WALLA WALLA COST ENGINEERING MANDATORY CENTER OF EXPERTISE

COST AGENCY TECHNICAL REVIEW

CERTIFICATION STATEMENT

Project No. 464170

POA Port of Nome Navigation Improvement Project

The Port of Nome Navigation Improvement Project, as presented by Alaska District, has undergone a successful Cost Agency Technical Review (Cost ATR), performed by the Walla Walla District Cost Engineering Mandatory Center of Expertise (Cost MCX) team. The Cost ATR included study of the project scope, report, cost estimates, schedules, escalation, and risk-based contingencies. This certification signifies the products meet the quality standards as prescribed in ER 1110-2-1150 Engineering and Design for Civil Works Projects and ER 1110-2-1302 Civil Works Cost Engineering.

As of March 23, 2020, the Cost MCX certifies the estimated total project cost of:

NED Plan:

 Total First Costs (FY20):
 \$490,919,000

 Fully Funded Costs:
 \$591,917,000

It remains the responsibility of the District to correctly reflect these cost values within the Final Report and to implement effective project management controls and implementation procedures including risk management throughout the life of the project.



FOR: Michael P. Jacobs, PE, CCE Chief, Cost Engineering MCX Walla Walla District PROJECT: Port of Nome Modification Feasibility Study

PROJECT NO: P2 464170 LOCATION: Nome, Alaska DISTRICT: Alaska District-POA PREPARED: 2/19/2020 POC: CHIEF, COST ENGINEERING, Karl Harvey

This Estimate reflects the scope and schedule in report; December 2019, Draft Integrated Feasibility Report & EA

Civil	Civil Works Work Breakdown Structure			ESTIMATED COST					CT FIRST COS Int Dollar Basi	TOTAL PROJECT COST (FULLY FUNDED)					
WBS <u>NUMBER</u> A	Civil Works <u>Feature & Sub-Feature Description</u> B	COST _(<u>\$K)</u> C	CNTG _(\$K) 	CNTG (%) E	TOTAL (\$K)	ESC (%) G		ogram Year (l fective Price CNTG (\$K) I		2020 1 OCT 19 Spent Thru: 1-Oct-18 _(\$K)_	TOTAL FIRST COST <u>(\$K)</u> K	INFLATED	COST _(\$K) 	CNTG (\$K)	FULL (\$K) 0
10 12 12 08 19 12	BREAKWATER & SEAWALLS NAVIGATION PORTS & HARBORS LOCAL SERVICE FACILITIES (Berthing) LOCAL SERVICE FACILITIES (Bridge, Roads LOCAL SERVICE FACILITY (Utilities) ASSOCIATED (ATON)	\$283,928 \$53,116 \$8,579 \$77,389 \$2,268 \$69	\$96,536 \$18,059 \$2,917 \$26,312 \$771 \$24	34.0% 34.0% 34.0% 34.0% 34.0%	\$380,464 \$71,175 \$11,496 \$103,701 \$3,039 \$93	2.3% 3.7% 3.7% 1.9% 0.4% 3.7%	\$290,532 \$55,068 \$8,894 \$78,852 \$2,277 \$72	\$98,781 \$18,723 \$3,024 \$26,810 \$774 \$24	\$389,312 \$73,791 \$11,918 \$105,662 \$3,051 \$96	\$0 \$0 \$0 \$0 \$0 \$0	\$389,312 \$73,791	6	excluded fror	\$116,331 \$25,611 m Fully Funded m Fully Funded m Fully Funded m Fully Funded	Costs Costs
	CONSTRUCTION ESTIMATE TOTALS:	\$425,349	\$144,619		\$569,968	2.4%	\$435,695	\$148,136	\$583,831	\$0	\$463,104		\$417,475	\$141,942	\$559,417
01	LANDS AND DAMAGES	\$16	\$5	34.0%	\$21	1.9%	\$16	\$6	\$22	\$0	\$22	e	excluded fror	n Fully Funded	Costs
30	PLANNING, ENGINEERING & DESIGN	\$6,742	\$2,292	34.0%	\$9,035	3.4%	\$6,972	\$2,370	\$9,342	\$0	\$9,342	4.9%	\$7,312	\$2,486	\$9,798
31	CONSTRUCTION MANAGEMENT	\$13,316	\$4,527	34.0%	\$17,843	3.4%	\$13,770	\$4,682	\$18,451	\$0	\$18,451	23.0%	\$16,941	\$5,760	\$22,701
	PROJECT COST TOTALS:	\$445,423	\$151,444	34.0%	\$596,867		\$456,453	\$155,194	\$611,646	\$0	\$490,919		\$441,729	\$150,188	\$591,917

