Item 42
- Item 47-48 Cost estimate is consistent with a Class 4 estimate per the AACE Cost Classification System. A +30% to -15% range has been applied to the project total based on current project definition
- Item 47-48 Reported range is based on percentage of Item 42 plus Items 44 and 45.



James Dumont &lt;james@buildmomentum.io&gt;

## Information Requests for NWSA MARAD Grant

**Paul Gagnon** <Paul.Gagnon@ssamarine.com>

Fri, Sep 6, 2019 at 8:29 AM

To: James Dumont <james@buildmomentum.io>, Kelly Garber <Kelly.Garber@ssamarine.com>, "Lauren H. Offenbecher"

<Lauren.Offenbecher@ssamarine.com>

Cc: Mark Filimonov <mark@buildmomentum.io>, Robert Eckard <robert@buildmomentum.io>, Paul Gagnon

<Paul.Gagnon@ssamarine.com>, Joe Arnold <Joe.Arnold@ssamarine.com>

See Below.

**From:** James Dumont <james@buildmomentum.io>

**Sent:** Thursday, September 05, 2019 4:32 PM

**To:** Paul Gagnon <Paul.Gagnon@SSAMarine.com>; Kelly Garber <Kelly.Garber@SSAMarine.com>; Lauren H. Offenbecher <Lauren.Offenbecher@SSAMarine.com>

**Cc:** Mark Filimonov <mark@buildmomentum.io>; Robert Eckard <robert@buildmomentum.io>

**Subject:** Information Requests for NWSA MARAD Grant

Hi Paul,

I hope you are doing well!

Two topics to cover in this e-mail.

First, could you please help us fill out the following table with the costs that will be incurred for T-5 by September 16, 2019 and by March 31, 2021? I've written \$TBD for the sections that I've been informed you would most likely have the answers for. Please note that these costs are intended to be cumulative.

Component	Lead	\$ Expended by September 16, 2019	\$ Expended by March 31, 2021	\$ Included in MARAD Request	\$ Expended by Project Completion
<b>Ongoing Activities for Terminal 5 Modernization Project</b>					
Ship-to-Shore (STS) Cranes	SSAT	\$0	\$TBD	--	\$40,800,000
Secondary Truck Gate	SSAT	\$0	\$TBD	--	\$TBD
Terminal Technology	SSAT	\$0	\$8,000,000	--	\$8,000,000
<b>Proposed PIDP Components of Terminal 5 Modernization Project</b>					
On-Dock Rail Improvements	NWSA	\$0	\$0	\$1,000,000	\$1,000,000
ITS & Access Upgrades on Spokane St. Corridor	NWSA	\$0	\$2,000,000	\$1,000,000	\$2,000,000



9/11/2019

Momentum Mail - Information Requests for NWSA MARAD Grant

Cargo Handling Equipment	SSAT	\$0	\$TBD	\$5,000,000	\$TBD
Refrigerated Container (Reefer) Electrical Plugs	SSAT	\$0	\$6,000,000	\$6,000,000	\$6,000,000
Stormwater System	SSAT	\$150,000	\$2,000,000	\$38,000,000	\$38,000,000
Terminal Lighting	SSAT	\$0	\$TBD	\$2,000,000	\$2,000,000
Terminal Pavement	SSAT	\$73,000	\$8,500,000	\$20,000,000	\$20,000,000

Second, could you please confirm how many Top Picks SSA anticipates purchasing with \$5,000,000? Kelly and Lauren weren't certain on the price, but it sounds like we will be in the 6-8 range.

Cargo Handling equipment:

Last Count:            36 UTRs @ \$125,000/            =            \$4,500,000 (not US made)  
                             18 Tops @ \$650,000/            =            \$11,700,000 (Taylor, US made)

Terminal paving expense for engineering and site survey.

If we intend to be fully operational by March 2021, these cost will be due on delivery of equipment including cranes.

Paul

Thank you and have a great evening!

Best,

James

James K. Dumont, J.D.

Director, Ports and Fleets

MOMENTUM

e: [james@buildmomentum.io](mailto:james@buildmomentum.io)

t: 916.577.4935 m: 530.575.0881

## MEMORANDUM

DATE: September 6, 2019

TO: Tong Zhu

FROM: Scott Bickel, P.E.

CC: Ryan McFarland, Zack Thomas, Dakota Chamberlain, Deirdre Wilson, Steve Queen, Tim Flood

RE: T-5 Rail Yard Observations and Potential Funding for Repairs

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A site visit to the T-5 Rail Yard in Seattle was conducted on the afternoon of September 3, 2019. Attendees included; Zack Thomas, NWSA, Steve Queen, NWSA, Scott Bickel, WSP, Tim Flood, Tacoma Rail, and Bret Campbell, SSA. The purpose of the site visit was to observe the current condition of the rail yard and assess necessary improvements or repairs to make the yard ready for operations.

