

PORT OF PORT TOWNSEND

MEETING OF: SEPTEMBER 13, 2017

AGENDA ITEM: VII. Regular Business

**C. CHANGE AUTHORIZATION – CONTRACT 2017-07-01 –
WORKYARD RESURFACING**

BACKGROUND:

The Port awarded Contract 2017-07-01 - Workyard Resurfacing to Nordland Construction. Work was conducted from August 23rd to September 1st of this year.

The gravel quantities required to effectively complete the job exceeded estimates resulting in costs beyond the contract authorization. Pursuant to Resolution No. 655-17 (*Resolution Delegating Authority to Port Management, Jan. 25 2017*), the Executive Director is authorized to execute contract change orders up to \$25,000 for a contract of less than \$1 million. The change order amount is \$42,229. Thus, there is a need for Commission approval of a contact change.

Variance from Estimated Quantity

The design for the Workyard Resurfacing Projects was based on drawings generated in 1996 by Reid Middleton. The record drawings indicated that grades (slopes) within the yard leading to stormwater features were to be between 1 and 2% (a standard grade for drainage).

When this project was developed, plans were completed without a comprehensive topographical survey of the project area. Instead, Port staff provided relative spot elevations and set the objective of re-establishment of a grade sufficient to provide water flow to the stormwater system (a grade of 1 to 2%). Completion of a comprehensive topographical survey would have been expensive given the extent of the area and the number of obstacles (mostly boats) within line of sight. Instead, quantities for both excavation and gravel import were generated with full knowledge of the need for field engineering.

The contractor provided survey equipment and the capability to establish a desired grade as directed by the Port. Early in the project, it was recognized that in many areas, no grade existed to drain to the stormwater treatment system properly. A desired grade was discussed with the field engineer, Marc Horton, PE, and the contractor. The result was a decision to try to establish a 1% minimum grade.

Quantities of crushed gravel were monitored daily and reports were prepared and presented to management by the field engineer. For the initial work area (the East Boatyard) quantities were over estimates, but it was agreed that the overall project objectives (grades which worked for drainage) should be met as the project progressed from the East Boatyard, to the Shipyard, and finally to the West Boatyard. Failure to do so would defeat a major purpose of the project – assuring a uniform flow to stormwater catchment and treatment features.

Contamination concerns prevented use of excavated material (removed from around concrete and road structures) from being re-used to re-establish grade. This material (approximately 450 cy) has been stockpiled and sampled. Pending test results, this material may be re-used in other areas of the Workyard in the future.

Estimates for gravel were based on an average of a 3.0 inch lift, the actual amount required to accomplish the desired grade resulted in an average 3.8 inch lift. While this did not re-establish the design grades totally, it is a major improvement to provide drainage for stormwater treatment and operational purposes.

The variance for the project is enumerated in the table below:

ITEM	BID QUANTITY	UNIT PRICE	BID PRICE	ACTUAL QUANTITY	ACTUAL TOTAL	VARIANCE
Shipyard - Schedule A						
Mobilization	1	L.S.	10,000	1	10,000	-
Crushed Surface	1590	\$39/Ton	62,010	2087	81,385	19,375
Excavation and Haul	50	\$30/Ton	1,750	70	2,100	350
Traffic Control	1	L.S.	4,000	1	4,000	-
TESC	1	L.S.	2,000	1	2,000	-
SUBTOTAL			\$79,760		\$99,485	\$19,725
Boatyard Schedule B						
Mobilization	1	L.S.	10,000	1	10,000	-
Crushed Surface	1614	\$39/Ton	62,946	2030	79,179	16,233
Excavation and Haul	175	\$30/Ton	5,250	384	11,520	6,270
Traffic Control	1	L.S.	2,000	1	2,000	-
SUBTOTAL			\$80,196		\$102,699	\$22,503
PROJECT TOTAL			\$159,956		\$202,185	\$42,229

Overall, this change is for an increase in the contract cost of 26.4% or \$42,229. This brings the total cost of Contract 2017-07-01 to \$202,185 from \$159,959.

Executive Director's Recommendation:

I recommend that the Commission approve a Change Order of \$42,229 to increase the total authorized contract amount of Workyard Resurfacing Contract 2017-07-01 from \$159,959 to \$202,185.