 CHIEF, COST ENGINEERING, Karl Harvey
 PROJECT MANAGER, Jen Cate/Steve Howard
 CHIEF, REAL ESTATE, Vacant
CHIEF, PLANNING, Cindy Upah
 CHIEF, ENGINEERING, Mark Derocchi
 CHIEF, OPERATIONS, Julie Anderson
 CHIEF, CONSTRUCTION, Mark Derocchi
 CHIEF, CONTRACTING, Chris Tew
 CHIEF, PM-CW, Bruce Sexauer
 CHIEF, DPM, Randy Bowker

ESTIMATED TOTAL PROJECT COST:	\$591,917
GENERAL NAVIGATION FEATURES:	\$559,417
PROJECT FIRST COST:	\$490,919
LOCAL SERVICE FACILITIES COST:	<i>\$120.631</i>
ASSOCIATED COSTS:	\$120,031 \$96
LERR:	\$22

Filename: TPCS_Nome_Add Capstone_032020.xlsx TPCS

**** TOTAL PROJECT COST SUMMARY ****

**** CONTRACT COST SUMMARY ****

Port of Nome Modification Feasibility Study PROJECT: LOCATION: Nome, Alaska

DISTRICT: Alaska District-POA POC: CHIEF, COST ENGINEERING, Karl Harvey

PREPARED:

2/19/2020

This Estimate reflects the scope and schedule in report;