In summary, the existing rail yard has been out of operation for approximately five years and a Non-BNSF Owned Track inspection was completed on June 19, 2018. The intermodal portion of the yard has seven tracks approximate 2,820 feet per track for an overall total of 19,700 feet. The length of the longest arrival and departure track is approximately 5,100 ft. The rail yard is bound by Harbor Avenue an existing landfill and BNSF yard to the west, Elliott Bay to the north, and West Seattle Bridge to the south. These physical constraints leave little opportunity to expand the rail yard with new track. In conversations with the previous operator (SSA), the rail yard can depart and receive 7,200-foot trains, typically in the evening hours, to avoid impacting marine traffic on the Duwamish Waterway. Assembling longer trains requires an operational plan that includes crossing the Duwamish railroad bridge and stopping maritime traffic for a specified period. A specified closure of the bridge would allow time for train movements to build longer trains, conduct air tests and inspections to make the train ready for departure. However, an agreement with BNSF and USCG is required before the closure can be implemented.

According to the track inspection completed in June 2018, the rail yard is in good condition. However, the inspection calls out several areas of required maintenance. This includes the switches, turnouts, and general cleaning. The site visit confirmed the need for track repairs and identified many elements necessary to bring the yard to operating condition. Refer to the table below for a list of elements and a description of work for each. In general, the required repair work is divided into six categories with associated costs. Repair costs are estimated at \$1.9 million, excluding work on Track 7.

- Track Maintenance \$400,000 (General cost for track repairs)
- Control Room \$225,000 (Cost to re-instate the control room)
- Electrical Upgrades \$590,000 (Cost to upgrade the electrical systems)
- RPM and CBP \$560,000 (Estimated replacement cost)
- OCR and RFID \$125,000 (Potential CBP requirement)
- Track 7 Subgrade \$ 1 to \$ 2 million (includes geotechnical study and deep foundations to support the track and address unsuitable materials)



Track Maintenance	Scope
Clean Turnouts	Many of the turnouts have vegetation growing between the rail and pavement. Vegetation needs removed and turnouts cleaned and inspected. Also, inspect all derail boxes and make repairs as required.
Vegetation Control	Vegetation control measures are necessary across the entire intermodal yard.
Refurbish Greasers	Unclear if the greasers are operational. They need serviced and tested, unless they are maintained by BNSF or others. Also need to check the track gage in the curves and re-tamp as required.
Refurbish Rail Gates	Rail gates need refurbished to ensure the electrical system works and can be controlled from the control tower. Requires general maintenance of motors and slide gates.
Refurbish Existing Electrical and Hand Operated Switches	The south end of the yard is equipped with electrical switches and hand operated switches are located at the north end of the yard. The hand operated switches have rusted springs on the foot pedals and need replaced along with new safety latches. Electrical switches seem to operate by manual pumping, but the power switch is non-functional. If the Port decides to restore the electric switches, this requires a complete overhaul of the electrical and control systems.
Provide new Back Saver Switches	It was recommended to replace the electric switches with manual Back Saver Switches to reduce long term maintenance costs and avoid costly software updates. The Port needs to decide if the rail yard is to be repaired to its original design or consider cost effective alternatives. This could be an operational consideration as well.
Striping	For safety, the intermodal striping should be repainted.
Test Compressors and Air System	In is our understanding the Port has regular maintenance checks for the compressors. However, prior to operating the yard, they should be run and the air system tested to confirm it is in good working order.
<b>Control Room</b>	Existing control room has been remodeled into a conference room. Only the electrical box for the switches and lights remain. The switch for the lights was

	flipped on, but the lights did not respond. The control room needs to be restored with new computer equipment, monitors, cameras, suitable furniture and the electrical controls replaced to ensure continuity between the control room, master panel, switches, rail gates, and lights. Cost for control room improvements may be controlled by the lease and should be reviewed for possible cost sharing.
<b>Electrical Upgrades</b>	
General Electrical Work	Investigate existing electrical panels and conductors to ensure proper continuity throughout the system. This will likely require upgrades to the panels, removing and replacing wiring. It is assumed for the grant the existing electrical and communication conduit runs and vaults are usable.
Warning Lights	Investigate circuits and lights to ensure proper operation with the control room and master panel.
High Mast Light Conversion to LED	To improve energy consumption within the intermodal yard, it is recommended to remove the high-pressure sodium lights and replace with LED lights.
Cameras	Currently the intermodal yard has no cameras. New cameras and fiber optics are required for operational and security purposes.
<b>RPM and CBP booth</b>	Existing RPMs and CBP booth were removed from the intermodal yard. Prior to operating the intermodal yard, it is anticipated these elements would be required. A new CBP booth, foundation and utilities are needed to comply with current CBP standards. In addition, an estimated nine new RPM need to be installed with supporting power and fiber optics. It is assumed the existing conduits and vaults are reusable.
<b>OCR and RFID Tags</b>	Based on recent developments with CBP and Washington United Terminals, additional equipment was required to track container movements. Anticipating this will be a requirement for T-5, a cost to install OCR and RFID stands is included in the estimated cost of repair. Work includes new foundations to support the frames to mount the equipment, and new electrical and communication infrastructure.

<b>Track 7 Subgrade Improvements</b>	<p>A portion of Track 7 exhibits subsidence near the middle of the intermodal yard and long the fence. According to the Port, the area has been repaired several times with asphalt but continues to settle. The inspection report has flagged Track 7 as inoperable until the subsidence is repaired. To stabilize the area prior to operating the yard, a geotechnical study is necessary to better understand the under lying soil conditions and develop a suitable repair. The repair is likely to include removing existing rail and asphalt, replace the rail and repaving, install soil amendments or a soil bridge or possibly the installation of piles to support the rail and surrounding area. With Track 7 situated on the edge of the existing landfill, any excavation to remove soils is likely to encounter unsuitable materials and potentially contaminated materials. All unsuitable and contaminated materials would be hauled off-site and disposed accordingly. The estimated range of repairs includes costs for dealing with contaminated materials and piles. Institute soil amendments would be a preferred alternative to reduce off-site material disposal costs and use of pile.</p>
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The cost basis for the estimated cost of repairs and improvements is a rough order of magnitude and prices from similar work associated with the installation of RMPs and OCR infrastructure.



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## FW: Cost escalation for Rail Element

3 messages

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**Healy, Rob** <rhealy@portoftacoma.com>  
To: James Dumont <james@buildmomentum.io>

Tue, Apr 21, 2020 at 3:52 PM

James,

We found the basis for the \$2M rail cost estimate. We have not done any further planning or design on this component since this report was developed last year. We won't start design for some time, and I don't think it would be constructed until late in the delivery period. Given this ROM estimate I don't know if it makes sense to add an escalation to this. Let me know what you think.

---

**From:** McFarland, Ryan <McFarland.R@portseattle.org>  
**Sent:** Tuesday, April 21, 2020 2:00 PM  
**To:** Healy, Rob <rhealy@portoftacoma.com>  
**Subject:** Cost escalation for Rail Element

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe. Report suspicious email using the Report Phish button in Outlook.

Rob,

You mentioned you would talk with Dakota about whether to add cost escalation to the rail piece. Please do do that. I don't think the rail cost estimate took into consideration the timing of when construction would happen and/or escalation. I'm not sure, but that's my hunch.

I spoke with Emma. Her view is that we could add this into the rail project estimate if we do it for the other project elements as well.

Below and attached is the cost info that someone could take and add escalation to.

Do you think anything is needed from me at this point on this?

Ryan

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**From:** Stoker, Dustin <dstoker@nwseaportalliance.com>  
**Sent:** Tuesday, September 10, 2019 7:42 AM  
**To:** Beckett, Kurt (NWSA) <kbeckett@nwseaportalliance.com>; Thomas, Zack <zthomas@nwseaportalliance.com>; McFarland, Ryan <McFarland.R@portseattle.org>; Wilson, Deirdre - Contractor <dwilson@nwseaportalliance.com>; Jordan, Jason <jjordan@portoftacoma.com>  
**Cc:** Esterbrook, Don (NWSA) <desterbrook@nwseaportalliance.com>; Zhu, Tong (NWSA) <tzhu@nwseaportalliance.com>; Chamberlain, Dakota (NWSA) <dchamberlain@nwseaportalliance.com>  
**Subject:** RE: T-5 Rail Element of MARAD Grant

Hi All,



I have broken out the cost from Scott's report into two parts below. The infrastructure/maintenance costs will be needed \$2,215,000 - \$3,215,000 to get the rail yard operational. I do believe we should authorize the geotechnical evaluation of Track 7 now so that we determine what the true cost for repair are.

The question for Government Affairs and Commercial is if the CBP costs should be included in the grant application. I don't believe OPS is in a position to make this decision.

### Infrastructure

- Track Maintenance \$400,000
- Control Room \$225,000
- Electrical Upgrades \$590,000
- Track 7 Subgrade ` \$1M - \$2M (could be more based on a geotechnical evaluation)
- **Total \$2,215,000 - \$3,215,000**

### CBP Costs

- RPM \$560,000
- OCR/Rfid (for RPM) \$125,000
- **Total \$685,000**

### **Dustin Stoker**

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**From:** Beckett, Kurt

**Sent:** Monday, September 9, 2019 7:50 PM

**To:** Stoker, Dustin ; Thomas, Zack ; McFarland, Ryan ; Wilson, Deirdre ; Jordan, Jason

**Cc:** Esterbrook, Don ; Zhu, Tong ; Chamberlain, Dakota

**Subject:** T-5 Rail Element of MARAD Grant

**Importance:** High

Hi all –

I am writing to clarify a request I made of Dustin this morning and a hurried voicemail I left for Deirdre, that Jason followed up with on her behalf. I am in transit to DC, so sending this now while I can.

John has asked for a summary of the rail project element. In reviewing the latest version of the grant application late today, the table below reflects the current request of \$2.250m.

The last amount was \$1m as I recall it.

Knowing the amount had been increasing due to updated rail survey report, RPMs and possibly other equipment, I'm guessing the new number reflects these items.

Can Operations and Govt Relations please confirm what NWSA is planning to submit for the rail element of the overall T-5 MARAD grant?

Once we are aligned on this string, we need to send John an email summarizing this issue, and please flag any open questions that need resolution – such as do we include RPM's or not.