December 2019, Draft Integrated Feasibility Report & EA

Civil V	Works Work Breakdown Structure	ESTIMATED COST						FIRST COS Dollar Basis		TOTAL PROJECT COST (FULLY FUNDED)				
			nate Prepareo ive Price Lev	el:	19-Feb-20 1-Oct-18		m Year (Bud ve Price Lev		2020 1 OCT 19					
				RISK BASED										
WBS	Civil Works	COST	CNTG	CNTG	TOTAL	ESC	COST	CNTG	TOTAL	Mid-Point	INFLATED	COST	CNTG	FULL
NUMBER A	Feature & Sub-Feature Description	<u>(\$K)</u> C	<u>(\$K)</u>	<u>(%)</u> E	<u>(\$K)</u>	<u>(%)</u> G	<u>(\$K)</u> <i>H</i>	<u>(\$K)</u>	<u>(\$K)</u>	Date P	<u>(%)</u> L	<u>(\$K)</u> M	<u>(\$K)</u> N	<u>(\$K)</u>
4	General Navigation Features	C	D	F	F	0	п	'	5	r r	-	IVI	N	0
10	BW Demo & Construct, mob-demobe	\$283,928	\$96,536	34.0%	\$380,464	2.3%	\$290,532	\$98,781	\$389,312	2025Q3	17.8%	\$342,149	\$116,331	\$458,48
12	Dredging Basins, Mob-demobe	\$53,116	\$18,059	34.0%	\$71,175	3.7%	\$55,068	\$18,723	\$73,791	2025Q3	17.8%	\$64,852	\$22,050	\$86,90
12	Navigation Aids Foundations	\$69	\$24	34.0%	\$93	3.7%	\$72	\$24	\$96	2025Q3	17.8%	\$84	\$29	\$11
	CONSTRUCTION ESTIMATE TOTALS:	\$337,113	\$114,618	34.0%	\$451,732		\$345,671	\$117,528	\$463,200			\$407,085	\$138,409	\$545,49
01	LANDS AND DAMAGES	\$0	\$0	0.0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	5
30	PLANNING, ENGINEERING & DESIGN													
0.1%	% Project Management	\$202	\$69	34.0%	\$271	3.4%	\$209	\$71	\$280	2021Q1	3.8%	\$217	\$74	\$2
0.1%	6 Planning & Environmental Compliance	\$202	\$69	34.0%	\$271	3.4%	\$209	\$71	\$280	2021Q1	3.8%	\$217	\$74	\$29
1.0%	6 Engineering & Design	\$3,371	\$1,146	34.0%	\$4,517	3.4%	\$3,486	\$1,185	\$4,671	2021Q1	3.8%	\$3,619	\$1,231	\$4,8
0.1%	- , , , ,	\$202	\$69	34.0%	\$271	3.4%	\$209	\$71	\$280	2021Q1	3.8%	\$217	\$74	\$29
0.1%		\$202	\$69	34.0%	\$271	3.4%	\$209	\$71	\$280	2021Q1	3.8%	\$217	\$74	\$29
0.6%	5 1 5 1	\$2,023	\$688	34.0%	\$2,710	3.4%	\$2,092	\$711	\$2,803	2021Q1	3.8%	\$2,172	\$738	\$2,93
0.1%	5 5 5	\$202	\$69	34.0%	\$271	3.4%	\$209	\$71	\$280	2025Q3	23.0%	\$257	\$87	\$34
0.1%	5 5	\$169	\$57	34.0%	\$226	3.4%	\$174	\$59	\$234	2025Q3	23.0%	\$214	\$73	\$28
0.0%		\$0	\$0	34.0%	\$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$24 \$24
0.1%	% Project Operations	\$169	\$57	34.0%	\$226	3.4%	\$174	\$59	\$234	2021Q1	3.8%	\$181	\$62	\$2
31	CONSTRUCTION MANAGEMENT													
3.4%	6 Construction Management	\$11,462	\$3,897	34.0%	\$15,359	3.4%	\$11,852	\$4,030	\$15,882	2025Q3	23.0%	\$14,582	\$4,958	\$19,5
0.5%	6 Project Operation:	\$1,686	\$573	34.0%	\$2,259	3.4%	\$1,743	\$593	\$2,336	2025Q3	23.0%	\$2,144	\$729	\$2,87
0.1%	% Project Management	\$169	\$57	34.0%	\$226	3.4%	\$174	\$59	\$234	2025Q3	23.0%	\$214	\$73	\$28
	CONTRACT COST TOTALS:	\$357,171	\$121,438		\$478,610		\$366,413	\$124,580	\$490,993			\$431,339	\$146,655	\$577,99

**** TOTAL PROJECT COST SUMMARY ****

2/19/2020

**** CONTRACT COST SUMMARY ****

Port of Nome Modification Feasibility Study PROJECT: LOCATION: Nome, Alaska

DISTRICT: Alaska District-POA POC: CHIEF, COST ENGINEERING, Karl Harvey

PREPARED:

This Estimate reflects the scope and schedule in report;

December 2019, Draft Integrated Feasibility Report & EA

c	ivil Works Work Breakdown Structure	ESTIMATED COST					PROJECT I (Constant I		-	TOTAL PROJECT COST (FULLY FUNDED)					
			nate Prepared ive Price Lev		19-Feb-20 1-Oct-18		n Year (Budo /e Price Leve		2020 1 OCT 19						
WBS NUMBE	Civil Works R Feature & Sub-Feature Description	COST _(\$K)	CNTG _(\$K)	CNTG (%)	TOTAL _(\$K)_	ESC (%)	COST _(\$K)	CNTG _(\$K)	TOTAL _(\$K)_	Mid-Point <u>Date</u>	INFLATED	COST _(\$K)_	CNTG (\$K)	FULL (\$K)	
A	В	C	D	<u> </u>	F	G	H	<u> </u>	J	P	<u>L</u>	M	N	0	
10	Local Sponsor Funded Items BREAKWATER & SEAWALLS	¢o	¢o	26.0%	¢0.	0.0%	¢O	¢o	¢o	0	0.0%	¢0.	¢0	¢O	
10	LSF-Dredge Dock Berthing Areas	\$0 \$8,579	\$0 \$2,917	26.0% 34.0%	\$0 \$11,496	0.0% 3.7%	\$0 \$8,894	\$0 \$3,024	\$0 \$11,918	0 2025Q3	0.0% 17.8%	\$0 \$10,474	\$0 \$3,561	\$0 \$14,036	
08	LSF-Docks, Mooring Pts, Bridge, Causeway R		\$26,312	34.0% 34.0%	\$103,701	1.9%	\$78,852	\$3,024 \$26,810	\$105,662	2025Q3 2025Q3	17.8%	\$10,474	\$31,573	\$124,434	
19	LSF-Utilities	\$2,268	\$771	34.0%	\$3,039	0.4%	\$2,277	\$774	\$3,051	2025Q3	17.8%	\$2,681	\$912	\$3,593	
	CONSTRUCTION ESTIMATE TOTALS:	\$88,236	\$30,000	34.0%	\$118,236		\$90,023	\$30,608	\$120,631			\$106,017	\$36,046	\$142,063	
01	LANDS AND DAMAGES	\$16	\$5	34.0%	\$21	1.9%	\$16	\$6	\$22	2018Q1	-6.1%	\$15	\$5	\$21	
30	PLANNING, ENGINEERING & DESIGN														
	0.1% Project Management	\$53	\$18	34.0%	\$71	3.4%	\$55	\$19	\$73	2021Q1	3.8%	\$57	\$19	\$76	
	0.1% Planning & Environmental Compliance	\$53	\$18	34.0%	\$71	3.4%	\$55	\$19	\$73	2021Q1	3.8%	\$57	\$19	\$76	
	1.0% Engineering & Design	\$882	\$300	34.0%	\$1,182	3.4%	\$912	\$310	\$1,223	2021Q1	3.8%	\$947	\$322	\$1,269	
	0.1% Reviews, ATRs, IEPRs, VE	\$53	\$18	34.0%	\$71	3.4%	\$55	\$19	\$73	2021Q1	3.8%	\$57	\$19	\$76	
	0.1% Life Cycle Updates (cost, schedule, risks) 0.6% Contracting & Reprographics	\$53 \$529	\$18 \$180	34.0% 34.0%	\$71 \$709	3.4% 3.4%	\$55 \$547	\$19 \$186	\$73 \$734	2021Q1 2021Q1	3.8% 3.8%	\$57 \$568	\$19 \$193	\$76 \$762	
	0.6% Contracting & Reprographics 0.1% Engineering During Construction	\$529 \$53	\$180 \$18	34.0% 34.0%	\$709 \$71	3.4% 3.4%	\$547 \$55	\$186	\$734 \$73	2021Q1 2025Q3	3.8% 23.0%	\$568 \$67	\$193 \$23	\$762 \$90	
	0.1% Planning During Construction	\$33 \$44	\$15 \$15	34.0%	\$59	3.4%	\$33 \$46	\$15 \$16	\$73 \$61	2025Q3 2025Q3	23.0%	\$56	\$25 \$19	\$90	
	0.0% Adaptive Management & Monitoring	\$0	¢10 \$0	34.0%	\$0 \$0	0.0%	\$0	\$0	\$0	0	0.0%	\$0	\$0	\$0	
	0.1% Project Operations	\$44	\$15	34.0%	\$59	3.4%	\$46	\$16	\$61	2021Q1	3.8%	\$47	\$16	\$63	
31	CONSTRUCTION MANAGEMENT														
	3.4% Construction Management	\$3,000	\$1,020	34.0%	\$4,020	3.4%	\$3,102	\$1,055	\$4,157	2025Q3	23.0%	\$3,817	\$1,298	\$5,115	
	0.5% Project Operation:	\$441	\$150	34.0%	\$591	3.4%	\$456	\$155	\$611	2025Q3	23.0%	\$561	\$191	\$752	
	0.1% Project Management	\$44	\$15	34.0%	\$59	3.4%	\$46	\$16	\$61	2025Q3	23.0%	\$56	\$19	\$75	
	CONTRACT COST TOTALS:	\$93,502	\$31,791		\$125,293		\$95,468	\$32,459	\$127,928			\$112,381	\$38,209	\$150,590	